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ABDERAHMANE BERTHE

**Secretary General
African Airlines
Association (AFRAA)**



INDEX

4

Editorial

Dr Kostas Iatrou
Director General,
Hermes - Air Transport Organisation



5

Top News

Apr - Dec 2022
Latest Industry News and Updates



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26

Hermes News

- **May 20th, 2022: Hermes Director General meets with the Director General of the Civil Aviation of Kazakhstan & the Governor of the Hellenic Civil Aviation Authority..... 20**



- **May 21st, 2022: Special Presentation of Salzburg Mozarteum Foundation: The Grassi-Medailon & the Posch-Medallion..... 21**

- **June 9th, 2022: 2022 Hermes AGM & Leaders Forum..... 22**



- **June 19th, 2022: Hermes hosts a reception at the 2022 IATA AGM in Doha..... 23**

- **July 2nd, 2022: The Director General of Hermes meets with the Secretary General of ICAO..... 24**



- **August 6th, 2022: The Director General of Hermes meets the President of IFATSEA..... 25**

- **September 5th, 2022: Aviation leaders meet in Athens.... 26**



- **September 26th, 2022: Hermes hosts a reception at the 41st ICAO Assembly ... 27**



- **October 23rd, 2022: Hermes hosts a reception at the 2022 ACI WAGA in Marrakech 28**

- **October 25th, 2022: Hermes participates at the 55th AACO AGM 28**

- **December 8th, 2022: The Director General of Hermes & the Chair of Board of**

INDEX

Governors of IATA receive a Letter of Gratitude from the Minister of Industry and Infrastructural Development of the Republic of Kazakhstan..29



December 12th, 2022: The Director General of Hermes moderates the CEOs Roundtable Discussion in AFRAA AGA.. 30

31 Interview

Abderahmane Berthe
Secretary General African Airlines Association (AFRAA)



37 Recommendations

41 Events

- 27/9 - 7/10/2022:
41st ICAO Assembly 41
- 7/10/2022: **Hermes participated as an observer in the 41st ICAO Assembly... 43**



- 8/12/2022:
Aviation leaders sign a declaration that lay the way to establish the International Aviation Forum (IAF)..... 44
- 19-21/6/2022:
78th IATA AGM and World Air Transport Summit..... 46
- 16-18/10/2022:
2022 ALTA AGM & Airline Leaders Forum..... 52
- 22-28/10/2022:
2022 ACI Africa / World Annual General Assembly (WAGA 2022) 58
- 24-26/10/2022:
AACO 55th AGM 64

- 8/11/2022:
2022 IATA Wings of Change Europe 68
- 11-13/12/2022:
AFRAA 54th AGA 70

73 Article

- **Business Aviation - A Different Animal**
By Secretary-General Athar Husain Khan
European Business Aviation Association



75 Statistics



- **Air Passenger Market Analysis 76**



ICAO

- **Economic Development .. 77**



EDITORIAL



Dr Kostas Iatrou

Director General
Hermes - Air Transport Organisation

Dear Hermes member,

2022 was a very successful year for Hermes. Our AGM was hosted by EUROCONTROL in Brussels Headquarters.

During the year we hosted a series of networking receptions: during the IATA AGM, with the help of A4A, in Doha, on the eve of the ICAO Assembly in Montreal and in ACI WAGA, supported by iGA Istanbul Airport, in Marrakesh.

At the same time in my capacity as Director General I represented Hermes in the assemblies of the partners of our organisation namely IATA AGM, ACI WAGA, AACO AGM and AFRAA AGA.

Hermes participated for the second time in ICAO Assembly as an observer and submitted two information papers. Finally, I was a co-signatory of the declaration that lay the way to establish the International Aviation Forum (IAF).

In this issue we have the pleasure to host an interview with Abderahmane Berthe, Secretary General of AFRAA.

Enjoy reading!

Kostas Iatrou

07/04/2022

ICAO AND IFAR REACH COOPERATION AGREEMENT ON AVIATION INNOVATION

ICAO and the International Forum for Aviation Research (IFAR) will scale-up their cooperation and information sharing to promote innovation through a new agreement concluded in Montréal this week.

The agreement was signed on the occasion of a high-level meeting between the Secretary General, the President of the ICAO Council and Council members and IFAR Principals. Both parties acknowledged the need for the independent assessment of innovations to frame and protect the notion of general interest, within the context of a variety of transformative changes within the aviation industry.



Source: ICAO

04/04/2022

CATALIN RADU APPOINTED AS DIRECTOR GENERAL IN AVIATION ADMINISTRATION OF KAZAKHSTAN JSC

By the decision of the Board of Directors, Catalin Radu was appointed as Director General in Aviation Administration of Kazakhstan JSC.



Source: Aviation Administration of Kazakhstan

07/04/2022

NEW TRAINING PROGRAMME TO ACCELERATE AVIATION'S SUSTAINABLE AND RESILIENT RECOVERY

A new agreement reached between ICAO and the Civil Aviation Authority of Singapore (CAAS) today will see the global delivery of an aviation recovery and resilience training programme for aviation leaders, accelerating the restoration of air services through improving alignment with international best practices.

The agreement was signed in Singapore by ICAO Secretary General Juan Carlos Salazar and the Director-General of the Civil Aviation Authority of Singapore (CAAS) Han Kok Juan.



Source: ICAO

11/04/2022

THE TOP 10 BUSIEST AIRPORTS IN THE WORLD REVEALED

Airports Council International (ACI) World has today published the top 10 busiest airports worldwide for 2021 showing encouraging signs of traffic recovery as many previous busiest airports re-join top ranks. The world airport rankings are based on the preliminary compilation of 2021 global data from airports around the world. Due to ACI’s reach as the trade association of the world’s airports, the rankings reflect the most up-dated airport data used by the industry and include passenger traffic, cargo volumes, and aircraft movements.

2021	2020	2019	Airport	2021	% change vs 2020	% change vs 2019
1	2	1	ATLANTA GA, US (ATL)	75 704 760	76.4	-31.5
2	4	10	DALLAS/FORT WORTH TX, US (DFW)	62 465 756	58.7	-16.8
3	8	16	DENVER CO, US (DEN)	58 828 552	74.4	-14.8
4	13	6	CHICAGO IL, US (ORD)	54 020 399	75.1	-36.2
5	15	3	LOS ANGELES CA, US (LAX)	48 007 284	66.8	-45.5
6	18	34	CHARLOTTE NC, US (CLT)	43 302 230	59.2	-13.4
7	27	31	ORLANDO FL, US (MCO)	40 351 068	86.7	-20.3
8	1	11	GUANGZHOU, CN (CAN)	40 259 401	-8.0	-45.1
9	3	24	CHENGDU, CN (CTU)	40 117 496	-1.5	-28.2
10	22	30	LAS VEGAS NV, US (LAS)	39 754 366	78.6	-23.1

* Total passengers enplaned and deplaned, passengers in transit counted once

Source: ACI World

20/04/2022

AIRPORTS ANTICIPATE AND RESPOND TO FINANCIAL MARKET, CUSTOMER, AND COMMUNITY NEEDS

Airports Council International (ACI) World has today released a first of its kind guidance, the Environmental, Social, and Governance (ESG) Management Best Practice, to help airports define and strengthen their ESG reporting framework to position themselves for future growth.



22/04/2022

QATAR AIRWAYS STEPS INTO THE METAVERSE WITH ‘QVERSE’ VIRTUAL REALITY AND WORLD’S FIRST METAHUMAN CABIN CREW

Qatar Airways today entered the metaverse by launching QVerse, a novel virtual reality (VR) experience for visitors to the airline’s website.

Users of the www.qatarairways.com/QVerse website can now virtually tour and navigate the Premium Check-in area at Hamad International Airport (HIA), the cabin interior of the airline’s aircraft, including the award-winning Business Class - Qsuite, and the Economy Class cabin, by using their own Personal Electronic Devices (PEDs). The national carrier of the

State of Qatar is also the first global airline to introduce a MetaHuman cabin crew offering a digital interactive customer experience.



Source: Qatar Airways

05/05/2022

IATA AND ACA COLLABORATE ON STANDARD INFLIGHT CATERING AGREEMENT, FACILITATING OPERATIONAL HARMONIZATION

The International Air Transport Association (IATA), in collaboration with the Airline Catering Association (ACA), have released an updated Standard Inflight Catering Agreement (SICA). The use of the standardized SICA template helps improve the efficiency of inflight catering procurement across the world.

The release of the updated template is the result of an agreement to deepen the collaboration between IATA and ACA. The two organizations will also jointly promote the use of SICA among their members.

06/05/2022

UPDATED AVIATION SECURITY STANDARDS ADOPTED BY THE ICAO COUNCIL

During its recent 225th Session the Council of ICAO adopted Amendment 18 to Annex 17 to the International Standards and Recommended Practices, Aviation Security (Annex



Source: ICAO

17 to the Convention on International Civil Aviation). Amendment 18 arises from the proposals of the Thirty-second Meeting of the Aviation Security Panel (AVSECP/32), held virtually from 31 May to 4 June 2021, in order to ensure that the measures in Annex 17 – Aviation Security are commensurate with the level of threat to civil aviation.

31/05/2022

THE SESAR DEPLOYMENT AND INFRASTRUCTURE PARTNERSHIP TAKES OVER AS THE NEW SESAR DEPLOYMENT MANAGER

The European Commission and the SESAR Deployment and Infrastructure Partnership (SDIP) signed a long-term Framework Partnership Agreement (2022-2027) on 31 May, marking the official start of the new SESAR



Deployment Manager. SESAR is the technological pillar of the EU's Single European Sky (SES) initiative, charged with harmonising and modernising Air Traffic Management (ATM) across Europe.

01/06/2022

LAUNCH OF ICAO ASSISTANCE, CAPACITY-BUILDING AND TRAINING FOR SUSTAINABLE AVIATION FUELS

ICAO Vision for SAF, and the three main pillars of sustainable development recognized by the United Nations: economic, social and environmental.

The ICAO Assistance, Capacity-building and Training for Sustainable Aviation Fuels (ACT-SAF) programme was officially launched at a Stockholm+50 associated side event held at ICAO Headquarters in Montréal. ICAO ACT-SAF will provide opportunities for States to develop their full potential in sustainable aviation fuels (SAF) development and deployment, in line with ICAO's No Country Left Behind initiative, the 2050

15/06/2022**AIRBUS A321XLR TAKES OFF FOR THE FIRST TIME**

Source: Airbus

Airbus' first A321XLR (Xtra Long Range) has successfully accomplished its first flight. The aircraft, MSN 11000, took off from Hamburg-Finkenwerder Airport at 11:05 hrs CEST for a test flight which lasted approximately four hours and 35 minutes. The aircraft's crew consisted of experimental test pilots Thierry Diez and Gabriel Diaz de Villegas Giron, as well as test engineers

Frank Hohmeister, Philippe Pupin and Mehdi Zeddoun. During the flight, the crew tested the aircraft's flight controls, engines and main systems, including flight envelope protections, both at high and low speed.

19/06/2022**IATA LAUNCHES IATA CO2 CONNECT IN SUPPORT OF INDUSTRY SUSTAINABILITY COMMITMENT**

The International Air Transport Association (IATA) has launched IATA CO2 Connect, an online tool which provides the most accurate CO₂ emission calculations for any given commercial passenger flight. IATA CO₂ Connect responds to the growing demand for CO₂ data transparency linked to airline specific and actual fuel burn information and load factors. This sets it apart from theoretical data models that already exist on the market today.

21/06/2022**FIRST FLIGHT IN HISTORY WITH 100% SUSTAINABLE AVIATION FUEL IN BOTH ENGINES ON A COMMERCIAL AIRCRAFT**

Today, regional aircraft manufacturer ATR, Swedish airline Braathens Regional Airlines and sustainable aviation fuel (SAF) supplier Neste collaborated to enable the first ever 100% SAF-powered test flight on a commercial aircraft.

20/06/2022**MEHMET TEVFIK NANE NEW CHAIR OF THE IATA BOARD**

The International Air Transport Association (IATA) announced that Pegasus Airlines Vice-Chairperson of the Board (Managing Director) Mehmet Tevfik Nane has assumed his duties as Chair of the IATA Board of Governors (BoG) for a one-year term, effective from the conclusion of the 78th IATA Annual General Meeting (AGM) in Doha, Qatar on 21 June. Nane is the 80th chair of the IATA BoG. He has served on the BoG since 2019. He succeeds JetBlue Airways CEO Robin Hayes, who will continue to serve on the BoG.



Source: IATA

03/06/2022

EASA PUBLISHES WORLD’S FIRST RULES FOR OPERATION OF AIR TAXIS IN CITIES

The European Union Aviation Safety Agency (EASA) published rules for the operation of air taxis in cities, the first comprehensive proposal for such regulations to be issued world-wide. The proposed new regulatory framework is open to public consultation until September 30, 2022, and cover the technical domains of airworthiness, air operations, flight crew licensing and rules of the air.

18/07/2022

AIRBUS, AIR CANADA, AIR FRANCE-KLM, EASYJET, INTERNATIONAL AIRLINES GROUP, LATAM AIRLINES GROUP, LUFTHANSA GROUP AND VIRGIN ATLANTIC SIGN LETTERS OF INTENT TO EXPLORE CARBON REMOVAL SOLUTIONS FOR AVIATION

Airbus and a number of major airlines – Air Canada, Air France-KLM, easyJet, International Airlines Group, LATAM Airlines Group, Lufthansa Group and Virgin Atlantic – have signed Letters of Intent (LoI) to explore opportunities for a future supply of carbon removal credits from direct air carbon capture technology.

Direct Air Carbon Capture and Storage (DACCS) is a high-potential technology that involves filtering and removing CO₂ emissions directly from the air using high powered fans. Once removed from the air, the CO₂ is safely and permanently stored in geologic reservoirs. As the aviation industry cannot capture CO₂ emissions released into the atmosphere at Source, a direct air carbon capture and storage solution would allow the sector to extract the equivalent amount of emissions from its operations directly from atmospheric air.

01/07/2022

ANDREAS BOSCHEN BEGINS MANDATE AS SESAR 3 JU EXECUTIVE DIRECTOR

In 1 July, Andreas Boschen officially started his mandate as Executive Director of the SESAR 3 JU. Boschen’s arrival comes at a critical moment as the new partnership embarks on its ambitious research and innovation programme to make Europe’s aviation infrastructure fit for the digital age and on target to meet the sector’s net zero ambitions.

During his time at the European Commission, Andreas Boschen has been actively shaping policy and following legislation on aviation, more specifically the Single European Sky, developing implementing rules, managing the Single Sky committee and coordinating relations with Eurocontrol and third countries.



Source: SESAR



Source: Airbus

19/07/2022

AIRBUS AND CFM INTERNATIONAL LAUNCH A FLIGHT TEST DEMONSTRATOR FOR ADVANCED OPEN FAN ARCHITECTURE

Airbus and CFM International, a 50/50 joint company between GE and Safran Aircraft Engines, are collaborating to flight test CFM's cutting-edge open fan engine architecture.

The Flight Test Demonstrator aims to mature and accelerate the development of advanced propulsion technologies, as part of CFM's Revolutionary Innovation for Sustainable Engine (RISE) demonstration programme, on board an Airbus A380. The flight test campaign will be performed in the second half of this decade from the Airbus Flight Test facility in Toulouse, France. Ahead of the A380 test flights, CFM will perform engine ground tests, along with flight test validation at GE Aviation's Flight Test Operations centre in Victorville, CA, USA.



22/07/2022

COUNTRIES' SUPPORT GLOBAL 'NET-ZERO 2050' EMISSIONS TARGET TO ACHIEVE SUSTAINABLE AVIATION

Ministers and officials engaged in high level environment talks brokered by ICAO have urged countries to cooperate further through the UN agency toward a collective global long term aspirational goal (LTAG) of net-zero carbon emissions by 2050, in support of the Paris Agreement's temperature target.



Source: ICAO

Recognizing that each State's special circumstances and respective capabilities will inform the ability of each to contribute within its own national timeframe, while showcasing a collaborative spirit through constructive dialogue and respect for diversity, the new conclusions will aid a just and green transition for the decarbonisation of international aviation.

27/07/2022

ATR APPOINTS NATHALIE TARNAUD LAUDE AS CHIEF EXECUTIVE OFFICER

ATR announces that its Board Members, Airbus and Leonardo, have appointed the new Chief Executive Officer, Nathalie Tarnaud Laude, effective from 17 September. Nathalie succeeds Stefano Bortoli, whose four-year mandate expires at the same date, following the terms set by ATR's bylaws. Stefano will take on a new leadership role at Leonardo that will be announced by the company in the upcoming days.



Source: ATR

10/08/2022

EMIRATES INVESTS OVER US\$ 2 BILLION TO TAKE ITS ON-BOARD CUSTOMER EXPERIENCE TO NEW HEIGHTS

Priding itself on a brand promise of 'Fly Better', Emirates is investing over US\$ 2 billion to enhance its inflight customer experience, including a massive programme to retrofit over 120 aircraft with the latest interiors, plus an array of other service improvements across all cabins starting in 2022.



Source: Emirates

09/08/2022

IATA LAUNCHES AVSEC INSIGHT PLATFORM TO HELP MANAGE BUSINESS SECURITY RISKS

The International Air Transport Association (IATA) announced the launch of AVSEC Insight, an online platform offering users a comprehensive range of timely, open-Source, information to aid in identifying potential security risks and threats to their operations and businesses.

16/08/2022

AMERICAN AIRLINES ANNOUNCES AGREEMENT TO PURCHASE BOOM SUPERSONIC OVERTURE AIRCRAFT, PLACES DEPOSIT ON 20 OVERTURES

American Airlines and Boom Supersonic announced the airline's agreement to purchase up to 20 Overture aircraft, with an option for an additional 40. American has paid a non-refundable deposit on the initial 20 aircraft. Overture is expected to carry passengers at twice the speed of today's fastest commercial aircraft.



Source: American Airlines

18/08/2022**2022 ICAO SAFETY REPORT PRESENTS POSITIVE RESULTS**

ICAO has released its 2022 Safety Report, presenting a detailed analysis of global civil aviation safety performance for 2021 operations.

Report results reveal a 9.8% decrease in the global accident rate for last year vs. 2020, dropping from 2.14 to 1.93 per million departures.

Meanwhile 2021 fatalities fell by 66% against the number in 2020, though the number of accidents where fatalities occurred remained consistent at four.

12/09/2022**AFRAA AND FLIGHT SAFETY FOUNDATION SIGN MOU FOR COLLABORATION TO ENHANCE SAFETY OF THE AIR TRANSPORT INDUSTRY IN AFRICA**

The African Airlines Association (AFRAA) and Flight Safety Foundation (FSF) signed a memorandum of understanding (MoU) to establish a framework of cooperation and facilitate collaboration between the two organisations on actions to enhance air transport safety in Africa.

Under the MoU, AFRAA and FSF will cooperate closely and consult each other on matters and/or activities of mutual interest aimed at the improvement of safety of the air transport industry in Africa such as joint regional technical workshops, development of information and resource material for the membership of each organisation and the industry at large, promotion of effective safety information sharing among other initiatives.

