



ICAO

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Agenda Item 6: ECONOMIC DEVELOPMENT OF AIR TRANSPORT

ICAO'S WORK FOR ECONOMIC DEVELOPMENT OF AIR TRANSPORT

(Presented by Secretariat)

SUMMARY
<p>This paper reports on ICAO's priority work under the Strategic Objective – Economic Development of Air Transport, which aims at enhancing capabilities of States to a) improve air connectivity, create more competitive business opportunities, increase consumer's benefits and choices, and reduce financial burden and costs in performing regulatory oversight functions; and b) enable aviation to serve as an effective means to achieve economic development, in particular, increase accessibility to funding for aviation infrastructure development and investment in air connectivity. The paper summarizes the progress of the follow-up work to the Sixth Worldwide Air Transport Conference (AT Conf/6) related to air transport policy and regulation, as well as infrastructure management and funding/financing. It also presents ICAO's work related to the aviation data and analyses, which focuses on big data, business analysis tools and air traffic forecasts, with the establishment of a joint venture model, at the specific project level, in collaboration with partners. The Conference is invited, inter alia, to proactively support ICAO's work for Economic Development of Air Transport and to encourage contributions to the Air Transport Fund for the implementation of various air transport projects.</p>
<p>Related ICAO Strategic Objective(s): Economic Development of Air Transport</p>

1. INTRODUCTION

1.1 The Economic Development of Air Transport is one of the five Strategic Objectives established by ICAO. As described in the ICAO Business Plan for 2017-2018-2019, removing impediments to economic sustainability of air transport and elevating the priority given to aviation in financing are the ultimate goals of this Strategic Objective. States can use aviation as an effective development tool by placing it at the center of the national/regional development framework and international financing for development, resulting in: a) improving air connectivity; b) creating more competitive business opportunities; c) increasing consumers' benefits and choices; and at the same time d) reducing the financial burden and costs for States in performing their regulatory oversight functions. The delivery of the results with respect to this Strategic Objective will contribute to the

growth of civil aviation activities and the efficiency of air transport, and hence to the global economy, and the expansion of trade and tourism.

2. STATE OF AIR TRANSPORT IN AFI REGIONS

2.1 African air carriers recorded a 2.4 per cent annual increase in their revenue passenger kilometres (RPK) in 2015, comparing to the +0.7 per cent in the previous year. From 2011 to 2013, the annual RPK reached a three-year accelerated rise. In 2014, growth slowed down due to the outbreak of Ebola in Western Africa. The 2015 growth was supported by the expansion of air carriers such as Ethiopian Airlines (+12.7 per cent), Royal Air Maroc (+9.0 per cent) and Air Algérie (+14.2 per cent). These air carriers expanded their network and benefited from the continued development of internationally-trading industries. However, South Africa, the largest African market, showed a decline of -1.7 per cent in 2015. The airlines of South Africa, Ethiopia and Egypt account for 53.7 per cent of African air carriers' total passenger traffic and showed a traffic variation of respectively -1.7 per cent, +12.6 per cent and +2.5 per cent in terms of RPK.

2.2 International traffic of air carriers in Africa represented 85.0 per cent of African airlines' total RPK and recorded a 2.3 per cent annual growth in 2015. South Africa is the largest domestic market in Africa with 56.7 per cent of domestic traffic in Africa. Domestic traffic in Africa showed a +2.7 per cent growth in RPK in 2015 with a capacity growing of +2.7 per cent.

2.3 Airlines in Africa increased their capacity in available seat kilometres (ASK) by +2.0 per cent in 2015, a drop of 0.4 percentage points compared to 2014 growth (+2.4 per cent), indicating a reversion to the average growth rate during 2011 and 2012. The capacity in ASK increased by +1.9 per cent for international air services and by +2.7 per cent for domestic services. In absolute terms, the States that contributed the greatest increase in capacity are Ethiopia (+12.4 per cent) and Morocco (+9.6 per cent). The total passenger load factor slightly increased in 2015 compared to 2014, reaching 68.1 per cent, up from 67.8 per cent the previous year. The passenger load factor achieved 67.5 per cent for international services and 71.5 per cent for domestic services.