15/09/2022**ICELAND AND EUROCONTROL HAVE TODAY SIGNED A TRANSITIONAL AGREEMENT MARKING ICELAND'S INTENTION TO BECOME A MEMBER STATE OF THE ORGANISATION ON 1 JANUARY 2025**

Iceland and EUROCONTROL have today signed a Transitional Agreement marking Iceland's intention to become a Member State of the Organisation on 1 January 2025.

The Transitional Agreement was signed today in Reykjavik by Mr Jon Gunnar Jonsson, Director General of the Icelandic Transport Authority and Eamonn Brennan, Director General of EUROCONTROL.



Source: EUROCONTROL

Under the terms of the Agreement, Iceland will be able to participate in the tasks and activities of EUROCONTROL and also be present as an Observer in the decision-making and working groups.

15/09/2022

REGENT COMPLETES WORLD'S FIRST ALL-ELECTRIC SEAGLIDER FLIGHT UNLOCKING A NEW ERA OF MARITIME MOBILITY

REGENT, the company pioneering the electric seaglider for sustainable high-speed maritime travel, has announced that its seaglider technology demonstrator completed its first successful series of flights in Narragansett Bay, Rhode Island. The REGENT seaglider is the first-ever vehicle to successfully utilize three modes of maritime operation—floating, foiling and flying—marking a major step forward in maritime transportation.



Source: REGENT

20/09/2022

BOEING AND WISK UNVEIL CONCEPT OF OPERATIONS FOR URBAN AIR MOBILITY

Boeing and its joint venture partner Wisk today released a roadmap for transitioning to a future where automated and uncrewed aircraft can safely carry passengers and cargo in urban and suburban areas. The concept of operations lays out the technology, regulatory and social recommendations needed to deploy Urban Air Mobility (UAM) in the United States and integrate it into the national airspace system.

28/09/2022

IATA AND ITC JOIN FORCES FOR CROSS-BORDER TRADE

The International Air Transport Association (IATA) and the International Trade Centre (ITC) joined forces to improve access to global trade and air cargo supply chain information for businesses and air cargo professionals.

27/09/2022

VIRGIN ATLANTIC TO JOIN SKYTEAM ALLIANCE

SkyTeam, the global airline alliance, and Virgin Atlantic have today announced that the UK airline will join as SkyTeam's newest member in early 2023. Virgin Atlantic will become SkyTeam's first and only UK member airline, enhancing the alliance's transatlantic network and services to and from Heathrow and Manchester Airport.



Source: SkyTeam

01/10/2022

SKYTEAM APPOINTS PATRICK ROUX AS NEW CEO AND MANAGING DIRECTOR

SkyTeam, the global airline alliance, has named Patrick Roux as its new CEO and Managing Director, effective 1 October 2022.

An industry veteran with more than 30 years' experience, Patrick joins Sky-Team from the Air France-KLM Group, where he spent the last 15 years working at executive levels across key roles covering strategic and operational leadership, most recently as Senior Vice President Alliances. In this role he was responsible for overseeing the strategic partnership activities of Air France-KLM, including commercial offerings in different markets through more than 80 Joint Ventures and codeshare agreements.



Source: SKyTeam

04/10/2022

BIDEN-HARRIS ADMINISTRATION EXTENDS REST PERIODS FOR FLIGHT ATTENDANTS

The U.S. Department of Transportation's Federal Aviation Administration (FAA) issued a final rule requiring that flight attendants receive longer periods of rest between shifts. The new rule increases the rest period to 10 consecutive hours.

14/10/2022

SWISS BECOMES THE WORLD'S FIRST PASSENGER AIRLINE TO ADOPT CARBON-EFFICIENT AEROSHARK TECHNOLOGY



Source: SWISS



Source: European Commission

17/10/2022

EU AND ASEAN SIGN LANDMARK REGION-TO-REGION AGREEMENT CONNECTING 1.1 BILLION PEOPLE

The European Union and the Association of Southeast Asian Nations (ASEAN) (members: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam) signed a comprehensive air transport agreement that will open up more air transport opportunities and enhance direct connectivity between the two regions, while upgrading

rules and standards for concerned flights. The agreement will apply immediately. By setting global benchmarks that commit all 37 countries in the two regions to fair competition and to improving social and environmental conditions, it is the latest example of a new generation of international air transport agreements. The signing means new opportunities for consumers, airlines and airports both in Europe and in ASEAN countries.

18/10/2022**U.S. AIRLINES STRENGTHEN COMMITMENT TO PASSENGER ACCESSIBILITY**

Airlines for America (A4A), the industry trade organization for the leading U.S. airlines, along with our seven passenger airlines – Alaska, American, Delta, Hawaiian, JetBlue, Southwest and United – announce a new pledge to improve safe, accessible air travel to all passengers with disabilities including those with mobility, cognitive and social disabilities.

Airlines for America’s (A4A) passenger airlines, jointly commit to taking steps to improve accessibility and services for passengers with disabilities,” announced A4A’s seven passenger airline CEOs in a statement. “We recognize the need for a specific commitment to remove barriers to safe, accessible air travel.”

25/10/2022**SALVATORE SCIACCHITANO RE-ELECTED AS PRESIDENT OF ICAO COUNCIL**

Source: ICAO

Salvatore Sciacchitano was re-elected by acclamation yesterday for a second three-year term as President of the Council of the International Civil Aviation Organization (ICAO).

“While the COVID-19 pandemic has dramatically impacted the Organization’s work, I take great pride in the fact that the priorities identified as part of my agenda for modernization have all been addressed with reasonable success,” Mr. Sciacchitano remarked in his acceptance address. “It is my firm belief that we must continue in this same direction in the next triennium in order to fully realize the modernization of our great Organization to the benefit of all Member States and the global aviation community.”

09/11/2022**IGA ISTANBUL AIRPORT ACTIVATED THE ROUTING SERVICE (LEVEL 3) AT A-SMGCS SYSTEM**

The world’s most important global hub, iGA Istanbul Airport, activated a new level of their pioneering application, Advanced Surface Movement Guidance and Control System (A-SMGCS), developed in line with its digitalization strategy. “Routing Service”, the new level of A-SMGCS technology, provides automatic routing functionality for all aircraft and vehicles on airside operations delivering an advanced situation awareness and enhanced operational control.

Integrating the latest technology in the aviation industry into the current applications and procedures is becoming increasingly crucial in order to make an airport more sustainable. iGA Istanbul Airport carries out the required planning by optimizing the needs of all stakeholders, such as joint projects with airlines, airports, aircraft manufacturers and the appropriate sub-groups for the sector’s dynamic structure, as per the Eurocontrol specifications, accurately meeting the Eurocae performance criteria, and following the rules of national and international organizations.



Source: iGA Istanbul Airport

16/11/2022**EASA AND FAA JOIN FORCES TO PRESENT NEW ROADMAP FOR AIR-GROUND CONNECTIVITY**

The European Union Aviation Safety Agency (EASA) and the Federal Aviation Administration (FAA) have launched a joint cooperation initiative to rethink aviation connectivity, publishing a White Paper proposal for the modernisation and harmonisation of the aviation data communication landscape by 2035.



**Federal Aviation
Administration**

21/11/2022**EUROPEAN UNION AGENCY FOR RAILWAYS (ERA) AND EASA SIGN A MEMORANDUM OF COOPERATION PROMOTING INTER-AGENCY COOPERATION**

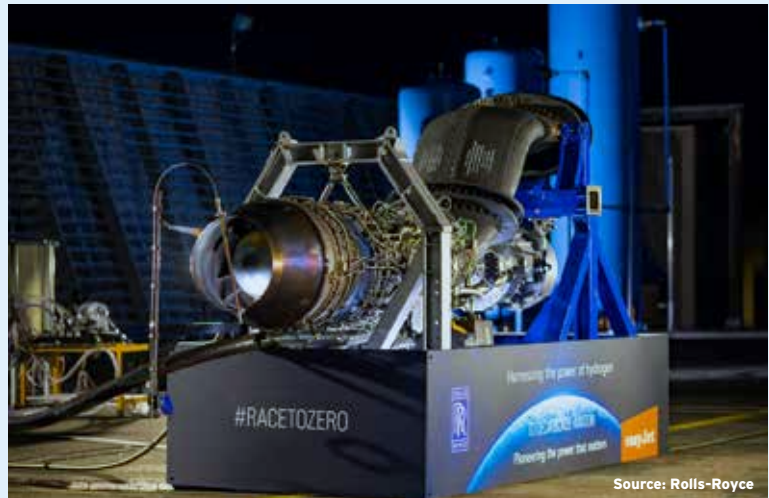
Patrick Ky and Jean-Marc Cluzeau met with Josef Doppelbauer, Executive Director of the European Union Agency for Railways (ERA) and members of his team in Valenciennes, for the signature of a Memorandum of Cooperation (MoC).

The MoC promotes cooperation and establishes a regular structured dialogue between the Agencies, enhancing the sharing of information, knowledge and experience in three core areas of cooperation.

28/11/2022**ROLLS-ROYCE AND EASYJET SET NEW WORLD FIRST**

Rolls-Royce and easyJet today confirmed they have set a new aviation milestone with the world's first run of a modern aero engine on hydrogen.

The ground test was conducted on an early concept demonstrator using green hydrogen created by wind and tidal power. It marks a major step towards proving that hydrogen could be a zero carbon aviation fuel of the future and is a key proof point in the decarbonisation strategies of both Rolls-Royce and easyJet.



Source: Rolls-Royce

29/11/2022**ISTANBUL AIRPORT BECOMES WORLD'S FIRST TO ACHIEVE AIRPORT ACCESSIBILITY ACCREDITATION**

Airports Council International (ACI) World announced that iGA Istanbul Airport has become the first airport in the world to be accredited under its new Accessibility Enhancement Accreditation program, a first-of-its kind program dedicated to airport accessibility.

The accreditation program was launched earlier this year and provides a continuous path of improvement in the area of accessibility for passengers with disabilities, which includes people with physical and non-apparent disabilities. This level of accreditation achieved by iGA Istanbul Airport is designed to help airports measure, evaluate, and improve their accessibility management and culture. It was developed as a collaboration between accessibility advocacy groups, airports, industry partners, and ACI.

30/11/2022

AIRBUS AND NESTE JOIN FORCES ON SAF DEVELOPMENT TO DECARBONISE AEROSPACE

Airbus and Neste, a world-leading producer of renewable fuels, have signed a Memorandum of Understanding (MoU) to jointly advance the production and uptake of Sustainable Aviation Fuel (SAF). Both parties share a vision that SAF is a key solution to helping reduce greenhouse gas emissions of air travel. This collaboration aims to accelerate the aviation sector's transition to SAF.



30/11/2022

AIRBUS REVEALS HYDROGEN-POWERED ZERO-EMISSION ENGINE

Airbus has revealed that it is developing a hydrogen-powered fuel cell engine. The propulsion system is being considered as one of the potential solutions to equip its zero-emission aircraft that will enter service by 2035. Airbus will start ground and flight testing this fuel cell engine architecture onboard its ZEROe demonstrator aircraft towards the middle of the decade. The A380 MSN1 flight test aircraft for new hydrogen technologies is currently being modified to carry liquid hydrogen tanks and their associated distribution systems.



06/12/2022

THE INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA) HAS DEVELOPED INDUSTRY STANDARDS WHICH WILL BRING THE AIM OF HAVING TRAVELERS ARRIVE AT AIRPORTS READY-TO-FLY ONE STEP CLOSER TO REALITY

The International Air Transport Association (IATA) has developed industry standards which will bring the aim of having travelers arrive at airports ready-to-fly one step closer to reality. The newly released Recommended Practice on Digitalization of Admissibility will enable travelers to digitally prove admissibility to an international destination, avoiding a stop at the check-in desk or boarding gate for document checks. Under the One ID initiative airlines are working with IATA to digitalize the passenger experience at air-

ports with contactless biometric-enabled processes. The International Air Transport Association (IATA) has developed industry standards which will bring the aim of having travelers arrive at airports ready-to-fly one step closer to reality. The newly released Recommended Practice on Digitalization of Admissibility will enable travelers to digitally prove admissibility to an international destination, avoiding a stop at the check-in desk or boarding gate for document checks.

06/12/2022

FINAL BOEING 747 AIRPLANE LEAVES EVERETT FACTORY

The last Boeing (NYSE: BA) 747 left the company's widebody factory in advance of its delivery to Atlas Air in early 2023.



06/12/2022

IATA ESTABLISHES MODERN AIRLINE RETAILING PROGRAM

The International Air Transport Association (IATA) announced the establishment of the Modern Airline Retailing program to advance customer centricity and value creation in the airline industry. The transformation will be accelerated by a consortium of advanced airline adopters that will work together through IATA. Consortium participants include American Airlines, Air France-KLM, British Airways, Emirates, Finnair, Iberia, Lufthansa Group, Oman Air, Singapore Airlines and Xiamen Airlines.

13/12/2022

UNITED AIRLINES UNVEILS HISTORIC ORDER TO PURCHASE UP TO 200 NEW BOEING WIDEBODY PLANES

United Airlines today announced the largest wide-body order by a U.S. carrier in commercial aviation history: 100 Boeing 787 Dreamliners with options to purchase 100 more. This historic purchase is the next chapter in the ambitious United Next plan and will bolster the airline's leadership role in global travel for years to come.



13/12/2022

ICAO AND WHO HEIGHTEN THEIR PUBLIC HEALTH EMERGENCY PARTNERSHIP

A new agreement between ICAO and the World Health Organization (WHO) will support the use of evidence-informed and risk-based approaches to international travel, both in the context of the COVID-19 pandemic and other potential public health emergencies.

14/12/2022

AIR NEW ZEALAND ANNOUNCES MISSION NEXT GEN AIRCRAFT PARTNERS

Air New Zealand has announced four world-leading innovators it will be working with on its mission to have its first zero emissions demonstrator flight – either cargo or passenger – take to the skies from 2026.

A combination of electric, green hydrogen, and hybrid aircraft, these partners will work alongside Air New Zealand over the coming years to focus on developing the technology and associated infrastructure required to make flying these aircraft in New Zealand a reality.



Source: Air New Zealand

14/12/2022

ANGELA GITTENS BECOMES GLOBAL AMBASSADOR FOR FLAGSHIP ACI-ICAO AIRPORT PROFESSIONAL PROGRAM

Airports Council International (ACI) World, along with the International Civil Aviation Organization (ICAO), has today announced the appointment of Ms. Angela Gittens, former Director General of ACI World, as program ambassador for the renowned ACI-ICAO Airport Management Professional Accreditation Programme (AMPAP).



Source: ACI

15/12/2022

SESAR 3 JU AND EUROCONTROL REINFORCE COLLABORATION

On 15 December 2022, the SESAR 3 Joint Undertaking and founding member, EUROCONTROL, signed an administrative agreement setting out EUROCONTROL's renewed role in and commitment to the partnership and the Digital European Sky research and innovation programme. The agreement was signed by Andreas Boschen, Executive Director of the SESAR 3 JU and Eamonn Brennan, Director General, EUROCONTROL, on the occasion of the SESAR 3 JU's Governing Board.



Source: EUROCONTROL



Hermes Director General meets with the Director General of the Civil Aviation of Kazakhstan & the Governor of the Hellenic Civil Aviation Authority

During his visit to Athens the Director General of the Civil Aviation of Kazakhstan, Catalin Radu had the opportunity to meet with the Governor of the Hellenic Civil Aviation Authority, Dr Christos Tsitouras, and Hermes' Director General, Dr Kostas Iatrou. During their discussion Dr. Iatrou presented the relationship of Hermes with ICAO and requested the support and contribution of the Greece and Kazakstan to the papers that Hermes will submit to the next ICAO Assembly that will take place in Montreal in September.





Special Presentation of Salzburg Mozarteum Foundation: The Grassi-Medaillon & the Posch-Medallion

The Grassi-Medaillon & Posch-Medallion were presented in an exclusive event on Saturday 21 May in Athens, Greece to Hermes and Mozarteum Hellas members.

These two objects had never been put before on display outside the museums in Salzburg. The Grassi-Medaillon is one of the most valuable pieces, as it is one of the few (and last) portraits giving an authentic impression of how Mozart looked like.

On the other hand, the “Posch-Medallion” has become one of the most famous “idealized” images of the composer ever created. Put together, as a pair these two delicate objects give a wonderful impression of how the Mozart-iconography. Further, as the Grassi-Medaillon is mounted on Mozart's tabatiere, this object is a rare example of the few remaining personal belongings of the great composer.

In his presentation Mr Linus Klumpner, Director Mozart Museums, International Stiftung Mozarteum said: “On behalf of the International Mozarteum Foundation I would like to express my sincere gratitude to the Mozarteum Hellas for organizing this event. The presentation of these two particular fine objects gave the unique opportunity to offer an exclusive insight into the thrilling and vast field of Mozart-Iconography – for a circle of people who are particularly interested in discovering the life and oeuvre of Wolfgang Amadé Mozart.”

H.E. Hermine Poppeller, Ambassador of Austria in Greece: “A great thank to Mozarteum Hellas for making this event



possible and giving us the opportunity to have these two invaluable objects in Greece and of course I would like to express my gratitude to Salzburg Mozarteum Foundation for making not only the music of Mozart Amadeus Mozart but also his life and his personality accessible to all people and generations”

“This is a unique day for Mozarteum Hellas and for its cooperation with Salzburg Mozarteum Foundation as we welcome two objects exhibited for the first time outside the Mozarteum museums. For Mozarteum Hellas the Posch-Medallion has also a significant importance as our logo is inspired by that” said Mrs Evgenia Votanopoulou, President of Mozarteum Hellas.

“Today we are thrilled to present two objects of Mozart, i.e. the Grassi-Medaillon and the Posch-Medallion to our members. During the 2019 Hermes Leaders Forum the participants witnessed the signature of the MoU between Hermes and Mozarteum Foundation (SMF). Under this MoU, the two organizations established a long term partnership” added Dr Kostas Iatrou, Director General, Hermes – Air Transport Organisation.

Several Hermes members participated in the event.





2022 Hermes AGM & Leaders Forum

Brussels, Belgium – On Thursday 9 June 2022, Hermes – Air Transport Organisation held the 2022 Hermes AGM & Leaders Forum hosted by EUROCONTROL

The event began with a warm welcome by the Director General of the Hermes – Air Transport Organisation, Dr. Kostas Iatrou, who summarised the organisation’s activities over the last year.

Jeff Poole stepped down as President and Mrs Angela Gittens was unanimously elected as the new President.

Finally, during the AGM Mehmet Nane officially became member of Hermes.



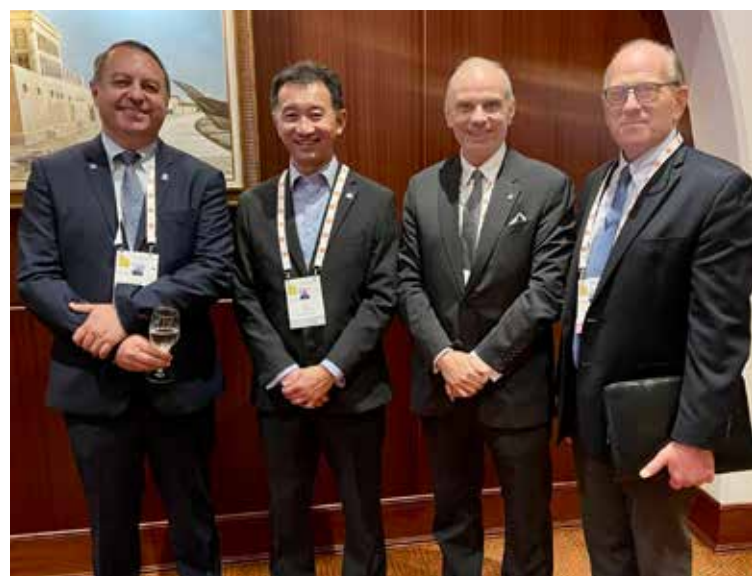


Hermes hosts a reception at the 2022 IATA AGM in Doha

During the IATA AGM held in Doha on Sunday 19 June Hermes hosted a reception sponsored by A4A with the participation of numerous members of Hermes and leaders of aviation.

Dr Kostas Iatrou, Director General of Hermes during his speech presented Hermes latest developments of the organisation including the outcome of the 2022 Hermes AGM & Leaders Forum.

Finally he thanked IATA and A4A for organising the reception.





The Director General of Hermes meets with the Secretary General of ICAO



In preparation of the participation of Hermes – Air Transport Organisation in the 41st ICAO Assembly next September, Dr Kostas Iatrou, Director General of Hermes had the opportunity to meet with Mr Juan Carlos Salazar, Secretary General of ICAO.

Dr Iatrou informed Mr Salazar on the recent Hermes recommendations on sustainability; he also advised him that Hermes will submit two information papers on Resilience and efficiency through Leadership and Cooperation and Digitalization, AI in Aviation and the Human Factor.

Mr Salazar has been an Hermes member since 2019.



The Director General of Hermes meets the President of IFATSEA

In preparation of the 41st ICAO Assembly the Director General of Hermes, Dr Kostas Iatrou, met the recently elected President of IFATSEA, Theodore Kiritsis. The two agreed to expand and strengthen the cooperation between the two organizations.

Dr Iatrou said: "IFATSEA is already a close partner of Hermes. I am looking forward to work closely with Mr Kiritsis".

Theodore Kiritsis said: *"Maintaining a cooperation with International organizations like Hermes, is a must for IFATSEA as this allows for the propagation of the importance of the role of the Human pillar, like ATSEP, in the Safety chain."*

IFATSEA's position towards "sustainability in aviation" is published in this year's Hermes recommendations.





Aviation leaders meet in Athens



On the occasion of the Airport Service Association (ASA) Leadership Forum held in Athens (5-7 September) leaders of aviation had the opportunity to meet and discuss the future of air transportation.

In the meeting participated Luis Felipe de Oliveira, *Director General of ACI World*, Fabio Gamba, *Director General of ASA*, Dr Kostas Iatrou, *Director General of Hermes – Air Transport Organisation*, Mehmet Nane, *Chair of the Board of Directors of IATA* and Glyn Hughes, *Director General of TIACA*.

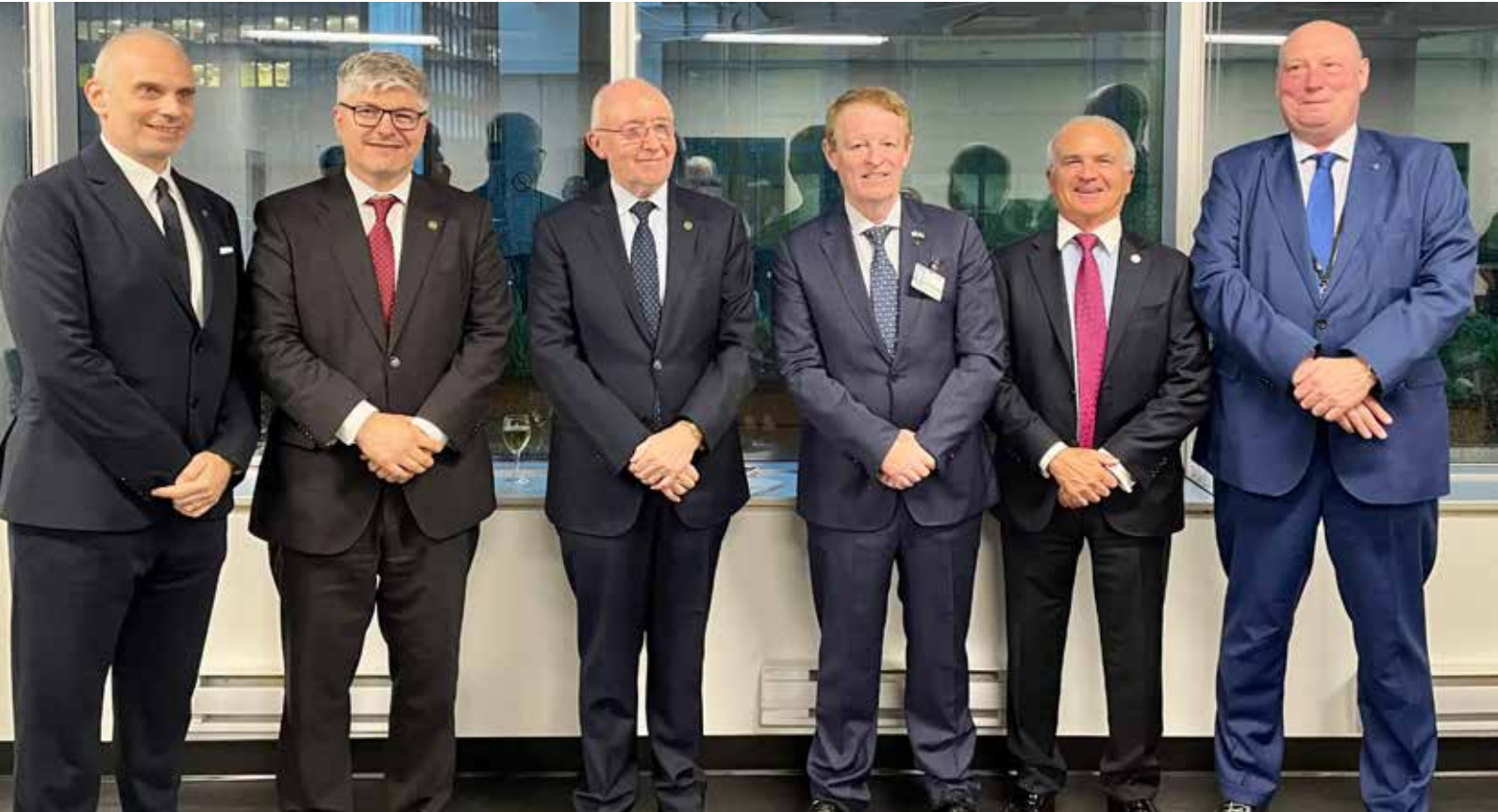


September 26th, 2022

Hermes hosts a reception at the 41st ICAO Assembly

At the eve of the 41st ICAO Assembly Hermes hosted in ICAO Headquarters a reception with the presence of the leaders of air transport.

During the reception Salvatore Sciacchitano, President of the Council of ICAO and Juan Carlos Salazar, Secretary General of ICAO received the Decade Air Transport Award for their contribution to aviation from the President of the Air Transport Awards and Hermes Director General, Dr Kostas Iatrou.





October 23rd, 2022

Hermes hosts a reception at the 2022 ACI WAGA in Marrakech

Hermes hosted a reception at the 2022 ACI WAGA held in Marrakech on Monday 23rd October kindly sponsored by iGA Istanbul Airport.

During the ACI WAGA the Director General of Hermes, Dr Iatrou, had the opportunity to meet with the Chair of ACI World, Aimen bin Ahmed Al Hosni, the Chair of the Board of Governors of IATA, Mehmet Nane, the Secretary General of ACAO, Abdenbi Manar and the Secretary General of AFCAC, Adefunke Adeyemi, among others.



October 25th, 2022

Hermes participates at the 55th AACO AGM

Hermes – Air Transport Organisation participated in the 55th AACO AGM that was held in Abu Dhabi on Tuesday 25th October.

The AGM, was attended by the CEOs of AACO member airlines, AACO partner airlines and industry partners from aircraft and engine manufacturers, Global Distribution

Systems (GDSs), IT providers and other specialized companies relevant to the Arab air transport industry. Eamonn Brennan, VP of Hermes & Director General of EUROCONTROL and Henrik Hololei, Hermes Board Member of Hermes & Director-General for Mobility and Transport of the European Commission participated in the CEO panel.





The Director General of Hermes & the Chair of Board of Governors of IATA receive a Letter of Gratitude from the Minister of Industry and Infrastructural Development of the Republic of Kazakhstan

In recognition of their dedication and commitment to international civil aviation and their outstanding support for the civil aviation of the Republic of Kazakhstan to increase its visibility and adherence to the highest international aviation standards, Dr Kostas Iatrou, Director General of Hermes & Mehmet Nane, Chair of the Board of Governors, IATA & Vice Chair of Pegasus Airlines received from the Minister of Industry and Infrastructural Development of the Republic of Kazakhstan, Kairbek Uskenbayev a Letter of Gratitude.

The Letter of Gratitude was delivered to Dr Iatrou and Mr Nane from the Director General of Aviation Administration of Kazakhstan, Catalin Radu.

The ceremony took place during the International Aviation Forum in Ekali, Greece.





The Director General of Hermes moderates the CEOs Roundtable Discussion in AFRAA AGA

Dr Kostas Iatrou, Director General of Hermes, moderated the CEOs Roundtable Discussion at the 54th AFRAA Annual General Assembly & Summit in Dakar.

The theme of the panel was: "Reconciling airline strategies for sustainability of the air transport industry in Africa".



ABDERAHMANE BERTHE

Secretary General
African Airlines
Association (AFRAA)





SUSTAINABILITY OF THE AVIATION INDUSTRY

1. How do you define sustainability in aviation?

Aviation provides the only worldwide transportation network, which makes it essential for global business and tourism. It is vital in facilitating economic growth, particularly in developing countries. Air transport has become a driver of economic, social, and cultural development and has fundamentally changed how we

travel, interact with others, and do business.

Sustainability is defined simply as “meeting the needs of the present without compromising the ability of future generations to meet their needs.”

Sustainability is a business strategy that drives long-term corporate growth and profitability by mandating the inclusion of environmental and social issues in the business model.

Building a sustainability strategy creates long-term value, improves efficiency and reputation, meets customer demands, and fosters the Aviation Industry’s resilience and longevity.

2. What are the key features of a sustainable aviation industry?

Sustainability is not just about the environment and society. It is about ensuring a prosperous future for the next generations.

Social, environment, and economy are the three features of the sustainable aviation industry. It is referred to as people, planet, and profits in today's business environment.

3. How can the aviation industry best reduce its environmental footprint?

Air Transport contributes to 2% of human-made CO2 emissions. The climate change trends put pressure on the sector to further reduce its modest share of CO2 emissions faster. ICAO Assembly adopted the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).

We believe that the aviation industry will contribute to protecting the environment better with coordinated efforts in line with five pillars:

- Continuous Fuel Efficiency Improvement through New Technology.
- Alternative Fuel.
- Implementation of Fuel Conservation Initiatives in Operations.
- Air Navigation Infrastructure.
- CORSIA.

4. How will investments in sustainability impact the efficiency and profitability of aviation?

Aviation sustainability, in addition to addressing the industry's environmental impact, focuses on the survival and success of the aviation value chain.

To achieve the five pillars and positively impact efficiency and profitability requires investment in New Technologies, alternative fuel, effi-



cient infrastructure, and cost-saving competitive operations.

Airlines need -finance to invest in the modern, efficient fleet and relevant technologies that will make them competitive and sustainable. Aviation and tourism infrastructure investments are also required to boost the sector's total development.

5. What are the industry's best practices, already in place, that improve sustainability?

The good thing is that, in aviation, best practices are not traded secrets. They can be easily accessed and learned from.

The African Continent will have to learn from other regions where airline ownership limits are relaxed and

foreign equity capital encouraged and not frowned upon. A deliberate policy to privatize state-owned airlines and invite foreign investors to take a stake will attract the capital and managerial expertise needed to run such airlines professionally. Airlines that are efficiently and profitably run are sure to be sustainable, provided the right regulatory environment is created to support business. This is the trend in many parts of the world.

On economic sustainability, consolidation and collaboration are crucial elements in the success of the African airlines. Airline consolidation across other regions has positively impacted the growth and sustainability of the airline industry. In the African context, the ripple effect of strengthened collaboration amongst airlines will be an increase in the industry's contribution to the sustainable development of Africa. The engagement of States, airlines, and all relevant stakeholders is necessary to achieve the required outcomes on airline consolidation in Africa effectively.

On social sustainability, industry stakeholders across the globe are taking various actions to address gender diversity and develop the Next Generation of Aviation Professionals to meet the African global needs of the aviation industry of tomorrow. The development of skilled aviation professionals in Africa's aviation and aerospace industry is critical as a large contingent of the current aviation professionals will retire, and aviation growth will require more qualified and competent professionals. The Continent can train, develop and groom youth.



6. How can these best practices be fully implemented throughout the industry?

The acceleration to aviation sustainability will be realized if Africa allows the private sector to drive the commercial side of the business. At the same time, governments focus on enacting the enabling regulations to support the industry.

7. What are the regulatory impediments to increasing sustainability?

African aviation sustainability renaissance began with adopting the African Union (AU) Vision 2063, a continental development roadmap. Among the flagship projects in this document are the Single African Air Transport Market (SAATM); the African Continental Free Trade Agreement (AfCFTA); and the Protocols on the free movement of people and goods – three inter-related projects aimed at liberalizing the air transport market, facilitating trade and the movement of people across borders.

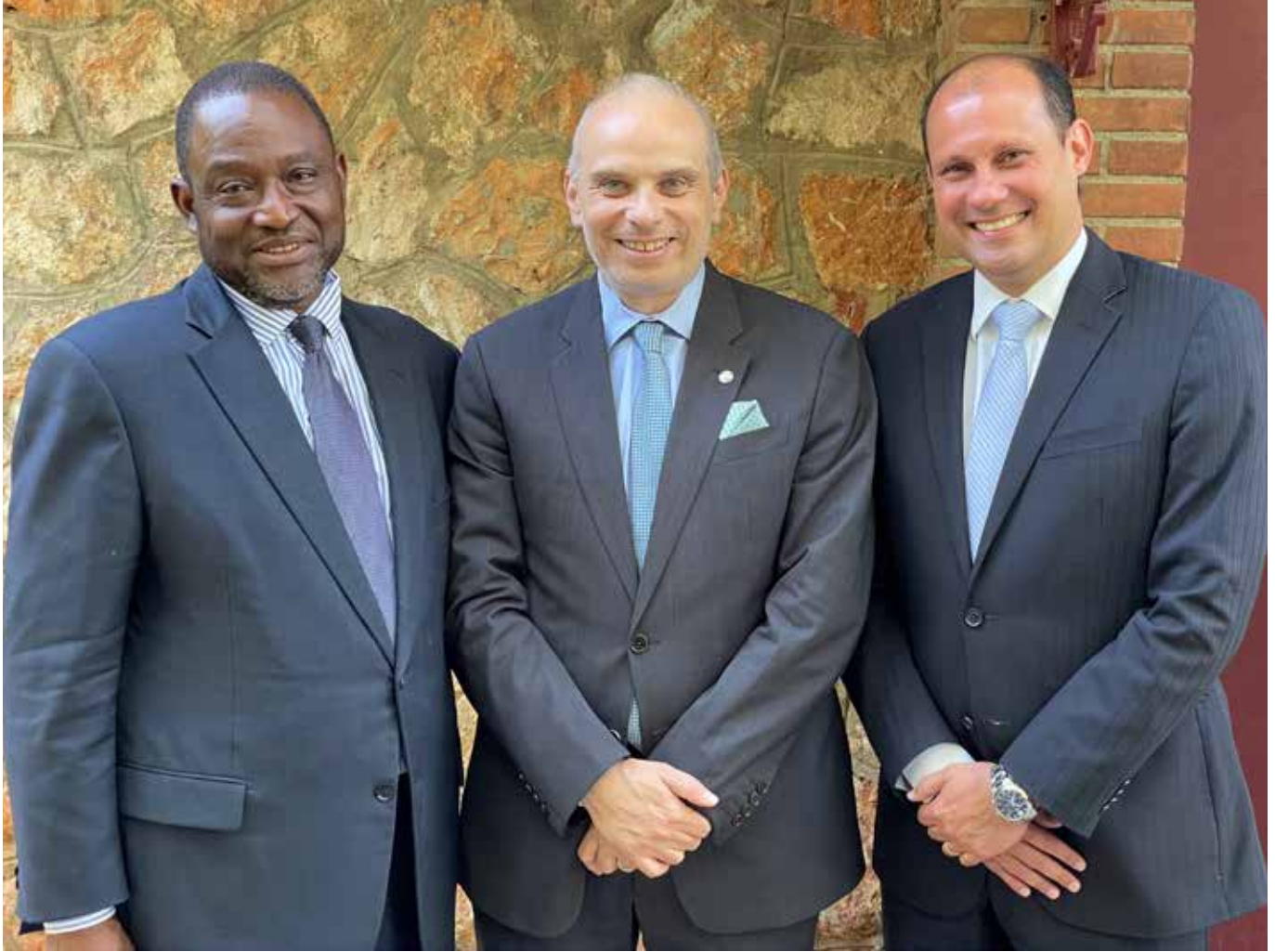
To ensure the successful implementation of all three projects, conscious efforts are being made to put the regulatory framework and institutional structures in place and to

disband or amend national regulations that may not align with the letter and spirit of the AU Agenda 2063 and these flagship projects.

8. How can regulations incentivize and facilitate the aviation industry to be more efficient and more sustainable?

The full implementation of the Yamoussoukro Decision (YD), AfCFTA, and facilitation of mobility through visa and passport protocols will guarantee aviation sustainability in Africa. Harmonization and implementation of appropriate policies and regulations are essential for the oversight of the AUC Agenda 2063 projects which will spur the sustainability of the air transport sector in Africa. Governments, Development Financing Institutions (DFIs), and other partners should support the efforts to implement all the regulations and set up functional structures.

9. How can industry participants, including airport, airlines, and air navigation providers, cooperate to improve sustainability?



Aviation has traditionally been a business that collaborates and coordinates to provide transportation services. Historically, airlines work

with governments, airports, air navigation service providers, civil aviation authorities, tourism organizations, safety/security institutions, and other sectors.

Indeed, collaboration has seen the aviation industry agree on CORSIA to address the global environmental challenges instead of the earlier unilateral regional/country measures that would have been expensive and chaotic.

AFRAA believes that aviation “talks too much to itself” and excludes other relevant players that influence the industry.

As the leading air transport body on the Continent, AFRAA is conscious of this reality and has decided that in 2022, it will begin to change the narrative and establish broader consultation with all stakeholders for the industry’s good. In furtherance of this, AFRAA organized in June 2022



a “Laboratory” of relevant players to consult broadly on critical issues of the aviation, trade, tourism, financial and regulatory sectors. The LAB brought together government, international development partners, aviation entities, trade and tourism organizations, financiers, regional economic communities, and selected consumers of air transport services.

The laboratory developed roadmaps grouped under five projects that deliberated on out-of-the-box solutions on specific subject areas, including fuel and customs taxes, high taxes and charges, navigation – Free Routing Area (FRA), implementation of the Single African Air Transport Market (SAATM) and partnerships between airlines, hospitality and tourism bodies to improve

intra-African tourism. The roadmap, which will be tabled for adoption by AU Policy Organs, shall be monitored, assessed, and reviewed by a multi-sectoral steering committee coordinated by AFRAA.