2.4 Cargo traffic performed by African carriers recorded a decline of -0.4 per cent in 2015 in terms of freight tonne kilometres (FTK), compared to +5.6 per cent in 2014. Air freight market performed by African carriers is mostly international and national carriers of Ethiopia, South Africa and Egypt, all accounting for 75.1 per cent of the African traffic, and in turn recorded annual growths of +29.3 per cent, -15.6 per cent and -5.2 per cent, respectively.

2.5 Aviation is not only a major engine of economic growth for States, but it is also a significant driver in increasing their tourism and trade. By association, this makes air connectivity an important factor which is indispensable for tourism in many States, especially Least Developed Countries (LDCs), Landlocked Developing Countries (LLDCs) and Small Island Developing States (SIDS). Aviation is also an important transport mode for world trade, as nearly a third of global trade in terms of value is carried by air. Besides, more than half of international tourists arrive at their destinations by air. In 2015, aviation's global economic impact (direct, indirect, induced and tourism catalytic) is estimated at USD 2.7 trillion, an equivalent to 3.5 per cent of world gross domestic product (GDP). The air transport industry generates a total of 63.5 million jobs globally. The air transport industry in Africa (direct indirect and induced) generated an estimated 1.1 million jobs and contributed USD 38.2 billion to the gross domestic product (GDP) in Africa, i.e. 1.7 per cent of the

economy.

2.6 An overview of regulatory and industry trends and developments is provided in http://www.icao.int/Meetings/a39/Documents/Overview_of_Regulatory_and_Industry_Developments_in_International_Air_Transport.pdf.



3. DISCUSSION

3.1 AIR TRANSPORT POLICY AND REGULATION

3.1.1 For the last few years, the focus of ICAO's work in this field has been the implementation of the recommendations adopted by the Sixth Worldwide Air Transport Conference (ATConf/6, March 2013). The follow-up work has been conducted with the Air Transport Regulation Panel (ATRP)¹. The recent 39th Session of the Assembly endorsed the future work plan of the Organization for the 2017 to 2019 triennium, including activities under this work programme.

¹ Policy and Guidance material on the Economic Regulation of International Air Transport (Doc 9587, Provisional Version) and Manual on the Regulation of International Air Transport (Doc 9626, Provisional Version) are available at:

<http://www.icao.int/Meetings/a39/Documents/9587-PROVISIONAL%20VERSION.pdf>

http://www.icao.int/Meetings/a39/Documents/Provisional_Doc_9626.pdf.

3.1.2 **ICAO's long-term vision for air transport liberalization.** The Council adopted the long-term vision in June 2015, which has been disseminated to Member States (State letter 2015/54), as an inspirational guide for the pursuit of their liberalization goals. States are encouraged to give regard to, and apply the vision in their policy making and regulatory practices.

3.1.3 **Market access, air cargo and air carrier ownership and control.** Work on the development of international agreements on these subjects has been undertaken by the ATRP, and the drafting task is underway by a working group established under the panel. While some progress has been made, there remained differing views on how to address the several key provisions, such as traffic rights and safeguards. Nevertheless, the discussion during the working group meetings helped foster a better understanding of the various perspectives and available options, and provided a good direction for further work.

3.1.4 The ATRP working group aims at producing a final draft text of the international agreements by the end of 2016 or early 2017. It is envisaged that the draft text will then be examined further by the next panel meeting (ATRP/14, June 2017), and its result will be submitted for review by the Air Transport Committee and the Council. Subject to the outcome of these considerations, Member States will be consulted on the draft text of the agreements, prior to their finalization.

3.1.5 **Fair competition.** ICAO's efforts focused on developing tools to enhance the transparency of States' competition rules, and to foster cooperation, dialogue and regulatory compatibility. In this respect, a compendium of competition policies/practices (nationally or regionally) has been compiled and is available at <http://www.icao.int/sustainability/compendium/Pages/default.aspx>. An exchange forum on competition issues was also provided through various meetings, including the third ICAO Air Transport Symposium (IATS, March 2016, Montreal). The summary report of the IATS is available at <http://www.icao.int/Meetings/iats2016/Pages/default.aspx>.