10. Sustainability is often thought of as a long-term goal, but what three key changes can the aviation industry implement within the next five years to increase sustainability?

A sector struggling to survive will find it difficult to focus on the long-term environmental goals that do not yield short-term visible results. This does not mean the environmental priorities are less critical.

The aviation world can do more by ensuring that all regions have viable and sustainable aviation businesses in the first place. Particularly in the developing world, where connectivity and mobility are limited, costly, and local airlines cannot sustain their businesses, there is a need for stakeholder collaboration to address some of the bottlenecks.

At the same time, governments should prioritize aviation and support the industry with the right laws that guarantee market access, capital access, and capacity development.

Finally, the efforts made by African states under the leadership of the African Union to implement SAATM and AfCFTA and facilitate the movement of people and goods are giant steps toward aviation sustainability in Africa.



SUSTAINABILITY OF THE AVIATION INDUSTRY

Introduction

In November 2021, the International Civil Aviation Organization released the first edition of its publication, *Innovation Driving Sustainable Aviation*. The publication highlighted work on the development of aircraft technologies, the improvement of aviation operations and infrastructure, and the development of environmentally friendly fuels. Indeed, the aviation industry has made great strides advancing sustainability initiatives. However, key developments in aviation technology designed to improve sustainability, such as the electrification of aircraft, may not see large scale implementation for many years. With aviation's focus on safety, and given the industry's regulatory oversight, new technologies and improved systems often take decades to implement. There is, however, increasing public pressure on aviation to move more quickly to sustainable practices. The substantial reduction in aviation activities during the Covid-19 pandemic has led environmentalists to call for a permanent reduction in aviation activity. Consequently, the industry needs to develop short term solutions to significantly improve sustainability. With this thought in mind, leading aviation bodies were asked by the Hermes Air Transport Organization to address the following questions:

1. What are the regulatory impediments to increasing sustainability and how can regulations be improved to make the industry more efficient and sustainable?
2. How can industry participants cooperate to improve sustainability, especially over the next five years?
3. What are the industry's best practices, already in place, that improve sustainability and how can these best practices be implemented throughout the industry?

Briefs were received from representatives of ten leading

aviation organizations. The major points cited in these briefs are discussed below. Recommendations are then advanced based on a consensus view of the industry organizations.

What Constitutes Sustainability?

In his interview in *The Magazine* published by the Hermes Air Transport Organization, ICAO Secretary General, Juan Carlos Salazar, uses the Brundtland Report definition of sustainability as, "meeting the needs of the present without compromising the ability of future generations to meet their own needs." He further defines sustainability as, "an integrated approach that takes into consideration environmental and social concerns along with economic development."

This idea that sustainability must incorporate social conditions and economic development, along with environmental considerations, is highlighted in the position paper presented by the African Airlines Association. The AFRAA brief warns that the aviation industry should not solely define sustainability based on curtailing environmental impacts. The brief states that this, "is a narrow view of what appears to be a pervasive matter in every facet of human existence." Conversely, AFRAA states that sustainability should focus on the survival and success of airlines, airports, and all players in the aviation value chain. This focus is especially important in developing areas of the world, including Africa and Latin America, where industry participants are most at risk.

A wide view of sustainability is echoed in the position paper advanced by the European Regional Airlines Association. ERA notes that regional carriers are important in connecting remote areas to the rest of the world, and that regional routes are necessary to the sustained economic well-being of remote communities. The ERA brief states: "Recent European national Government announcements to ban short-haul routes in Europe could ultimately hinder, rather than help efforts for a more sustainable air transport future."

The International Air Cargo Association also takes a wide view of sustainability. TIACA discusses the role that air cargo operators played during the Covid-19 pandemic when air passenger operations were restricted and maritime operations constrained. Air cargo operators were called upon to deliver cargo around the world to sustain international supply chains. As noted in the position paper:

For many, the term sustainability is often limited to the environmental aspects, which are critically important for protecting the planet however TIACA believes that true sustainability can only be achieved when you look holistically at how we individually and collectively impact People, Planet and enhance global Prosperity, the three Ps.

In summary, there is belief among key industry organizations that sustainability encompasses economic and social development, in addition to environmental concerns.

Key Initiative – Sustainable Aviation Fuels

The initiative outlined most often as a means for achieving short term sustainable outcomes is the increased use of sustainable aviation fuels. These sustainable fuels include biofuels and synthetically manufactured aviation fuels. Mr. Salazar, in the ICAO brief, states: “SAF are available now ... In 2021 ICAO adopted the first-ever internationally harmonized SAF sustainability criteria that cover all three pillars of sustainability, with environmental, economic and social themes.”

The ERA notes that SAFs are, “a relatively established technology and are ready to be used as drop-in fuels,” but cautions that production is extremely limited with current capacity only sufficient for 0.1 percent of demand. Moreover, SAF costs are high at between 3 and 5 times the cost of conventional jet fuel.

The brief submitted by the European Union (DG MOVE) states:

Sustainable aviation fuels (SAF) are fully compatible with current aircraft technology and already certified up to 50% of the fuel used in a flight. Although they have the potential to make an important contribution to tackling GHG emissions in aviation (emission savings can go up to 80% compared to conventional jet fuel), this potential is still largely untapped.

The Airports Council International position paper states

that, “incentives to reduce aviation emissions are still underprioritized” and notes: “Creating SAF policies that will provide certainty to investment in production and will support bridging the gap of SAF premium prices—one of its main barriers—is an immediate action that governments can pursue and a point in common on which aviation stakeholders can collaborate.”

Finally, the Joint Aviation Authorities Training Organization cautions: “Uneven access and distribution in the deployment of Sustainable Aviation Fuels (SAF) or charging infrastructure for electrified aircraft operations is and will become a challenge,” to the implementation of sustainable policies in aviation.

In summary, there is belief across the aviation industry that the increased use of sustainable aviation fuels is an effective method to the short run reduction in carbon emissions. The technology is already developed. However, current policies do not incentivize the use of sustainable fuel and access is currently limited and unevenly deployed.

Other Key Initiatives

Several other initiatives were advanced to improve the sustainability in the aviation industry:

- ▶ JAA TO cites improved air transport management, such as the Single European Sky (SES) initiative, as a “safe, cost efficient and environmentally friendly way” to improve sustainable aviation. According to JAA TO: “The benefits of the SES could potentially be huge; tripling the airspace capacity, reduce ATM cost by 50%, improve safety tenfold and reduce environmental impact by 10%.” Other initiatives outlined in the JAA TO position paper include improved manufacturing design that “allows for quicker and more flexible production, reduces material waste compared to traditional approaches and it also results in much lighter parts reducing aircraft weight and fuel use,” better aerodynamic technology that can, for example, increase effective wingspan, better fuel efficiency, for example by using new turbofan technology, increased thermal efficiency, and improved noise standards.
- ▶ DG MOVE cites several ways to increase sustainability: Environmental conditions could be better incorporated into the determination of airline charges at airports; slot allocation rules could be

aligned more closely with environmental goals; and groundhandling operations could be accomplished with reduced environmental impacts. DG MOVE also points to increased coordination and cooperation in air traffic management as a means to achieving sustainable outcomes: “The local approach to Air Navigation Services provision is less effective and leads to congestion and capacity crisis whereas experience shows that more effective network coordination decreases delays and congestion.”

- ▶ Based on its view that sustainability implies economic success for firms in the industry, AFRAA identifies “access to affordable and competitively priced capital; provision of infrastructure to support the growing industry; better connectivity and market access; facilitating mobility and cost competitiveness” as keys to sustainability. Important to the development of air transport in Africa is a competitive regulatory environment that improves connectivity across the continent.
- ▶ ERA cites voluntary carbon offsetting programs as a means for airlines to reduce their CO2 emissions. According to the ERA position paper: “These programs can either be used by the airlines themselves or by their passengers and allow the customer to compensate for their emissions by buying projects that reduce or remove CO2 emissions elsewhere (e.g., forestation or renewable energy projects).”
- ▶ ACI discusses continuous climb operations (CCO) and continuous descent operations (CDO) as methods for reducing carbon emissions. According to ACI: “CCO and CDO allow aircraft to use a flexible and optimum flight path that can deliver significant environmental and economic benefits—reduced fuel burn, gaseous emissions, and fuel costs—without any adverse effect on safety... The use of these techniques results in time being spent at more fuel-efficient higher cruising levels, hence significantly reducing fuel burn, and lowering emissions and fuel costs.” In addition, ACI lists several best practices for airports in increasing sustainability including installing solar panels and electrifying ground service equipment.
- ▶ TIACA believes that regulatory reform is key to increasing the efficiency of cargo operations and, thus, improving sustainability. TIACA believes

that a reformed regulatory regime, “must include the whole range of traffic rights, including fifth and seventh freedoms, so as to allow all-cargo operators the ability to optimize the use of their fleets by picking up cargo where and when there is demand for the service and transporting it to where and when the client requests it.”

- ▶ The submission by the International Federation of Air Traffic Safety Electronics Associations (IFATSEA) also cites needed changes to the regulatory environment as a means of promoting sustainability. The brief states: “The regulatory environment, including Standardization activities are crucial activities and enable the promotion of requirements and Safety standards that in turn promote Sustainability ... The lack of standards for the CNS/ATM systems and their interoperability requirements of the future concepts ... if it is overcome, will , undoubtedly constitute a significant enabler, together with the Human pillar, for sustainability.”
- ▶ The brief of the Arab Civil Aviation Organization is concerned with actions that can be taken to recover from the unprecedented disruptions to the aviation system that occurred during the Covid-19 pandemic. ACAO supports harmonized approaches to restore the health of the aviation industry, such as the continued digitization of passenger and cargo data. Among the specific initiatives proposed include, “strengthening the ICAO system of standards, particularly those associated with the Unified Electronic Passenger Transport Database, by including health data and establishing a similar database for cargo transport.”

Coordination of Efforts

Several of the position papers cite the importance of coordination of efforts across the industry and, indeed with stakeholders outside aviation, to improve the sustainability of the aviation industry. These stakeholders include destination management and marketing organizations; that is, organizations that facilitate travel and tourism. In its brief, AFRAA states: “The importance of collaboration for the success and sustainability of the industry is not in doubt. What is, however, missing is the aviation sector to collaborate with industries that are not directly related to

aviation but impact it." Along these lines, AFRAA says that it intends, "to change the narrative and establish broader consultation with all stakeholders for the industry's good." These views are echoed in the ERA brief. ERA states that collaborative efforts promoting sustainability are needed: "Collaboration is key. To be successful, support from European and national policy makers is needed to create the right policy frameworks and, in some cases, to provide financial assistance to develop and apply new technologies." ERA provides the example of the Toulouse Declaration of February 2022 – "the first-ever public-private initiative supporting aviation's decarbonization goals signed by 35 European countries and more than 100 industry stakeholder groups in Toulouse, including the five leading European aviation associations."

Recommendations

As the aviation industry moves beyond the Covid-19 pandemic, it faces unprecedented pressure to increase sustainable practices. Although the industry has been progressing steadily on increasing sustainability through the use of new technologies and the implementation of best practices, many future developments will take considerable time to implement given the industry's regulatory oversight and focus on safety. With this in mind, Hermes asked leading industry associations to provide recommendations for improved sustainability with a focus on short-term initiatives. Based on the position papers submitted, Hermes Air Transport Organization makes the following recommendations:

1. Develop incentives to roll out the use of sustainable aviation fuels. The technologies have been developed; however, the supply is

currently very limited. Governments need to develop incentives that will increase capacity and drive down production and distribution costs. Efforts should be made to distribute the sustainable fuels in an equitable manner so that all industry participants can benefit from its use.

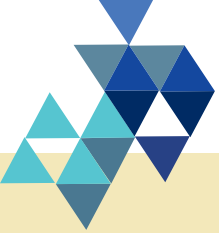
2. Reform economic regulations to increase the sustainability of aviation. Although there has been much talk of reform, there are still many impediments to efficient and equitable aviation operations. In the short run, it may be advantageous to engage in reform on a regional basis or within industry sectors. In particular, regulatory reform could be put into place to allow air cargo operators to operate efficiently with international hubs that facilitate global supply chains.
3. Facilitate air traffic management and control to improve efficiency in air operations. For example, efforts should be paid to procedures that increase operating efficiency and the reduction in fuel usage.
4. Increase the dialog among aviation organizations and other stakeholders. It became clear during the Covid-19 pandemic of the importance of aviation to sustaining supply chains. Moreover, the limitations placed on air travel imposed precipitous losses to both tourism and business sectors. Clearly, it would be beneficial for a consortium of organizations interested in promoting best practices and sustainability in the aviation industry to work together towards these objectives.

CHAIRPERSON

Professor Martin Dresner, *Chair, Air Transport Research Society (ATRS)*

MEMBERS

- **Dr Olumuyiwa Benard Aliu**, *Honorary Member, Hermes - Air Transport Organisation & founder and President of the International Partners for Aviation Development, Innovation and Sustainability (iPADIS)*
- **Angela Gittens**, *Board Member, Hermes - Air Transport Organisation*
- **Mario Nemeth**, *ex Director General of Civil Aviation, Slovakia*
- **Professor Dr Andreas Papatheodorou**, *President, Hellenic Aviation Society & Editor-in-Chief, Journal of Air Transport Studies*



41st ICAO Assembly



ICAO



Recognizing the critical role air transport plays as a catalyst for sustainable development worldwide, governments attending the 41st ICAO Assembly earlier this month have taken new steps to recognize and strengthen the role of air connectivity in their strategic planning and policies, and to emphasize the role it plays in achieving global sustainable development.

“You have strongly promoted the recognition of aviation as a powerful enabler of economic recovery, the need for increasing liberalization of air services, and the role of air cargo operations in keeping our world supplied and connected in times of crisis,” declared ICAO Council President Salvatore Sciacchitano in his closing remarks.

The 184 countries participating in the Assembly also formally acknowledged the long-term investment frameworks needed to modernize aviation infrastructure and air navigation services globally, separately urging ICAO to con-

tinue to make progress on a new Convention on Foreign Investment in Airlines.

The Assembly also provided ICAO with an opportunity to advocate for the increased liberalization of air services in all world regions, in order to expand the access and affordability of air services by opening up travel and transport markets and eliminating protectionist constraints.

In further decisions relating to the sustainable development of air transport, the Assembly reaffirmed its commitment to the achievement of the United Nations 2030 Agenda for Sustainable Development, and supported continued efforts for advocating around aviation as a strong contributor to the Sustainable Development Goals.

A revised Resolution on this topic encourages States to consider establishing a clearly-defined relationship between their national development plans, and national civil aviation policy, plans and strategies, and calls for

greater support of development of the aviation in least developed countries, Landlocked developing countries, and small island developing states, especially through enhanced development assistance and cooperation.

In addition, there was unequivocal support for the revised Assembly Resolution on a more holistic approach to achieving gender equality in aviation. Countries have encouraged ICAO, Member States, industry, and all stakeholders to demonstrate greater ambition and intensified action in their human resources policies for a gender-balanced workforce, to set out goals and measurable targets to minimize the gender gap, and to devote more resources to achieving these goals.

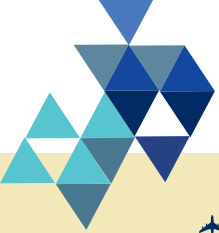
On the topic of innovation, which will be fundamental to achieving many current air transport objectives, the Assembly recognized the relevance of ICAO's continued work in this area. The Assembly underscored the need to define new cooperation mechanisms to realize greater efficiencies in ICAO's standards development process, to support early implementation and innovation. It also highlighted the role of ICAO in supporting Member States' efforts to streamline certification and audit processes in order to facilitate the uptake and operation of innovations.

The Assembly further requested ICAO to consider engaging with the appropriate government entities related to the operation of urban air mobility (UAM), as this will require a multi-stakeholder approach. In welcoming the content of the Industry Roadmap for Future Skies, the Assembly requested ICAO to consider the development and prioritization of the activities included in the roadmap.

In the legal domain, the Assembly called upon States to respect their obligations under the Convention on International Civil Aviation, its Annexes and its related procedures for the safe and orderly development of international civil aviation, and recognized ICAO's Legal Committee achievements in the development of over 20 international air law treaties.

The second ICAO Treaty Event was successfully conducted during the Assembly, at which seven States took the opportunity to deposit instruments of ratification to international air law treaties for which ICAO acts as Depositary, with a total of 11 depositary actions being recorded. The Event took place under the theme "75th Anniversary of the ICAO Legal Committee – Building the Global Legal Regime for Civil Aviation".





41st ICAO Assembly



Hermes participated as an observer in the 41st ICAO Assembly (27 Sep – 7 Oct) held in Montréal. Dr Kostas Iatrou, Director General (Chief Observer) and Angela Gittens, President represented the organisation.

Hermes presented two information papers based on its recommendations:

- *A41-WP/604*

EX/281 RESILIENCE AND EFFICIENCY THROUGH LEADERSHIP AND COOPERATION

- *A41-WP/605*

EX/282 DIGITALIZATION, ARTIFICIAL INTELLIGENCE (AI) IN AVIATION AND THE HUMAN FACTOR

Finally, Dr Iatrou had a series of meetings with key stakeholders -including ICAO, ACI World, ACAO, LACAC, AFCAC, – and presented the work of Hermes.





December 8th, 2022

Aviation leaders sign a declaration that lay the way to establish the International Aviation Forum (IAF)



A Declaration to lay down the foundation for the launch of a new collaboration mechanism under a form of a High-Level Organization was signed at the International Aviation Summit: The future of air transport, held on Thursday 8 December 2022 in Ekali, Greece. This declaration seeks to ensure the global coordination and facilitate decision-making processes for the top level of aviation leading organizations. Leaders committed to work together in order to establish the International Aviation Forum.

INTERNATIONAL AVIATION SUMMIT



The declaration was signed by the top leaders of the aviation industry.

Fabio Gamba, Director General of ASA; **Simon Hocquard**, Director General of CANSO; **Dr Kostas Iatrou**, Director General of Hermes Air Transport Organisation; **Mehmet Nane**, Chair of the Board of Governors at IATA and **Glyn Hughes**, Director General of TIACA agreed that:

- **International aviation is a critical component of a modern global economy and community, connecting people and things to people and places. It supports millions of jobs and transports over 35% of international trade by value.**
- **In order for commercial aviation to be efficient and effective, a collaborative environment between governments, regulators and industry is imperative to establish smart regulations, supportive economic regimes and robust facilitation processes.**
- **All signing parties are committed to working together to establish the International Aviation Forum, an international collaborative forum that will represent all industry sectors and will speak with a unified voice on matters of common interest.**

"As an industry, the key players in aviation are inextricably linked. The more opportunities we have to bring together aviation's leaders at fora like Hermes to collaborate on the issues that matter most to our industry, the better," Simon Hocquard, Director General of CANSO.

"A strong united and successful aviation industry is crucial to support the global community, from a social and economic perspective. The formation of the International Aviation Forum will enable the entire industry to speak with a common voice on the critical issues the industry faces and TIACA is proud to be involved" Glyn Hughes, Director General of TIACA

Aviation industry, with all its constituents globally went under some really tough days since the start of Covid in 2020. It is time to unite our efforts for the improvement of our industry; it is time to create value and synergies from our different perspectives, not conflict. Vice Chairperson-Pegasus Airlines, Mehmet T. Nane

"Cooperation between the aviation stakeholders is critical for the future of air transport. The International Aviation Forum will make our industry more efficient and will deal with critical issues faster, added Dr Kostas Iatrou, Director General of Hermes – Air Transport Organisation.

"The IAF is a concrete step to engage the industry – its various components – and the national authorities into a constructive dialogue. It was long overdue, yet quite far-reaching in its consequences and we look forward to it." Fabio Gamba, Director General of ASA.





78th IATA AGM and World Air Transport Summit



source IATA

The International Air Transport Association (IATA) held its in-person two-day 78th AGM in Doha, Qatar, on the 20th and 21st June 2022 gathering aviation leaders from across the globe to having meaningful consultations to come up with concrete plans to steer the industry out of challenges posed by COVID-19 pandemic in the last two years and to address future sustainability issues.

The International Air Transport Association (IATA) called for governments to apply the lessons learned from the dismantling of global connectivity in response to COVID-19 to ensure that future global health threats can be effectively managed without closing borders.

With air traffic now rebuilding after more than two years of crisis, three key lessons have emerged for governments.

1. Evidence confirms that border measures are not an effective global strategy to control a pandemic

2. Governments should balance health measures with economic and social impacts

3. Traveler confidence requires logical rules and clear communication

To give the public greater confidence in the predictability of travel, governments should:

- Adopt guidance for how public health measures, once introduced, will be removed
- Simplify and digitize travel bureaucracy and paperwork with common standards and mutual recognition of digital health credentials.

The International Air Transport Association (IATA) announced an upgrade to its outlook for the airline industry's 2022 financial performance as the pace of recovery from the COVID-19 crisis quickens. Forecast highlights include:

- Industry losses are expected to reduce to -\$9.7 billion (improved from the October 2021 forecast

for an \$11.6 billion loss) for a net loss margin of -1.2%. That is a huge improvement from losses of \$137.7 billion (-36.0% net margin) in 2020 and \$42.1 billion (-8.3% net margin) in 2021.

- Industry-wide profitability in 2023 appears within reach with North America already expected to deliver an \$8.8 billion profit in 2022.
- Efficiency gains and improving yields are helping airlines to reduce losses even with rising labor and fuel costs (the latter driven by a +40% increase in the world oil price and a widening crack spread this year).
- Industry optimism and commitment to emissions reductions are evident in the expected net delivery of over 1,200 aircraft in 2022.
- Strong pent-up demand, the lifting of travel restrictions in most markets, low unemployment in most countries, and expanded personal savings are fueling a

resurgence in demand that will see passenger numbers reach 83% of pre-pandemic levels in 2022.

- Despite economic challenges, cargo volumes are expected to set a record high of 68.4 million tonnes in 2022.

The International Air Transport Association (IATA) called for governments to adopt a Long Term Aspirational Goal to decarbonize aviation at the 41st Assembly of the International Civil Aviation Organization (ICAO) later this year.

The International Air Transport Association (IATA) called for governments to urgently put in place large-scale incentives to rapidly expand the use of sustainable aviation fuels (SAF) as aviation pursues its commitment to achieving net zero carbon emissions by 2050.

The International Air Transport Association (IATA) urged governments to work closely with the aviation industry to ensure that aviation and incumbent aviation safety systems can safely co-exist with new 5G services[i]. While IATA recognizes the economic importance of making spectrum available to support next generation commercial wireless telecommunications, maintaining current levels of safety of passengers, flight crews, and aircraft must continue to be one of governments' highest priorities.

The International Air Transport Association (IATA) has launched IATA CO₂ Connect, an online tool which provides the most accurate CO₂ emission calculations for any given commercial passenger flight. IATA CO₂ Connect responds to the growing demand for CO₂ data transparency linked to airline specific and actual fuel burn information and load factors. This sets it apart from theoretical data models that already exist on the market today.

The Minister of Transport (MoT) of Qatar, H E Jassim bin Saif Ahmed Al Sulaiti, in his address recognised the



source IATA

role of IATA in uniting the world and working for safe, secure, sustainable, and accessible air transport. Al Sulaiti also affirmed the country's commitment to work alongside the aviation sector to support the advancement of commercial aviation globally and to support the vision of sustainable growth, namely the goal of net zero carbon emission by 2050. "The State of Qatar has the best airport and the best airline in the world, in addition to Hamad Port which will be a beacon in the world of ports." Recently, Hamad International Airport was named as the World's Best Airport for the second year at the SKYTRAX Airport Awards 2022 and Qatar Airways holds the Airline of the Year 2021, also from SKYTRAX. The Minister noted that the country has the largest fleet of electric buses for public transport, which enhances the position of the country as a "leader in the field of mass transportation of clean energy." The use of fully electric-powered buses reflects the gradual materialization of MoT's plans of shifting of public and government school buses and Doha Metro feeder buses to electric buses, thus achieving the percentage

that is required to reduce carbon bus emissions by the year 2030.

Director General's, Willie Walsh, Report on the Air Transport Industry, AGM 2022, Doha

Aviation is resilient. And we are rebounding.

People who longed for the freedom to fly are taking to the skies again – and in growing numbers. By next year, most markets should see traffic reach or exceed pre-pandemic levels. But while the outlook is positive, the business environment is challenging.

- Inflation topped 9.0% in the OECD in April.
- Our outlook expects GDP to grow 3.4% this year. Not bad but down on earlier forecasts.
- The World Bank expects energy prices to soar 50% compared with 2021.
- Russia's illegal invasion of Ukraine has destabilized global-



source IATA

ization, threatened the world's food supply, and recreated a geopolitical divide not seen since the Cold War.

- And fixing battered balance sheets carrying debts of \$650 billion will be a monumental challenge.

To support our future success, I will highlight just four of the challenges for our collective attention:

- We, and I mean everyone, must learn the lessons of COVID-19,
- We need to be clear with governments on what is needed from regulation,
- We must deliver on our net zero emissions commitment, and
- It has never been more important for us to improve gender diversity

Conclusion

This is a unique time for aviation. We have proven our resilience. And we are rebounding as a safe, sustainable, and diverse industry that is on its way to being profitable.

The recovery from COVID-19, however, is coincident with a tectonic shift in geopolitics. The Russian invasion and subsequent war in Ukraine have shaken the foundations of globalization to which aviation has contributed so much, and that, in turn, enables so much of our business.

No war is good. Wars bring human suffering. And the stakes in Ukraine could not be of greater consequence. That is why, even for our apolitical business-focused association, there cannot be any ambiguity in condemning what is happening in

Ukraine. I am sure that I speak for all participating in this assembly in calling for peace.

In the meantime, we continue our critical work of bringing people together.

We are builders of peace and enablers of freedom.

Robin Hayes, Chair's Report to the 78th AGM

The good news is that our industry has a proven track record of successfully navigating the effects of wars, pandemics, terrorism and economic uncertainties. I am confident that commercial aviation and our association are prepared to tackle the future, whatever it may bring.

Implications of War in Ukraine

The panelists of the “Implications of the War in Ukraine” discussion agreed that the greatest risk resulting from the war in the Ukraine is uncertainty. This uncertainty is due also to the fear of new autumn Covid wave, to the high energy prices that will continue for a long time and will impact on people’s behavior and thus on the industry and of course to the geopolitical changes.

They wondered whether the people so eager to fly this summer bringing about a good summer aviation recovery will have disposable income to fly over Christmas and next year. Although the inflationary pressures are obvious, they expressed their doubts in relation to whether there will be recession. The system is under a serious shock but there are in Europe policy that will alleviate the severity of the crisis. In the US on the other hand, it rests with the Fed to find ways to calibrate the rise in interest rates to prevent recession and they are trying. They stressed though that even if there is not going to be a recession, the West is experiencing a revival of inflation it has not experienced since the 1970s which was at the time massively destabilizing on the political scene and perhaps the West is experiencing that again if the French elections can be interpreted as such an indication. Inflation will bring political disruption and people who feel that they are left behind will voice their discontent. There is already turmoil in industrial relations with strikes in the aviation sector almost all over Europe and this together with the increase in prices and the food shortages will bring political upheaval and uncertainty.

The increase in prices is not only due to the energy crisis but also to the disruption of the supply chains. This disruption due to a large extent to the effect of the pandemic on China -expected to open sometime in 2023- is going to continue for some time and is having an effect on in-

flation: f. ex. second hand cars and playstations have gone because people cannot get hold of new ones. The economists were expecting these to ease off over the course of this year, but then the war came. It is pushing energy prices and on secondary level food prices and will take longer for the markets to adjust to the disruption. There will be an era of high inflation and volatile prices for a while.

But again the situation is much more complex. Although it is difficult to quantify how much of the inflation is a result of the invasion in the Ukraine, the panelists pointed out that there were inflationary pressures before the war because of the pandemic and because governments were pumping money in the economy. The situation perhaps can be traced back to the 2008 financial crisis. For the last 20 years the normal rules of economics were suspended with negative interest rates, governments keeping reflatting, and printing money, thinking there would be consequences, but they were wrong.

Globalisation has got a bad rap but perhaps in a few years time it will be considered as a golden era of peace and prosperity. In the last decade more people are living with better health care, better sanitation and education than any time in history. There are threats to globalisation, it is too early to say if it is already dead, the benefits are diminishing. But there will regionalisation with realignment of interests.

The breakdown of globalisation is coming hand in hand with the breakdown of law and order. There is fragmentation of international rule of order with governments picking and choosing. The invasion in the Ukraine has brought about a seismic geopolitical change and things will never be the same again and has given rise to fears of spillovers. People are worried about China and Taiwan. If China does carry out its frequent threats on Taiwan, this will mean much more not only for world peace but also for world economy

as the integration between China, US and Europe is so intense, much more intense than that with Russia, which a relatively minor player. The aim behind the war in the Ukraine is the West and US dominance and this why China supported the invasion, at least “plan A” of the war, a fast takeover of territories after the end of the Olympics. There is a strategic opportunity now for China to acquire cheap energy but at the same time it has interests that might be threatened, for ex. its investments at the Odessa port. India is also getting cheap oil from Russia but India can do it without penalty because the US need India to contain China in Asia and want to displace Russia as the main supplier of arms. A good thing that may come out of the war is that it will be the turning point for what Putin represents: a violent autocratic rule by strong men which has been gathering prestige over the last years.

The Europeans feel threatened by what is happening in the Ukraine. The panelists stressed that the West should have made greater efforts to diminish its reliance on Russian oil and gas ever since the Crimean invasion. But politicians much too often think only in terms of short term crises. It is was a strategic mistake of Germany and other countries such as Italy to become so dependent on Russian gas failing to keep nuclear plants open, to build LNG terminals. It is the end of their complacency and now they have 18 months to remove their dependence. There will be acceleration towards diversification and non fossil fuels but the change cannot happen overnight. Climate change is an existential threat for the world but the crisis means that the world will have to suspend or limit some of its targets since the 2050 goal of zero emissions is unattainable. Moving away from carbon fuels has a long way to go. The world needs to invest in both fossil fuels and renewable energy sources taking into account how much and for long the old system will be needed to keep energy supplies meet demand and keep



source IATA

the economy going until the transition is achieved. Therefore, some balanced investment in fossil fuel is needed and in the maintenance of refineries which was put back during the pandemic to make sure that the system is stable while the new energy systems and infrastructures are being built. For example, for LNG the production is not the problem, the reception is as there is extreme lack of storage facilities and of investments. Unless such investments are undertaken, there will be uncertainty resulting in the volatility of prices.

They pointed out though that even if such high energy prices make investments in alternative fuels more attractive, the policy fragmentation makes it difficult to become a market incentive.

They all agreed that the war in the Ukraine will not end soon and diplomacy will not yield any results in the near future. The relations with

Russia will not be what they were because Russia is now considered a threat and people will think that to resume relations would be like helping Russia build its war machine. End of war or not, Europe will move away from Russian oil and gas although Russia at the moment is earning a lot from its oil. Russia needs the revenue from the West which is the only thing that keeps the Russian economy going.

The critical point though of the war is that millions of people in the developing world may be pushed to starvation as the Ukraine and Russia supply a large part of the world wheat supply. The west can afford to pay higher prices for energy insulated but the developing world cannot. It is important to open up the port of Odessa in the next months as there is no way to substitute the maritime transport and there are no existing corridors. The Russians may ask the West to lift the sanctions to allow the transport but at the same time if they

continue they will start losing friends soon. Starvation will lead to greater social unrest, migration flows with all the implications.

The crisis is also a systemic crisis the world has been in a permanent crisis mode for some years now, financial crisis, security crisis, migration crisis, sanitary crisis economy going. Things will change.

CEO Insights Panel

Before the beginning of the CEO panel the moderator, Richard Quest, interviewed William Walsh, DG of IATA, who reiterated the industry complaints over the sham-bolic reactions of governments to the pandemic and to the reopening of borders. Governments were taking decisions based on the popularity of the measures and not on the soundness for the economy or the effect on the pandemic. The closure of borders did not stop the spread of

the virus and caused huge economic damage to the airlines. Governments cannot afford to do it the way they did it the last time should the need arise to take measures since the economic cost of what they did was huge. Many governments decided to open the borders because the measures were becoming unpopular and extremely expensive. The industry has become the “whipping boy” of the environment but both the perception and the reality have to be addressed. The reality is that today it is 2% but in ten years it will be much more than 2% and in twenty years greater still. And that because in this time other industries will decarbonize and the aviation’s percentage will increase and aviation will have grown even more.

The panelists said restructuring has given them the opportunity to come up with a sustainable model to become revenue sustainable. This means simpler models with newer and simplified fleets focusing on who each airline wants to serve according to the market size, population, geographic location, competition. Flying has become a critical part of everybody’s daily needs more connectivity is required, a broader segment of the population wants to fly and some airlines have to provide more efficient, lower cost, simpler products while others a premium flight experience. The top priority of everyone is certainly the cutting down of costs without effecting the passenger facing standards of the airline.

Alliances have lost the discipline they had when they were originally launched. Joint Ventures and bilateral arrangements seem much more important. It is not necessary to be part of an alliance for an airline to survive but airlines break ranks with the alliance there are in if they find opportunities outside the alliance that better serve their interests than within their own alliance.

On the theme of fuel prices increase panelists stressed that fuel was by tradition 25-30% of the cost depending on the route structure now it is

getting close to 40% of cost structure. Some airlines had managed to hedge oil prices but this helps up to a point and for some time. Airlines have no choice but to increase their prices to cover the cost of the fuel. If the things in the Ukraine escalate, which is quite possible, oil prices could reach 200 us dollars. All airline restructuring plans had cost discipline measures that allowed airlines to be more competitive than their competitors. So far the pent up demand resulting from the Covid shutdown has helped airlines and have not passed through to the prices the cost of fuel. But ultimately passengers will have to pay what it costs to produce the flight. This may hurt the image of airlines but airlines have no choice but to raise prices. The sector has the obligation to reestablish connectivity in a way that is sustainable after a two year period when most airlines suffered extreme losses.

It is not affordable for the industry if airlines do not return to profitability and generating a stronger balance sheet. And capacity discipline has to be remained. Discipline is maintained when there is tension somewhere in the cost structure or the demand flow. When demand and supply fall out of balance and there is not enough supply and profits go into unusually high territories, this creates disruption opportunities. Someone will come and get profits down again. Decision making to bring capacity in takes long, especially on the long haul sector, so the industry needs some time to return to balance.

The chaos passengers face at the airports is not going to get better this summer. First of all, there are delays and cancellations but these incidents are isolated and not widespread, there is not the chaos many would like to portray. This situation is somewhat understandable as the industry has never experienced a ramp up and did not know what to do. No one expected the pandemic and no one expected that millions of people would be made redundant

and people would work for home when passengers need physical presence from people to serve them. It was an unprecedented event. The industry was facing an existential crisis. With borders closed and demand collapse, the industry had to be on partial pays or having aircraft on land for months. It is lamentable that during the pandemic the equipment was not properly maintained - many delays are currently due to the baggage system being broken down- but no one had perfect foresight to figure out how to manage equipment during the lockup, which people to hang to, which to let go. The chaotic situation at airport is very frustrating for the business but airports that are trying to get back to are suffering from the same challenges as airlines: handling very high volumes consistently. Certainly everyone could have a better job but this is said with the benefit of hindsight.

The public needs a reality check. They have to be told of the benefits of aviation and that “we do what we do as well as it can be done and we deserve to make a profit which as an industry we have not done” Employees have to adjust to the new world order which is not as straightforward as expected, to demanded from them to be as productive as they were in 2019 is not very realistic. Even the A350s dispute between airlines and one of the major aircraft manufactures is an unprecedented situation.

With airlines reconstruction and cost cutting measures there has been a change of the culture, of the product, a change in the way an airlines does things, in the way customers see the airline, in the way employees see what the airline provides. They expressed the hope that there will be a return to the destinations airlines were serving and grow even more where there are opportunities.



2022 ALTA AGM & Airline Leaders Forum



ALTA AGM & AIRLINE LEADERS FORUM

BUENOS AIRES, ARGENTINA
OCTOBER 16-18, 2022

altaairlineleaders.com



source ALTA

With more than 500 participants and 47 airline CEOs, a record for the event, the 18th edition of ALTA's Annual General Meeting and Leaders Forum was held in Buenos Aires, bringing together industry leaders in the region with its 154 members, representing 80 percent of Latin American and Caribbean traffic.

During the official opening of the meeting, which was attended by the Minister of Tourism and Sports of Argentina, **Matias Lammens**, and the Secretary of Transportation, Diego Giuliano, ALTA's Executive Director & CEO, **Jose Ricardo Botelho**, remarked: "We have a lot to do as a regional association and we have

phenomenal potential. Let this Forum serve to create a State Agenda. As I always say, where there is aviation, there is development. There is no single place on the planet where our industry is present, and we do not have infrastructure development, jobs, or economic growth. I hope to move forward to remove unnecessary regulations and laws that affect our industry at this time when the famous revenge tourism is taking place, where people want to fly again and connect with the region."

"ALTA added 24 new members over 2022 alone, reaching 154 members representing almost 90% of all traffic in the region. We want to invite you

to join the association. We are here because of you, for you. The whole chain is involved. We have at this moment 57 simultaneous actions in progress," highlighted Botelho before the region's leading executives.

"As people, we feel that we are coming out of the Pandemic, but the industry is still suffering as it did not receive any support from the States. Moreover, we are the only industry 100 committed and involved and took concrete actions to decarbonize the sector to protect our future. But we have to do it jointly without losing the opportunity and potential of our region for the generation of PBS."

During his speech as the new Chairman of ALTA's Executive Committee, Adrian Neuhauser reviewed the critical issues for the industry, with a mix of good news and a review of the sector's challenges. "Latin America has led the global recovery in aviation. We have countries that are already over 100% recovery compared to 2019, and all at very high levels, mainly in the domestic sector that has led with a fairly clear correlation between border openings and recovery with underlying demand," he expressed.