3.1.6 **Consumer protection.** A set of core principles on consumer protection was endorsed by the Council in June 2015 (State letter 2015/60). These core principles aim at providing high-level guidance to States and concerned stakeholders to ensure that air passengers are duly protected in the three phases of their travel. States and concerned stakeholders are encouraged to provide feedback to ICAO on their experiences in applying the guidance.

3.1.7 **ICAN event.** The Eighth ICAO Air Services Negotiation Event (ICAN2015) was held in Antalya, Turkey from 19 to 23 October 2015. The event had record-breaking participation of 800 delegates from 95 States/territories and one regional grouping. Altogether, 585 formal and informal bilateral meetings were conducted. These meetings led to the signing or initialling of approximately 550 agreements (including many open skies agreements) and arrangements (such as Memoranda of Understanding, Records of Meeting or Agreed Minutes). This year's ICAN2016 will take place in Nassau, The Bahamas, from 5 to 9 December 2016, with added features and services such as opportunities for Business to Business meetings for participating business entities, and workshops or showcases on topical subjects of interest to participants. The detailed information is available at <http://www.icao.int/Meetings/ICAN2016/Pages/default.aspx>.

3.1.8 **Support for regional efforts on liberalization:** ICAO has continued to support and collaborate with the African Civil Aviation Commission (AFCAC) on liberalization in air transport in the region through the promotion of the implementation of the Yamoussoukro Decision (YD). ICAO commends African States for the adoption of a Single African Air Transport Market (SAATM) by

2017 and will encourage African States to give consideration to, and apply the ICAO long-term vision in their policy making and regulatory practices as this will facilitate the implementation of the YD.

3.1.9 As part of its *No Country Left Behind* (NCLB) initiative, ICAO has also provided targeted assistance to African States in the air transport field based on their needs and local conditions. For example, in order to foster air cargo development in Africa, a *Declaration on Air Cargo Development in Africa* was adopted in Lomé, Togo, in August 2014. Similarly, the *Declaration on the Sustainable Development of Air Transport in Africa* was adopted in Antananarivo, Madagascar, in March 2015 (<http://www.icao.int/sustainability/Pages/Declarations-and-Statements.aspx>). In this connection, the AFCAC's 25th Plenary Meeting, held in Cairo, Egypt in December 2015, decided to adopt these declarations for implementation. Finally, the ICAO Secretariat has designed an online system called *State Air Transport Action Plan System* (SATAPS), through which States are encouraged to upload information on their status of implementation of these declarations.

3.2 INFRASTRUCTURE MANAGEMENT

3.2.1 The rapid growth of air traffic will place an increased pressure on existing aviation infrastructure (see paragraph 3.3.5). According to the Programme for Infrastructure Development in Africa (PIDA), it is projected that 24 airports in Africa would be saturated by 2020.

3.2.2 Despite the potential of growth, it remains difficult for States and aviation stakeholders in Africa to access funds and/or ensure financing for the modernization and expansion of their infrastructure (such as airports, runways, telecommunication equipment, air cargo warehouse, meteorology, etc.). For example, of the over 50 projects under the PIDA, civil aviation has not more than three projects related to liberalization of air transport, capacity building and development of airports and air navigation facilities. Only seven African States received around 18 per cent of the overall official development assistance (ODA) for aviation-related projects.

3.2.3 As an outcome of the ICAO World Aviation Forum (IWAF), held on 26 September 2016, financial institutions were urged to alleviate constraints on financing development for the aviation sector, including quality infrastructure investment, and to examine the feasibility of creating investment pools and a financial marketplace in which aviation-related projects can be consolidated and promoted.

3.2.4 There is also no financing arrangement to implement the Aviation System Block Upgrades (ASBUs). In this regard, a Multi-disciplinary Working Group on the economic challenges linked to the implementation of the ASBUs (MDWG-ASBUs) produced reports on how to conduct cost-benefit analyses, business case studies and economic impact analyses, as well as financing schemes. The Airport Economics Panel (AEP) and the Air Navigation Services Economics Panel (ANSEP) were tasked with developing stand-alone guidance material based on these reports, which will be included as cross-reference in the 2019 edition of the Global Air Navigation Plan (GANP).