"The challenge is that recovering 100% is not enough, and it is still a region with few trips per capita and expensive for a poor society with challenges of costs, infrastructure, legal frameworks, taxation, and the environmental challenges that come to us as a World. As an example, an average inflation rate of 14.6% throughout the region - although unevenly - has a strong impact on the industry, with very high volatility in fuel costs, as well as challenges in the area of human resources that we will have to face and also in terms of infrastructure. Tax pressure is also very strong, with tickets whose value is more than 50% of the value without taxes. Amid a volatile context and marked by economic indicators that once again challenge us, the market demands from us more than ever solidity, competitiveness, diversification, and flexibility".

At the opening press conference, and in his role as outgoing president of ALTA's Executive Committee, **Roberto Alvo**, CEO of LATAM, highlighted the relevance of the event while affirming that "there is a spirited, dynamic recovery of the market in Latin America and the Caribbean after the pandemic and after several ups and downs in the last two years." And he recalled that at the height of the Pandemic, they were operating at 4% and 5% of airline capacity, and then in 2021. However, many countries were opened, although they experienced problems due to the various Covid-virus revolts in varying magnitudes.

"We are seeing a more definitive recovery period. ALTA has worked very hard with governments to accelerate the reopening of markets, being the only region in the world that did not receive any state support and with macroeconomic variables playing against us. We are in a period of reconsolidation that will continue in 2023. We expect the industry to return to full normality by 2024. Although we must be optimistic about the recovery of passenger traffic, we must not forget that we are coming from the deepest crisis in the history of aviation", said Alvo.

On the other hand, Juan Carlos Salazar, Secretary General of ICAO, thanked for the invitation to be part of the meeting and highlighted in his message that "ICAO member states recognize that air transport is an important driver of prosperity. The Pandemic has shown us the strategic factor of aviation in overcoming crises and has served us to reflect on the importance of standards in reviving travelers' confidence."

"In addition, the industry is at a crossroads. This turning point was discussed at the 41st ICAO Triennial Assembly. With a very ambitious long-term goal to reduce net carbon emissions to zero by 2050. Some measures give us reason to be confident that zero-emission flights can be a reality in a few decades. ICAO plays a central role and is open to discussions with all public and private stakeholders. Latin America and the Caribbean have favorable conditions, and we can lead the production of sustainable fuels worldwide," added Salazar.

Matias Lammens, Minister of Tourism and Sports, gave a brief review of his administration: "In December 2019, we took office as a government with a great expectation of generating progress with tourism as a generator of foreign exchange and a generator of quality jobs. And in March 2020, we were all left watching how companies were at zero turnovers because of the Pandemic".

"For us, airlines are fundamental partners to transform tourism into an engine for Argentina's sustained growth. We seek to create conditions for companies to invest in our country, earning money to reinvest. We estimate to exceed domestic traffic at 100 percent of capacity in these last months of the year, surpassing 2019 levels. Our goal is to build tourism into an engine for Argentina's sustained growth," asserted the official.

In turn, the Secretary of Transportation, **Diego Giuliano**, welcomed the participants and said, "for us, this International Forum is critical because it aims to bring concrete actions to make it more secure, accessible, and sustainable. Our generation was challenged by the Pandemic and the war that forced us to think about new scenarios. We welcome this Forum to reinforce our strengths for an increasingly united and connected Latin America".

Paola Tamburelli, head of ANAC (National Association of Civil Aviation of Argentina), as host of the meeting, highlighted that "our continent has an 88% recovery rate, behind North America, which has 90%. In October, there are no restrictions on the entry of passengers, and there is no country in Latin America and the Caribbean that could be an obstacle to flights from the region. Last year's conference in Bogota focused on system resilience: this Forum finds us in a different scene. The trend this time around is expansion." He added that "we have the opportunity to rebuild a global air network, better than before, in a more sustained, more inclusive, more resilient way and also, as we governments agreed with the approval of the whole industry, sustainably."

"In Argentina in particular, the number of passengers carried on domestic and international flights has a sustained recovery. In August 2019, Argentina handled 1,463,000 passengers. This year, we have 1,267,000 passengers, which translates into a recovery of 87%, mainly in cabotage," the official explained.

Michael Linenberg, Managing Director of Deutsche Bank Securities Inc., spoke about the recovery in the region during his presentation entitled "Prospects for socioeconomic growth in Latin America and the Caribbean." The current situation is favorable, with a capacity exceeding 2019 levels in several markets. Latin America expects GDP growth of 3.5% in 2022, but in 2023 it is expected to be 1.7%, according to the IMF. Estimates are that services will maintain the growth path, while suppliers and manufacturing will face more difficulties. In addition, the inflationary process in several markets affects the cost chain and makes it very difficult to stimulate demand, leading the industry to a significant diversification of income".

At The CEOs' Journey panel the CEO of Aerolineas Argentina, **Pablo Ceriani**, described how after the pandemic the airline's demand and operations grew to levels of between 70% and 80%. "We are with a recovery that surprised us because of how solid it is. We were closed the first year of the pandemic, and it took us longer to recover," he admitted.

For **Adrian Neuhauser**, CEO of Avianca, amid the pandemic, they had to make one of the most decisive decisions of this airline, to enter Chapter 11 of the U.S. Bankruptcy Law, from which they emerged with a well-defined restructuring plan and with which they seek to put the airline back on track with a new vision. "It was essential to do so; going through Chapter 11 was a matter of life and death. We knew how important Avianca is for the economy, for society, and how important it is for the company to exist. It is essential within the ecosystem for employees and us.

Aeromexico went through the U.S. Chapter 11 process, and its CEO **Andres Conesa** says that at that time, amid the pandemic, there were not many options. "It is the most important restructuring in the history of Mexico and leaves us

with many important lessons. We came out stronger; in the end, the most important lesson is that crises are opportunities; you will never be able to change your way when everything is going well," said Conesa, pointing out that efforts were doubled and tripled.

Conesa emphasized that today Aeromexico is stronger than before, and they are looking to grow even more to connect Mexico with the rest of the world.

He added that they expect to retake the Asian market as soon as these markets are opened. "The connection for Mexico and the rest of Central and South America with Asia is key."

Pedro Heilbron, CEO of Copa Airlines, pointed out that after the pandemic, they were surprised by the rapid recovery of tourism and leisure travel, while business travel is still lagging and has not returned to the passenger traffic that used to move this segment of corporate travelers before the pandemic.

Heilbron said that the growth of competition in the region with new airlines entering the Caribbean and Central American market and the consolidation of others makes airlines like Copa Airlines want to continue improving their air service proposal. "We have to be better, more competitive, and more efficient in what we do, and that is the formula," he replied about the arrival of new players in the airline industry.

Operational and external challenges

Avianca, Aerolineas Argentinas, Aeroméxico, and Copa Airlines's CEOs described some of the challenges they face operationally and externally.

Pablo Ceriani, CEO of Aerolineas Argentinas, said there is some uncertainty as to whether the growing pace of passenger flow will continue. At the same time, an overheating global economy is affected by high prices and inflation, which can affect household income. "As much as we say that we try to do every-

thing flexibly, this is quite a complicated business because the investment plans are long term and we have many sunk costs, and we do not have much maneuvering capacity, but we have to continue investing," he stated.

Andres Conesa, CEO of Aeromexico, said that there are regulatory challenges in addition to the global economic context. "We have to ensure a permanent level playing field that allows for more significant development, job creation, and benefits for the country. The key is to achieve greater regulatory clarity, which the government and the industry must do.

Adrian Neuhauser, CEO of Avianca, said it is essential to achieve a sustainable recovery of the regional airline industry that generates jobs and business opportunities with connectivity between countries and continents. "Aviation is fundamental for Latin America because it allows us all to connect, to do business and, of course, to generate economic growth and will allow us to have a better quality of life," said Neuhauser.

Pedro Heilbron, CEO of Copa Airlines, stressed that it is vital to promote the competitiveness of the airline industry to continue boosting the regional economy with more connectivity and promoting tourism. "Aviation has an important impact on the economy and tourism, but at the same time, new charges, costs, and taxes are imposed that go against this, so it is necessary to seek to promote the industry's competitiveness," he said.

The CEOs agreed that this industry has shown remarkable resilience and will continue to be resilient as long as it also strives to focus on decarbonization, including innovations to improve customer care and service, while reinventing itself every day amid fierce competition and a consumer who continues to seek revenge for the almost two years without travel.

The recovery of passenger demand in Latin America, the consolida-



source ALTA

tion of some airlines in the United States and Europe, as well as challenges that need to be overcome in the post-pandemic era, were topics addressed by the panel "Aviation growth in the face of new challenges."

In the panel, moderated by Alex De Gunten, Business Development Officer - HEICO Aerospace, the CEOs of Iberia, Javier Sanchez-Prieto; GOL, Celso Ferrer and AZUL, John Rodgerson, they shared their companies' experiences in overcoming the pandemic, and the actions they consider should be taken by the industry and governments.

Javier Sanchez-Prieto, CEO of Iberia, stressed that the industry has been able to recover in many aspects, despite the current uncertainty, which is not new, as aviation has had to face other challenges before COVID-19, such as recessions and high fuel prices, which the industry has been able to overcome.

"The good thing is that we turned the page and came back. The demand came back, and there are many problems, but we are doing well in some respects. We see more in some sectors and more growth. We failed in the predictions regard-

ing pricing and how we are recovering from the crisis. We are also seeing a much stronger recovery in corporate traffic, which is good news. I think this is the starting point. We know that we must live now with a certain degree of uncertainty, but that is what we have in this industry," said Sanchez-Prieto.

He mentioned three challenges facing aviation: making the industry work (recovery has to do with not having long lines at each airport, which is not good, nor the different regulations); understanding that the industry is instrumental for social and economic development, and not seeing sustainability as a threat, but as a challenge.

Iberia's CEO also stressed that there is a connection that must be continued, and that has to do with the customer. "This is something we must invest in if we want to protect our industry."

Celso Ferrer, CEO of GOL, also sees an optimistic scenario. "I see a better outlook. We faced a massive crisis, and we are getting to the post-crisis scenario. It will take at least two years to reduce the industry's backwardness or lethargy somehow."

He pointed to the actions they are taking after the pandemic, which is to go back to basics: bring back all the aircraft and handle the current budget. "We reduced the network from 800 daily departures to 50 daily departures, we were seeing during the crisis a work about day-to-day management, and in this post-crisis moment, we can combine a long-term vision with a medium-term vision, which is where we are today."

He added, "despite fuel costs, we see less volatility, which is good. We are adjusting to being able to stimulate the business and get the company back to growth. Today we are flying more or less 90% of our pre-pandemic flights, and the idea is that in December of this year, we will reach 100% of pre-pandemic flights".

After the Covid-19 crisis, GOL made crucial decisions: the integration of the frequent flyer program, which has been growing very fast (passengers are adding miles and want to travel much more); fleet renewal (they incorporated more than 35 aircraft in 18 months) and the integration of a new platform to offer a better digital customer experience.

The industry in Latin America was strengthened

John Rodgerson, CEO of AZUL, said that the recovery of airlines in Latin America, despite not having received subsidies like in other countries, demonstrates the strength of management teams in the region.

He indicated that demand in Brazil is currently at an all-time high, despite problems such as a 30% currency devaluation since 2018 and a doubling in fuel costs. "The demand for flights is very high. We can go through the war in Ukraine, Covid, and all the problems that arise if demand continues to increase. The problem is that the Brazilian government did not give money to the airlines. Still, the regulator did meet with us every week to see how it could support us. Some days we had negative sales because people were asking for refunds, there were many things, and there are many things that governments can do to help and support the airlines".

He added that with actions such as the transportation of vaccines, people understand how vital air transportation is for the economy. "This industry generates much value for tourism, for everything, it is essential that we think about this."

Consolidations that generate growth

Another aspect addressed was the issue of consolidations by some airlines from America and Europe. In this regard, the CEO of GOL (the company that will consolidate with Avianca) considers that Avianca should maintain the current business model. "Each airline has its strong point, its local possibility to deal with the situation and the local geography. In Latin America, everything is very different. Brazil is very different from Argentina and Colombia, and that is the beauty of this concept we are considering because we want to keep the best of each airline, and this is a new model."

Azul's CEO, for his part, believes that this is a healthy trend for the industry

that should be analyzed. "We want to generate more solid airlines in Latin America that generate jobs, that pay taxes; it seems that this is the natural path. I do not know if it is going to happen or not. It seems that it is complex and difficult to achieve. Still, it is healthy for the industry to see that this is happening and what was seen in the United States is interesting. It was not that consolidation took place, and then there was a contraction. There was a consolidation that generated growth. The same thing happened in Europe; consolidation led to growth. So, if you achieve consolidation that generates growth, I think that's good for everyone everywhere," Rodgerson said.

During the panel "Low-Cost Airlines (LLCs) in Latin America in the Post-Pandemic Era," **Estuardo Ortiz**, CEO of JetSMART, **Felix Antelo**, CEO of Viva Air, **Jose Ignacio Dougnac**, CEO of Sky Airline, **Mauricio Sana**, CEO of Flybondi and **Eduardo Lombana**, CEO of Wingo, participated and analyzed opportunities for the region.

The executives agreed on the excellent opportunity of the region to develop regulations to stimulate the growth of this segment to level the playing field and that it is necessary to review the fees, charges, and costs currently an obstacle in many markets.

Eduardo Lombarda, CEO of Wingo, highlights that they recorded 200% growth in available seats, doubled the fleet, and increased the flight portfolio. "However, the position will be very cautious. This is an industry where if you end up being oversized, you can destroy value very quickly. Despite having grown rapidly and that the demand has responded well, we believe that we must be cautious in our growth and, above all, very flexible".

José Ignacio Dougnac, CEO of Sky Airline, described that today the Low-Cost airline market has grown. It has very competitive players with modern aircraft fleets and considers that they are now playing in a very competitive league. "Competition is tough. It is important to adapt to changes and conditions. For example, exchange rates are

very volatile. We come to have more than 50% of the total cost in fuel, and the ability to adapt is key." He stressed that flexibility is vital in the business to take care of the passenger.

Felix Antelo, CEO of Viva Air, emphasized that low-cost airlines have always emerged stronger from crises. "They have a faster recovery capacity, and in Colombia, which led the recovery of air traffic, the Low-Cost airlines led that recovery, but it must be recognized that the ballast that has been carried for years is still large."

He insisted that the airline and aerocommercial sector needs the support of authorities in tax issues and better regulations. "There is work to be done between the public and private sectors." He stressed that in Colombia, the VAT on airline tickets was eliminated. If this measure is not renewed, it will affect the cost to the passenger.

The CEO of Viva Air stated the need to work together with the Government and airlines to promote more air travel and move from 0.5 to 2 air trips per person per year on average.

Estuardo Ortiz, CEO of JetSMART, noted that it is optimistic that aviation in Latin America has recovered faster than in other regions. But he added that many challenges remain. Ortiz said that costs are challenged due to taxes and boarding fees imposed on tickets in many markets. He detailed that there are international flights in which 70% of the ticket price is made up of taxes. "If we want to think and dream of an aviation that connects all Latin Americans, as Europe has done, it is impossible if you are going to pay 150 dollars in taxes per ticket". This airline has focused on closing the year with 60% more seats available than in 2019.

Mauricio Sana, CEO of Flybondi, agreed that it is time to have better regulation that stimulates Low-Cost airlines to grow in the region. "There is a need for clear long-term policies that encourage the market," he said, indicating that they are pressured by taxes and fees that make fares more expensive. He highlighted that despite these obstacles, they fly 86%

more passengers than in 2019. He said there is an efficient way to operate without overburdening passengers with tax surcharges.

One of the proposals made by LLC market leaders is to achieve a special regulation for regional flights aimed at incentivizing this segment's operations with lower boarding fees and taxes.

"What we want is to make it more affordable to travel. We have to think about an ultra-low-cost model for aviation. How we focus on efficiency and price," insisted JetSMART's CEO.

Likewise, Sky's CEO said that it is not possible that 50% of the cost of the ticket is fees and taxes that discourage passenger demand. "We need to stimulate passenger traffic and have regional boarding fees that are cheaper than international ones," he said.

"Many governments and politicians still think that travel is a luxury, and it is not. It is a necessity and is an essential service in many countries," Antelo stressed.

Wingo's CEO stressed that operating on an even playing field is essential to be competitive. "There is a huge opportunity to use airport infrastructure better today."

For Flybondi's CEO, low-cost airlines not only stimulate tourism but also move and mobilize small businesses, entrepreneurs, and people who need to travel efficiently. The CEOs also stressed that amid the challenges of more competitive costs, they must focus on achieving environmentally sustainable aviation.

The decarbonization of air transport is a commitment of Latin American and Caribbean airlines. The panel was held on the opportunity for Latin America to be a competitive market for the production and distribution of SAF, sustainable aviation fuel, a key component to achieving the goal of zero emissions by 2050.

Louise Burke, Vice President of Global Aviation and Biofuels of ARGUS, moderated the panel, which

included **Erasmus Battistela**, CEO of BSBIOS; **Juan José Toha**, Director of Corporate Affairs and Sustainability LATAM Airlines; **Manuel Macedo**, President of Honeywell Latin America and Thorsten Lange, EVP Renewable Aviation NESTE.

"It will be necessary to bring together technology suppliers, sustainable fuel producers, and governments with incentive policies and macroeconomic measures that allow the entire value chain to benefit," stressed Manuel Macedo, President of Honeywell in the region.

He explained that setting up a plant to produce and refine FFS may require investments of up to one billion dollars and up to five years.

He admitted that SAF fuel prices are a challenge as they are currently higher than fossil fuel. Still, he considers that if nothing is done, the cost to the airline industry (doing nothing) will be higher due to the impact of continuing with traditional fossil fuels in the face of environmental challenges.

BSBIOS is the Brazilian company building the Omega Green plant in Paraguay. Its CEO highlighted that doing a PAS project in Latin America is a great challenge. "I think the great potential we have is the raw material. We are big producers of raw material, and that is our strength".

LATAM will use 5% of the PBS produced in the region

Juan José Toha, Director of Corporate Affairs and Sustainability LATAM Airlines, stated that LATAM has committed to reducing its emissions to become carbon neutral by 2050 and 50% of its emissions by 2030. He added that they need to raise efficiency levels. "There is room for improvement. We require a carbon offset policy and the SAF," he said, noting that these elements are generated in a virtuous and agile way.

"We assumed and declared our willingness to reach the year 2030 using 5% of FFS produced in the region.

We believe that this is the role that LATAM can play, which is to encourage, to give a clear signal, both for public policies and for producers, in terms of saying here is a company that has the will to advance in this line and wants to do this. Still, it requires that there is production at the local level to be able to do it."

Manuel Macedo from Honeywell Latin America pointed out that 90% of airplanes operate with its technology. In all these years, especially in the aerospace industry, they have worked with all these companies to create more efficiency. He added that they had improved the efficiency of engines and, in general, by 80%.

The company is also one of the essential licensees in fuel technologies, not only in new ones such as SAF. Macedo pointed out that the world releases 40 billion tons of CO₂, of which only 2% comes from aviation. "We have to look for fuels that reduce CO₂ emissions, and the use of SAF is one of the four or five ways to do it", he said.

Thorsten Lange, VP of Renewable Aviation at NESTE, explained that they started producing PBS four years ago without having the support. The company is currently building two more refineries, one of them in Singapore. "I am talking about a global business that can generate one billion tons by next year and another 500,000 tons by the end of 2023," he stressed.

Governments have a fundamental role in the generation of adequate public policies, and ALTA has emphasized that this is a State agenda that promotes the socio-economic development of countries through air transport. In terms of PAS, ALTA is committed to working with governments on this agenda with a focus on attracting long-term investment by providing legal certainty, providing incentives for production/consumption: similar to biofuels in land transport, financing PAS production programs: providing guarantees, research, and development in the PAS supply chain and access to essential infrastructure for competitiveness.



2022 ACI Africa / World Annual General Assembly (WAGA 2022)



WAGA 2022

Source: ACI Africa

The 2022 ACI Africa / World Annual General Assembly, Conference and Exhibition (WAGA 2022), one of the most important global gatherings of airport leaders, took place in Marrakech, Morocco. This year the event brought together senior executives of the airport industry and high-end technology stakeholders from all over the world. The WAGA Conference featured discussion topics following this year's theme, "**SKY'S THE LIMIT: DISCOVERING OPPORTUNITIES WITHIN CHANGE**".

Several interesting workshops and discussion sessions have taken place from the 22/10 – 28/10. Topics included agile airports, meeting the net zero commitment, digital transformation, expectations of future travellers and workforce realisation. The sessions provided excellent food for thought while the different workshops were a superb opportunity to address key industry challenges and explore solutions that will allow the airport industry to meet future sustainability objectives.

Conference Highlights:

At the opening ceremony, delegates were welcomed by the Minister of Transport and Logistics of Morocco **Mohammed Abdeljalil**; Director General of ONDA **Habiba Lakkalech**; ACI Africa President **Emanuel Chaves**; ACI Africa Secretary General **Ali Tounsi**; CEO of Oman Airports Management Company and ACI World Chair Sheikh **Aimen Al Hosni**; and ACI World Director General **Luis Felipe de Oliveira**.



Source: ACI Africa

ACI World Director General **Luis Felipe de Oliveira** commented at the opening ceremony: “It is a pleasure to be able to reconnect here in beautiful Marrakech and in Africa, a region that holds great potential for air travel growth, with 18 per cent of the global population but with only 2.5 per cent of global passenger traffic”. He also expressed his appreciation for Morocco’s Office National Des Aéroports (ONDA) for “graciously hosting the global airport community. Being here in person with a range of stakeholders provides the sense of community to build a more sustainable and resilient future together as one aviation ecosystem.”

ACI Africa Secretary General **Ali Tounsi** stated that “WAGA 2022 in Marrakech is an ideal opportunity for African airports to discuss current challenges, identify a common vision and move forward together with confidence and pragmatism” and express his confidence that the event will reinforce the industry’s confidence for a strong, lasting, and irreversible recovery.

The Director General of ONDA **Habiba Laklalech** addressed the conference welcoming the industry professionals in Marrakech and specified

that “Given the calibre of experts who are speaking and participating, this edition will undoubtedly be rich in debates and exchanges covering the most important topics for the future of our sector. The event will reinforce our confidence for a strong, lasting and irreversible recovery.”

ACI also announced the launch of the Public Health & Safety Readiness Accreditation program for airports. The new accreditation provides airports with an assessment that evaluates how aligned their public health and safety measures are with ACI guidance, industry best practices, and recommendations from the International Civil Aviation Organization (ICAO) Council’s Aviation Recovery Taskforce (CART). The program is a continuation of the popular Airport Health Accreditation (AHA) program that supported nearly 500 participating airports during the pandemic. iGA Istanbul Airport collaborated with ACI World for this initiative and has been announced as the first airport in the world to be accredited under the new program.

CEO of iGA Istanbul Airport Kadri Samsunlu said: “iGA Istanbul Airport is committed to continue providing their best for customer and com-

munity wellbeing. A peer review by ACI on our public health and safety measures, and our compliance and achievements with regards to international standards was greatly appreciated. iGA Istanbul Airport has worked closely with ACI by being an active member in ACI committees and working groups and hosted two APEX Reviews in 2022, one on safety and one on security. I particularly value the initiatives, collaboration, and knowledge exchange that ACI creates amongst its members.”

Keynote address at ACI #waga202 by SG AFCAC Mrs Adefunke Adefunke, highlighting the importance of connectivity and liberalization to African socio-economic development and the critical role of airports as a facilitator of people and trade, emphasizing initiatives like SAATM, One-Stop Security and Environment.

Highlights on key sessions:

CEOs Panel

Airport leaders expressed their views on how airports can return to profitability, repair damaged balance sheets, restore and re-grow the



Source: ACI Africa

destination map while meeting consumer, customer, and stakeholder expectations. The panel expressed optimism about the recovery of the industry. It was evident that panel members felt the pressure and profound uncertainty generated by staffing shortages, the pandemic waves, and the geo-political crises. However, the COVID experience gave the airport leaders the opportunity to learn valuable lessons and react in a more sustainable way. The aviation ecosystem was also tested by the recovery of the traffic growth in summer 2022. Different airports experienced a different pace in recovery and most airports experienced numerous challenges.

Istanbul Airport and Tampa International Airport were at the forefront of the recovery mainly due to the different policies applied by the relevant

authorities that took place during the pandemic. In Australia and Canada, the COVID effect and different regulatory approaches posed significant constraints in recovery. In Kenya the traffic has returned, and the authorities have taken all the right precautions to ensure health and safety for the travelling public. Traffic growth predictions bring optimism in the airport community. Airport leaders agreed that the themes of sustainability and resilience of airports are at the top of their agendas and will dominate the future discussions. Airports are a key pillar of the aviation ecosystem, and they can lead in finding suitable solutions.

Moderator: Mark Pilling, Independent Editor and Journalist
 – **Mrs. Deborah Flint**, President, and Chief Executive Officer, Greater Toronto Airports Authority, Canada

- **Mr. Alex Gitari**, Kenya Airports Authority, Managing Director
- **Mr. Kadri Samsunlu**, Chief Executive Officer iGA Istanbul Airport, Turkey
- **Mr. Geoff Culbert**, Chief Executive Officer, Sydney Airport, Australia
- **Mr. Joseph Lopano**, Chief Executive Officer, Tampa International Airport, USA

Net Zero Carbon by 2050 Panel

The session discussed how airports can implement Net Zero goals, what are the opportunities, challenges and needs associated to policy, finance, capacity building and collaboration. The panel stressed the need for all the key stakeholders to work in collaboration for meeting the net zero targets. Especially, government support and commitment



Source: ACI Africa

are required as well as building an overall staff understanding and acquiring the right expertise. The representatives from the three airports shared their success stories and their strategies for the future. Airport leaders shared their confidence that net zero targets will be met on time.

Moderator: Mrs. Sharon Mahony, Sustainability and CEM Expert, EN-VISA, France

Panel Discussion:

- **Mr. Olivier Jankovec**, Director General, ACI EUROPE
- **Mr. Sam Samaddar**, Chief Executive Officer, Kelowna International Airport, Canada
- **Mr. Willy Etheve**, Director of Development, Reunion Island Roland Garros Airport, Reunion Island (France)
- **Akihiko Tamura**, President &

Chief Executive Officer, Narita International Airport, Japan

Future traveller panel

The panel discussed how COVID 19 has modified the profile of travellers and key reasons for travelling. Panel members agreed that there are currently fewer business travellers, an outcome of cost cutting and new ESG strategy for many companies, but business traffic is recovering. This comes mainly from the need to connect in person. LCCs also drive new traffic and seamless travel is earning ground among the youngest generations. This session also included an introductory presentation by Ms. Hee-Jung Lee, Executive VP Incheon Airport, South Korea, on how Incheon Airport manages to understand customers and their expectations by cre-

ating special experiences for the travellers and “touching moments” that develop positive memories.

- Moderator: Mr. Torsten Hentschel**, Managing Director, TH Airport Consulting
- **Ms. Joyce Carter**, Chief Executive Officer, Halifax International Airport, Canada
 - **Mr. Marco Troncone**, Chief Executive Officer, Aeroporti DI Roma Spa, Italy
 - **Mr. Askin Demir**, Chief Executive Officer, Lima-AIBD-Summa, Senegal

Valuing airport infrastructure in emerging markets for an economically sustainable and resilient future

The panel addressed the need to continue projects that stopped due to the pandemic in emerging markets with a more resilient mind-



Mrs. Mpumi Mpfu
Chief Executive Officer
Airports Company South Africa



Mrs. Habiba Laklalech
Director General
Office National Des Aéroports
Morocco



Mr. Kleber Meira
CEO at BH Airport
and Zurich Airport Group Comp



Source: ACI Africa

set. Flexibility, agility, and capacity building can drive a more resilient future. As the industry emerges from the pandemic, delivering value to the traveling public continues to gain momentum but also creates challenges from an infrastructure perspective. The role of improved sustainability practices and energy management adds to the solution and is considered critical for creating better risk sharing mechanisms between airports, airlines, and other stakeholders.

Moderator: Mr. Ruud Ummels, Managing Director, To70 Aviation, Netherlands

- **Mrs. Mpumi Mpfu**, Chief Executive Officer, Airports Company South Africa
- **Mrs. Habiba Laklalech**, Director

General, Office National Des Aéroports, Morocco

- **Mr. Prosper Zo'o Minto'o**, Regional Director, ICAO Western and Central African (WACAF) Office, Senegal
- **Mr. Catalin Radu**, Director General, Aviation Administration of Kazakhstan

Non-Aeronautical revenues post-COVID panel

Airport revenue streams are challenged now, especially non-aeronautical revenues. Panel members agreed that passenger profiling is changing and there is a growing need for products and services that meet the new requirements. The digital era has transformed

the buying behaviour and COVID 19 has contributed to this. In the post COVID era passengers have a strong appetite for spending during travelling but their purchase power and behaviour has changed. They have become more digital and look for convenience when it comes to buying. Retailers need to adapt and design products and experiences that meet their needs and wants. Local retailers and companies with strong sustainability profiles have earned high recognition in the eyes of the travelling consumer.

Moderator: Mr. Andrew Ford, President, Paccaya Resources

- **Mrs. Isabel Zarza**, Chief Operating Officer North & Central Europe, Russia & Africa, Dufry
- **Mrs. Svetlana Simeonova**,

Corporate Secretary & Head of Commercial, Fraport Bulgaria . Mr. John Hume, Managing Partner, Hume Brophy

- **Mrs. Tracy Ross**, Projects & Design Manager, Sustainability Champion & LEED Green Associate, Aer Rianta International Middle East
- **Mr. Antonio Vencesla**, Corporate Affairs & Communications Director, Global Travel Retail, JT International

What's the risk? Digital transformation vs cyber maturity Panel

In this session the panel discussed emerging cyber risks and explored the relations between technological development and digitalisation while ensuring the key principles of cyber risk management are maintained across the aviation system. Panel members stressed the need to accelerate digital transformation as means of mitigating risks. They also acknowledged that there is not such a thing as risk-free operations but there is effective risk mitigation. Cyber risks exist and will continue to evolve but the implementation of existing and new technology can improve how airports manage cyber threats efficiently.

Moderator: Mr. Terrance Kirk, Senior Vice President Global Operations of the Aviation Information Sharing and Analysis Center

- **Mrs. Tara Mulrooney**, Chief Information Officer from Edmonton Airport and Chair of ACI World Cyber Working Group .
- **Mr. Charles Habonimana**, Managing Director, Rwanda Airports Co. Ltd.
- **Mr. Emiliano Sorrenti**, Chief Information Officer of Aeroporti di Roma, Italy
- **Mr. Mthoko Mncwabe**, Chief Information Officer, Airports Company South Africa

The Workforce Crisis: Thinking Long Term

The discussion addressed key staff-

ing challenges throughout the aviation ecosystem. The recent staff shortages resulted in poor passenger experience but also in employee frustration. There is a growing need to create a more effective retention strategy and build core skills. Panel members agreed that there is a growing need to develop a better, more diverse, and inclusive working environment with more incentives for the future workforce. Mrs. Candace McGraw has announced that ACI World released the first edition of The Evolution of the Airport Workforce: Turning Challenges into Opportunities White Paper.

Moderator: Mrs Yolanta Strikitsa, Strikitsa Consulting

- **Mrs. Candace McGraw**, Chief Executive Officer, Cincinnati Airport and Vice-Chair of ACI World Board
- **Mrs. Catherine Piana**, Director General, Confederation of European Security Services
- **Mr. Guillaume Crozier**, SVP Global Cargo, Dnata, UAE
- **Ms Ilham Kazzini**, Directrice Commerciale, Royal Air Maroc, Morocco

Assembly Resolutions on Sustainability and Airport Resilience

“Each year the Assembly considers Resolutions on key priorities for airport operators that reflect the concerns and interests of ACI members,” said ACI World Director General Luis Felipe de Oliveira. “This year, the Assembly unanimously adopted Resolutions that will strengthen the sustainability and resilience of airports as essential players in the aviation ecosystem, and for the benefit of travellers and communities worldwide. These Resolutions will help airports deliver the long-term net zero carbon goal; restore economic equilibrium; support small, emerging, and regional airports; and, build aviation’s workforce. On behalf of ACI, I would like to thank our members for providing a strong collective response to, and a commitment to act on, the press-

ing issues presented in ACI World’s Resolutions.”

WAGA 2023 in Barcelona

AENA will be the new host of WAGA 2023 in Barcelona. ACI World Director General Luis Felipe de Oliveira welcomed the new host “ACI is delighted to announce that AENA will host the ACI EUROPE / WORLD Annual General Assembly, Conference and Exhibition (WAGA)” and expressed his confidence that it will be memorable event “Not only is AENA’s Executive Board Member and Managing Director Javier Marin sitting on the ACI World Governing Board as ACI EUROPE’s President, but AENA is also one of ACI’s most active members. As leaders in social, economic, and environmental sustainability, they are a perfect host for the world gathering of airport leaders. We look forward to building on what is already a strong and long-lasting collaboration.”

Airport Technology Innovation Awards:

During the Airports Council International (ACI) Africa / World Annual General Assembly, Conference and Exhibition today, ACI World and Amadeus have announced the winners of the Technology Innovation Awards, which put a spotlight on the best technology initiatives and leadership by airports.

1. Best innovation in airport passenger related processes: AENA – Biometric journey from home to aircraft at Barcelona Airport
2. Best innovation in airport operations and installations management: Incheon Airport – Data Sandbox
3. Best airport innovation leader (individual): Suhail Kamil Kadri, Senior Vice President, Technology & Innovation at Doha’s Hamad International Airport.



AACO 55th AGM



الاتحاد العربي للنقل الجوي الجمعية العامة الخامسة والخمسون

24 - 26 October 2022 | Abu Dhabi, UAE

Source: AACO

AACO 55th Annual General Meeting, that was held today in Abu Dhabi-UAE, announced that although it would've been preferable to maintain the baseline of CORSIA (the Carbon Offsetting and Reduction Scheme for International Aviation agreed under ICAO) at 2019 levels rather than adding additional burden by lowering that baseline, the AGM, however, welcomes the decision made by the ICAO 41st General Assembly on aviation and the environment, on Carbon Neutral Growth for the international aviation that is less than the emissions recorded in 2019 by 15%, as well as

the long term aspirational goal of achieving Net Zero Emissions by 2050.

On the same topic, the AGM called upon ICAO member states to work on the following:

1. CORSIA to be the only Market Based Measure (MBM) to deal with international aviation's emissions to avoid the implementation of divergent and unilateral measures for emission reduction schemes.
2. Low Carbon Aviation Fuels to be included in the strive of airlines to reduce their emissions.

3. The facility of Book & Claim to be included in any reference to supporting the deployment of Sustainable Aviation Fuels.

4. To harmonize the sustainability criteria to accredit and certify sustainable aviation fuels as eligible aviation fuels to avoid fragmentation and proliferation of individual mandates and standards.

It is worth mentioning here that AACO member airlines have committed to net-zero emissions aspirational target for 2050 through a resolution adopted last year at AACO 54th AGM (which is in line

with the industry's commitments adopted under the umbrella of IATA), provided that all stakeholders concerned with civil aviation contribute to that effort; namely, governments, technology partners, engine and airframe manufacturers and fuel suppliers.

This same target for Net-Zero Emissions in 2050 has been adopted recently by ICAO 41st Assembly that also mentioned that reaching this target will rely on the combined effect of accelerated adoption of new and innovative aircraft technologies, streamlined flight operations, and the increased production and deployment of sustainable aviation fuels (SAF).

On the other hand, the AGM adopted another resolution today stressing the importance of learning from the lessons of the COVID19 pandemic to be able to address any future global health crisis. The AGM resolved to encourage governments to do the following:

1. Revive the international health certificate in a digital format under the umbrella of the World Health Organization, to be ready for governments to use when the need arises.
2. Work under the umbrella of the World Health Organization and the International Civil Aviation Organization to deploy the recommendations and manual that were developed by ICAO's Aviation Recovery Task Force that also included the WHO, and to transform them into standards that include guiding actions to be taken when a health crisis occurs.
3. Adopt these standards in their national policies.
4. Work under ICAO to develop guiding material specific for safeguarding the integrity of air services agreements in times of crises based on a set of principles that ensure dialogue between parties of the agreements, consultations, transparency, and clarity and a clear pathway to go back to normalcy.

AACO 55th AGM also expressed its strong support to the recent resolution adopted by ICAO's latest Assembly that is in line with the above 4 points and called upon its implementation in a speedy manner.

As safety stays the priority of AACO member airlines, AACO 55th AGM drew attention to the risks associated with the air carriage of lithium batteries, if the shippers or individuals do not abide by production and carriage standards as set by the United Nations, ICAO, and IATA. In this regard the AGM encouraged governments to do the following:

- a. Increase awareness and training of the security staff at airports to detect and offload lithium batteries from baggage.
- b. Share safety data and information on incidents caused by lithium batteries.
- c. Invest in technical, operational, and regulatory solutions for detecting lithium batteries.
- d. Put enforcement measures on shippers and individuals to declare the carriage of lithium batteries.
- e. Work under the umbrella of ICAO towards developing a legal instrument which allows the prosecution of shippers and individuals who fail to declare carriage of lithium batteries in baggage.

AACO 55th AGM also encouraged operators to report all incidents related to lithium batteries to support research in this area, and to provide data for the development of operational, technical, and regulatory solutions by governments. The AGM also called upon screening equipment manufacturers to investigate into technology solutions for enhanced security screening x-ray machines at airports' security checks to offer automated lithium battery detection, and upon relevant technology providers to help airlines in their pursue for fire containment tools such as fire-resistant containers, fire containment covers and bags, and in smoke displacement systems.

AACO Secretary General's Report

AACO Secretary General, Mr. Abdul Wahab Teffaha, presented his report to the 55th AGM.

The Secretary General underlined that the air transport industry is barely sensing its way out of the COVID-19 crisis, whereby air traffic is still 17.6% less than 2019 levels, but with the increasing demand on travel, the industry is expected to exceed 2019 traffic levels in 2023 as compared to the previous predictions of 2025 or more. Meanwhile, new challenges are looming on the horizon, being:

1. Escalation of inflation rates
2. Increase of oil prices, and the crack between crude oil and Jet A1 prices
3. Geopolitical tensions

These factors are having adverse effects on the airlines' efforts to exit the crisis.

Moving on, the Secretary General emphasized the importance of drawing lessons from the COVID-19 crisis in two specific areas:

1. Governments' Approaches to Air Transport During Global Crises
2. Level of Technological Advancements in Air Travel Processes

Governments' Approaches to Air Transport During Global Crises

AACO Secretary General called upon governments, individually and through international government organizations, not to forgo lessons of COVID19 crisis and to take the following steps:

1. Revive the international health certificate in a digital form.
2. To call upon governments to adopt the CART guidelines, developed by ICAO and WHO, and ratify them as standard procedures based on scientific criteria

and corresponding risk management.