3.2.5 Concerning the use of incentives designed to encourage implementation of the ASBUs, it was concluded that: a) the existing document, *ICAO's Policies on Charges for Airports and Air Navigation Services* (Doc 9082) is sufficient to address financial incentives; and b) new guidance material should be developed on the potential role/use of operational incentives as part of the assessment of economic and performance benefits, which will also be included in the 2019 edition of the GANP.

3.2.6 An updated report on airport economics was made available on the ICAO website at

<http://www.icao.int/sustainability/Pages/eap-im-airports.aspx>. In exploring ways and means by which to finance aviation infrastructure development, as recommended by the ATConf/6, extensive research was conducted on the experiences of States in the development of various models of Public-Private Partnership (PPP) for infrastructure projects (<http://www.icao.int/sustainability/Pages/im-ppp.aspx>).

3.2.7 A State survey was conducted in 2015 concerning the level of implementation of ICAO's policies on charges. The survey result indicates that most of the 83 responding States/Territories (handling 84 per cent of the total flight departures in 2014) have followed the ICAO policies². This result can be used as a baseline to measure the progress of ICAO's NCLB initiative.

3.2.8 In order to assist States in the management and operation of airports that are not economically viable but are necessary as part of an integrated air transport network for safety, security and socio-economic reasons, the AEP is working on the clarification of the existing ICAO guidance on this subject, with a view to facilitating the management and operation of such airports while adhering to the ICAO key charging principles embodied in Doc 9082.

3.2.9 In cooperation with ICAO, an ACI Conference on Investing in Airports was held from 2 to 4 December 2015, in New Delhi, India, with participation by State regulators, airport operators, airlines and investors to discuss issues on financing of infrastructure development and economic oversight and regulation. A second such conference on the theme of "Creating the conditions to meet future demand" will be held this year from 6 to 8 December in Goa, India.

3.3 AVIATION DATA AND ANALYSIS

3.3.1 The ICAO Statistics Programme has been modernized as part of the Enterprise Data Management (EDM) initiative, which aims to harmonize different sources of data at the organizational level, using standard reference tables and taxonomies by creating a holistic repository of cross functional data.

3.3.2 At the same time, ICAO has established a joint venture, at the specific project level, in partnership with United Nations (UN) agencies, international organizations and academia, rather than conducting the project on its own. For example, a joint project with the Universal Postal Union (UPU), the UN Conference on Trade and Development (UNCTAD) and the International Transport Forum (ITF) at the Organization for Economic Co-operation and Development (OECD) was initiated to evaluate linkages of e-commerce, liner shipping and air cargo and to identify regulatory and other constraints that contribute to a low share of air cargo in the rapidly growing e-commerce market.

3.3.3 **Big data.** In recent years, data sets are becoming increasingly large and complex, making them unmanageable for traditional data processing applications. For example, aircraft movements data captured in real time using Automatic surveillance Broadcast System (ADS-B) or global traffic flows data coming from Market Intelligence Data Transfer (MIDT)³ cannot be

² The survey results are available at:

<http://www.icao.int/Meetings/a39/Documents/Survey%20on%20States%20%20Implementation%20of%20ICAOs%20Policies%20on%20Charges%20for%20Airports%20and%20Air%20Navigation%20Services.pdf>

³ ICAO released a preliminary study of air connectivity and competition based on the analysis of MIDT. This study was conducted jointly with the Interdisciplinary Center for Mathematical and Computational Modelling

processed under the existing applications. ICAO is a member of the UN Statistical Commission global working group, which is tasked to establish standards on the technical and policy aspects of big data.

3.3.4 Business analysis tools. Since mid-2014, various business analysis tools have been developed to analyze and visualize ICAO data thereby assisting in the decision-making process (<https://www4.icao.int/etools/>). The following are examples of the tools: air service agreement maps, aeronautical treaty maps, traffic and financial trends, air traffic mapping, airports and air navigation services tariffs evaluation. The latest available business tool measures the expected economic benefits of implementing safety-related Standards and Recommended Practices (SARPs). Progress has also been made regarding the use of modern analytical and forecasting tools to reduce time and improve the efficiencies of the analytical process.

3.3.5 Airport reporting form. ICAO, with the Airport Council International (ACI), jointly collects airport traffic data starting from January 2016 by replacing the ICAO Air Transport Reporting Form I, and is developing an online analytical tool of airport charges contained in Tariffs for Airports and Air Navigation Services (Doc 7100).

3.3.6 ICAO single set of long-term traffic forecasts. The multi-disciplinary group, including States, international organizations and the Committee of Aviation Environmental Protection (CAEP) working groups, developed the new forecasting models and methodologies. The estimated results indicate that global passenger traffic will grow at 4.6 per cent annually to 2032. Out of the 40 international route groups, eight are to/from Africa. It is expected that the largest passenger route group to/from Africa in 2032 will be Africa to Middle East where traffic will grow by 4.9 per cent annually to 2032. With regard to cargo traffic, Africa is expected to be the region with the slowest growth with 2.1 per cent annually while the world is expected to grow by 4.3 per cent annually.

3.3.7 Global market-based measure (MBM) scheme for international aviation. ICAO will develop, in coordination with the Committee on Aviation Environmental Protection (CAEP) and the Aviation Data and Analysis Panel (ADAP), an implementation framework for the Monitoring, Reporting and Verification (MRV) elements of the global MBM scheme.

3.3.8 Aviation satellite account. ICAO is preparing the draft methodological framework document on the Aviation Satellite Account to measure the size of aviation-related direct gross domestic product (GDP). The first draft will be ready for the ADAP to be held in March 2017. Under the guidance of the UN Statistics Division, the Expert Review Group will be established with representatives from the National Statistics Office (NSO) and Member States and observers of ADAP to review the methodological framework document by the end of 2017 to see if it conforms to the System of National Accounts (SNA) principles, and any deviation from SNA principles will be accepted due to peculiarities of the aviation sector.

3.3.9 Global Indicator for UN Sustainable Development Goals (SDGs). In order to measure the progress of the SDGs, the 47th Session of the UN Statistical Commission held in March 2016 endorsed the initial global indicator framework submitted for approval by the UN General Assembly. ICAO supports the agreed global indicator of SDG Target 9.1⁴ – *passenger and freight volumes by mode of transport* – by serving as the custodial agency responsible for collecting air traffic

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<http://www.icao.int/Meetings/a39/Documents/Air%20Connectivity%20and%20Competition.pdf>

⁴ SDG Target 9.1 refers to “Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.”

data and sharing the information with the UN.

3.4 **AIR TRANSPORT FUND**

3.4.1 The Air Transport Fund, established in 2014 (State letter 2014/32 refers), serves as a mechanism for the collection and use of voluntary contributions from States and other donors to support ICAO's activities in the air transport field (<http://www.icao.int/sustainability/Pages/TRAF.aspx>).

3.4.2 Possible projects to be undertaken by ICAO under the voluntary contributions of the Air Transport Fund include the "Air Transport Eliminating Poverty: ICAO's Essential Services and Connectivity Improvement (ESCI) Scheme", which is a practical regulatory tool to assist States in creating more opportunities for employment and investments in a liberalized business environment. It is moreover a guidance scheme for decision makers investing in air transport infrastructure, especially in LDCs, LLDCs and SIDS, not merely for the sake of air transport itself but as an effective means for economic development and poverty reduction.

3.4.3 Further possible projects to be supported by the Air Transport Fund include "iPLAN: Planning for Travel Disruptions", and "Business Aviation: A Productive Booster". Also the Air Transport Fund can support the provision of technical assistance as part of ICAO's NCLB initiative.

4. **ACTION BY THE CONFERENCE**

4.1 The Conference is invited to:

- a) support ICAO's work for Economic Development of Air Transport;
- b) encourage States to apply and follow ICAO's policies and guidance in the air transport field in their regulatory practices, including the long-term vision for liberalization and core principles on consumer protection;
- c) coordinate with ICAO in meeting States' needs of data, analysis and tools to promote air transport development in the region; and
- d) encourage contributions to the voluntary Air Transport Fund.

— END —