3. To avoid taking unilateral measures regarding air services.
4. To respect the international air services agreements, (bilateral or multilateral), and abide by their provisions when having to impose any urgent health measure for air travelers from any territory of the parties of those agreements.

Level of Technological Advancements in Air Travel Processes

The Secretary General said that digital transformation is at the top of the priorities of the industry as a group and as individual airlines.

Airlines are in an urgent need to work in a digital ecosystem based on two important elements that are: decentralized processing and modular capabilities and dealing with the customer as a human being rather than a number.

He commended the vision of IATA in this area under the banner of “Offer and Order” that includes a substantial transformation on all levels that would require reforming the digital infrastructure of airlines and travel stakeholders.

The Secretary General listed AACO’s scope of work in this area as follows:

1. Digital transformation at the level of the customer, so that the relationship between the customer and the airline becomes resident in a travel market environment for the customer to fulfil all his/her requirements in one location.
2. Knowing the customer by his or her digital identity so that the relationship with the data of that customer does not end by the end of the journey but is used to build a dynamic relationship with him or her.
3. Governments need to recognize digital identity in an interactive

way so that travel can be processed by changing the physical validation to a digital one.

The other major topic that the Secretary General dug deep in was the way to deal with climate change and its devastating impacts that are affecting every person on the planet and every industry including air transport.

He mentioned that the issue of climate change as it pertains to air transport is based on three primary pillars, as follows:

1. Long-term aspirational goal of the air transport sector
2. Short-term goal, specifically the “CORSIA” global scheme
3. Proper regulations for sustainable aviation fuels

Long-term aspirational goal of the air transport sector

The Secretary General reminded the AGM that zero net carbon emissions by 2050 is a target that necessitates the availability and integration of the four components listed below:

1. Development of engines and aircraft technologies
2. Sustainable aviation fuels
3. Management of airports and airspace infrastructure
4. Carbon Offsetting: In the various scenarios analyzed by ICAO, IATA, and AACO to achieve net zero emissions by 2050, it was obvious that airlines will need to buy carbon offsetting certificates to close the gap between the emission reductions to be achieved by the first three contributors and the actual goal of zero emissions.

Short-term goal, specifically the “CORSIA” global scheme

The Secretary General expressed that it would have been preferable to maintain the CORSIA baseline at 2019 levels rather than adding additional burden by lowering that baseline. Yet, he welcomed the decision

made by the ICAO 41st General Assembly on aviation and the environment in that regard.

Proper regulations for sustainable aviation fuels

The Secretary General listed important principles with regards to Sustainable Aviation Fuels as follows:

First, governments incentivize airlines to use sustainable aviation fuels by removing associated taxes and fees, hence reducing the price of SAF.

Second, governments must agree on international standards to account for all airline certifications.

Third, allowing airlines to use Book & Claim without any geographical restrictions.

Fourth, the harmonization of sustainability criteria to accredit and certify sustainable aviation fuels as eligible aviation fuels, and if harmonization cannot be achieved, all stakeholders’ sustainability certificates must be recognized.

AACO’s Annual Report and Annual Air Transport Statistics: Data on the industry’s recovery to pre-pandemic levels, and the global and regional Air travel and tourism sector was distributed to delegates of the AGM.

The Annual Report and the Annual Arab Air Transport Statistics bulletins were distributed during AACO’s AGM. The Annual Report focused on the aviation’s recovery to pre-pandemic levels, status of the industry in terms of that recovery, and critical industry issues such as climate change, digitization of air transport, safety, security, and aeropolitical affairs. AACO’s work and cooperation initiatives amongst its member airlines are also highlighted in the report.

The Annual Arab Air Transport Statistics bulletin covered 2021 data and included statistics on the global and Arab world economies, global and Arab air travel and tourism, and AACO member and partner airlines' data.

Major highlights of the data included in the two bulletins are listed here below:

- Traffic to/from and within the Arab world reached around 118 million passengers; increasing by 20.2% in 2021 compared to 2020, while remaining 64.2% below 2019 levels. The improvement in the Arab air transport market reflected the easing of border restrictions and the increase in demand for travel.
- Passengers using Arab airports in 2021 reached 149.3 million passengers, which is 24.2% above 2020 but 60.4% below 2019.
- Cargo handled at Arab airports increased by 11.9% in 2021 compared to 2020 reaching 7.3 million tons of cargo. The volume is 13.1% below 2019.
- By the end of 2021, AACO members passenger traffic measured in RPKs, and seat capacity measured in ASKs reached 58.4% and 50.3% below 2019 levels, respectively. AACO members' operations are expected to recover further throughout 2022 and reach pre-pandemic levels (2019) by mid-2023.
- By the end of 2021, AACO members' total fleet reached 1,506 aircraft with in-service aircraft representing 76.0% (1,149 aircraft), increasing by 16.2% compared to 2020, however, remaining 14.6% below 2019 levels. As at 30 June 2022, the number of in-service aircraft increased to reach 82.0% of the total fleet.
- In 2021, operating revenues for AACO member airlines reached USD 48.81 billion, increasing by 77.7% compared to 2020, while remaining 28.0% below 2019 levels. As operations increased in 2021, the operating loss of AACO members dropped significantly from USD 13.26 billion in

2020 to USD 2.0 billion in 2021, putting AACO members closer to pre-pandemic levels.

CEOs' Discussion Panels

The Secretariat General of AACO invited member airlines, regional and international organizations, industry partners, partner airlines, air transport professionals, and the media to participate in two CEOs' panels, one on Digital Transformation, and the other on Strategic Industry Issues.

1. CEOs' Panel on Digital Transformation: The high-level discussion on digital transformation of air travel was moderated today by Mr. Muhammad Albakri – IATA SVP – DG-Strategic Leadership Team. The discussion gathered Mrs. Irra Ariella Khi, CEO, Zama, and Mr. Juan Pablo Lafosse, CEO, Travelx.
2. CEOs' Panel on Industry Issues – The high-level discussion on industry issues was moderated today by Mr. Eamonn Brennan – Director General of EuroControl. The speakers participating in the discussion were:
 1. Mr. Henrik Hololei, Director-General for Mobility and Transport in the European Commission
 2. Mr. Antonoaldo Neves, Group Chief Executive Officer, Etihad Aviation Group
 3. Mr. Ghaith Al Ghaith, CEO, flydubai
 4. Mr. Maen Razouqi, CEO, Kuwait Airways
 5. Ms. Güliz Öztürk, CEO, Pegasus Airlines

Election of Members of AACO's Executive Committee

AACO members held a closed session today where they discussed administrative, financial, strategic and other issues related to AACO's Secretariat General work. The three strategic resolutions referred to at

the beginning of this press release were adopted by AACO member airlines during the closed session. On the other hand, the AGM elected a new Executive Committee which now comprises the following CEOs of AACO member airlines, elected for a term of 3 years as per AACO's bylaws:

Members of AACO Executive Committee:

- Mr. Mohamad El-Hout, Chairman-Director General of Middle East Airlines
- H.E. Mr. Akbar Al Baker, Group Chief Executive, Qatar Airways
- Eng. Yehia Zakaria, Chairman & CEO, EgyptAir Holding Company
- Mr. Antonoaldo Neves, Group Chief Executive Officer, Etihad Aviation Group
- Mr. Bander Almohanna, Chief Executive Officer & Managing Director, flynas
- Mr. Abdelhamid Addou, Chairman & Chief Executive Officer, Royal Air Maroc
- Eng. Samer Al-Majali, Vice Chairman and CEO, Royal Jordanian
- H.E. Eng. Ibrahim Abdul Rahman Al Omar / Director General, Saudia
- Mr. Khaled Chelly / Chairman and CEO, Tunisair

Closing of the AGM

As the AGM concluded, AACO members thanked the 55th AGM Chairman, Mr. Antonoaldo Neves, for chairing this event and for the generous hospitality of Etihad Aviation Group.

Venue of Forthcoming AGM

The forthcoming 56th AGM in 2023 will be convened in the Kingdom of Saudi Arabia by kind invitation of Saudia, while AACO 57th AGM in 2024 will be convened in the Hashemite Kingdom of Jordan by kind invitation of Royal Jordanian.



2022 IATA Wings of Change Europe



Source: IATA

The third edition of IATA Wings of Change Europe (WoCE), organised by the International Air Transport Association (IATA) and hosted by Pegasus Airlines, has kicked off in Istanbul today, 8 November 2022, following previous editions in Madrid and Berlin. Attendees on the first day included Türkiye's Deputy Minister of Transport and Infrastructure, Dr. Ömer Fatih Sayan; Chair of the IATA Board of Governors and Pegasus Airlines Vice-Chairperson of the Board and Managing Director, Mehmet T. Nane; IATA Director General, Willie Walsh; and Pegasus Airlines CEO, Güliz Öztürk, along

with government officials, industry representatives and aviation professionals from Türkiye and many other countries.

On the second day, **Deputy Minister of Culture and Tourism of the Republic of Türkiye, Özgül Özcan Yavuz**, delivered the opening address of the conference, where significant topics such as the post-pandemic recovery, environmental and financial sustainability, accessibility, inclusivity, diversity, tourism and digitalisation are being addressed. Topics of discussion included insights around the current state of

the sector and what's next for the air transport industry, as well as the tourism industry ecosystem.

Delivering a speech at the conference, **Türkiye's Deputy Minister of Transport and Infrastructure, Dr. Ömer Fatih Sayan**, said: "As a country we have the geographical advantage of being within a four-hour flight distance to 67 countries with 1.6 billion people and 8 trillion dollars of trade volume. Combining this strong geographical advantage with our strong airlines, comprehensive maintenance centres, modern airports, promising aviation training



Source: IATA

centres, and well-trained personnel, Türkiye is in a great position to become a world leader in aviation. New ideas and policies that are to be discussed here during this event will determine the roadmap of European aviation in the coming period. We believe that all challenges can be overcome first with regional and then with strong global cooperation.”

Delivering the opening address on the first day of the conference, **Chair of the IATA Board of Governors and Pegasus Airlines Vice-Chairperson of the Board and Managing Director, Mehmet T. Nane**, said: “The past few years have been the most difficult of the aviation industry to date. We have experienced and learned a lot. Now it is the time to recover and build back stronger than ever. We firmly believe in the power of working together to shape the future growth of a safe, secure and sustainable aviation industry that connects and enriches our world. We all have the power to achieve this and to make it happen, as long

as we join forces and stand shoulder to shoulder. That is why a united aviation ecosystem is vital, because only then can we build on each other’s strengths and achieve far greater things than we can individually, from innovation and diversity to safety and sustainability.” He continued: “Stakeholders from across the aviation sector are united on the need for regulations which promote the coexistence of different business models, encouraging healthy competition and maximum consumer choice. Türkiye is a good example of how to grow national connectivity and allow different kinds of carriers to succeed. And what is crucial is that policies for growth go hand in hand with sustainable solutions.”

Gülüz Öztürk, CEO of Pegasus Airlines, who also spoke at the event said: “As Pegasus Airlines, we are delighted to host IATA Wings of Change Europe, one of the most important aviation conferences in the European region. At this important event, we come together with aviation professionals from all over the

world to exchange ideas and discuss highly significant issues that will shape the future of our industry. I am pleased that we can emphasise the importance of an inclusive and diverse corporate culture within the global aviation industry and underline that companies should be prioritising these issues. I look forward to witnessing the positive outcomes that this gathering will bring”.

And **IATA Director General, Willie Walsh**, said: “Europe, just like the rest of the world, relies on air connectivity, which is vital for society, tourism, and trade. Business users of the European air transport network - large and small - have confirmed this in a recent IATA survey: 82% say that access to global supply chains is ‘existential’ for their business. And 84% ‘cannot imagine doing business’ without access to air transport networks,” said Willie Walsh, IATA’s Director General, and continued: “We should be focusing on incentivizing SAF production in the greatest quantities at the lowest cost, wherever that may be.”



AFRAA 54th AGA



Source: AFRAA

AFRAA Concludes its 54th Annual General Assembly with Emphasis on Concerted Actions to Drive Air Transport Industry Sustainability

December 14, Dakar, Republic of Senegal - The African Airlines Association (AFRAA) and Air Senegal concluded the 54th Annual General Assembly (AGA) in Dakar, Senegal. The event was held under the High Patronage of the Government of Senegal. The Assembly, which brought together 456 delegates from 42 countries under the theme **“Acing the Roadmap to Sustainable African Aviation”**, called upon African airlines and air transport stakeholders to act on initiatives and strategies that will drive

the sustainability of the air transport sector to realise its potential. Among others, these include: the Air Transport Sustainability Roadmap, the effective implementation of the Single African Air Transport Market (SAATM), the Continental Free Trade Agreement (AfCFTA), and the Free Movement Protocol.

In his welcome address, Mr. Alioune Badara Fall, President of AFRAA and CEO of Air Senegal stated: *“/ pay tribute to the extraordinary work by stakeholders in putting in place*

projects and programmes to build together a more united future for a sustainable African aviation, for the full benefit of African economies and populations.” The ultimate goal, he noted, will realise the improvement of connectivity between African countries, build truly efficient carriers both operationally and financially, attain structurally competitive tariffs in order to offer African populations the ability to travel, meet and exchange much more easily through new routes, increased frequencies.



Source: AFRAA

Mr. Abderahmane Berthe, AFRAA Secretary General, noted with satisfaction and great interest the importance given to the development of the aviation sector by the State of Senegal through investments in aeronautical development infrastructure and the National Company Air Senegal. *“In memory of the particularly difficult times during this ongoing phase to restore air transport activity, I would like once again to express AFRAA’s solidarity with the entire chain of players in the aeronautical industry. As the aviation community, we must continue the ongoing joint efforts to support recovery and foster a sustainable and resilient air transport system in Africa.”* he stated.

Resolution on Aviation Net Zero Carbon Emissions by 2050

Among the resolutions, in line with the industry commitment towards achieving net zero emissions by 2050, the Assembly urged all in-

dustry stakeholders to commit to addressing the environmental impact of their policies, products, and activities with concrete actions and clear timelines. The Assembly further encouraged all AFRAA member airlines to continue improving their operations’ efficiency to achieve sustained in-sector emissions reductions and to support the transition to reliable, cost-competitive Sustainable Aviation Fuels (SAF).

Appointment of officers

The 54th AFRAA AGA elected LAM Mozambique as the Chairman of the Executive Committee while Kenya Airways was elected as first Vice Chairman and Air Algerie was elected as second Vice Chairman. The AFRAA Executive Committee has oversight responsibility for the Association.

Host of the 55th AGA

The 54th AFRAA AGA elected Uganda Airlines as the President of the

association. Uganda Airlines will host the 55th AGA in Uganda from 19 - 21 November 2023.

Launch of the 1st edition of the History of Aviation report

AFRAA launched the 1st edition of the History of African Aviation Report at the side-lines of the 54th AFRAA Annual General Assembly (AGA) & Summit on December 12, 2022 in Dakar - Senegal. The History of Aviation Report by AFRAA is a prestigious industry publication, a first of its kind in Africa, which contains a rich mix of information to enrich the understanding of the development of African aviation.

Highlights from the Secretary General’s State of the Industry report

The recovery of aviation activity continued in 2022. After a contraction in 2020, Africa’s GDP rebound-



Source: AFRAA

ed by 6.9% in 2021. The prospects for economic growth in Africa are highly uncertain. The effects of the Russian-Ukrainian conflict could lead to a larger decline in global production than currently expected.

Compared to February 2020, African airlines have reopened almost all international routes. Some have extended their network to new destinations, particularly in West and North Africa. From January to November 2022, offered capacity reached 75.4% for the same period in 2019, while traffic reached 74.7%. The recovery of the level of activity in 2019 is still in progress.

AFRAA priorities for 2023:

1. Implement the roadmap actions for the sustainability of air transport in Africa
2. Continue to roll out the AFRAA Five-Year Strategic Plan

“Our industry must build its resilience and sustainability in the face of future crises like Covid 19 and stop the progressive marginalization we have suffered over the past 40 years.” Mr. Berthe emphasized.

About AFRAA

The African Airlines Association, also known by its acronym AFRAA, is a trade association of airlines from the member states of the African Union (AU). Founded in Accra, Ghana, in April 1968, and headquartered in Nairobi, Kenya, AFRAA’s mission is to promote, serve African Airlines and champion Africa’s aviation industry. The Association envisions a sustainable, interconnected and affordable Air Transport industry in Africa where African Airlines become key players and drivers to African economic development.

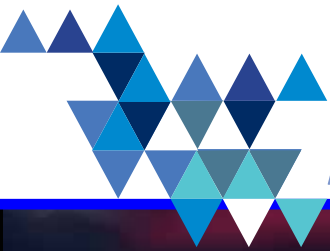
AFRAA membership of 44 airlines cuts across the entire continent and includes all the major intercontinen-

tal African operators. The Association members represent over 85% of total international traffic carried by African airlines. Follow us on Facebook, LinkedIn, Twitter and YouTube.

About Air Senegal

Air Senegal was established in 2016 and launched its commercial flights on May 14, 2018. Air Senegal aims to be the leader in air transport in West Africa by relying on the AIBD (Aéroport International Blaise Diagne) regional hub. Its mission is to serve national and international routes. The company is rooted in the Senegalese culture and in the TERANGA SPIRIT and puts the customer at the heart of its strategy.

The company currently operates a fleet of two Airbus A330-900Neo, two Airbus A321, two Airbus A319 and two ATR 72-600, one A220-300, one A340 in West Africa, Morocco, Central Africa, France, Spain, Italy and the United States.



BUSINESS AVIATION A DIFFERENT ANIMAL

By *SECRETARY-GENERAL ATHAR HUSAIN KHAN*
European Business Aviation Association



As we emerge from the COVID19 pandemic, many Europeans have realised the crucial importance of connectivity and the ability to travel across the region. As for Business Aviation, the sector has stood at the exact intersection between politics and society as it played a crucial role in European connectivity.

Business aviation is bit of a different animal compared to regular, scheduled aviation. It industry that provides a solution when time matters most, serving as a lifeline for communities, be it for medical transport or as a tool to help governments and businesses, that also generates local economic development. Crucially, Business aviation has played an important part throughout the pandemic,

showcasing its flexibility, manoeuvrability and sheer ability to perform missions quickly and aptly.

While commercial aviation spans much of the globe with its vast hub and spoke system, there are still many communities and small local airports unreachable by airline carriers. These areas may be sparsely populated or too far "off the beaten path" to justify the business case for a commercial route.

Not so for Business aviation. Activating this dense web of connections is core to the sector. Simply put, with Business aviation, you will get where you need to go.

The industry serves 25,280 European city or area pairs not connected by non-stop commercial flights, which represent about 31% of total city pairs. In other words, one in three

connections permitted by Business aviation is not currently linked by any direct commercial flight. The connection would not exist without this industry. Some 400,000 European jobs are either directly or indirectly dependent on the industry and the industry has an output of €90 billion to the European economy.

In addition, more than ever, the industry has been able to put the spotlight on its humanitarian component—flying medical supplies and people needing medical assistance, whether pandemic related or not; transporting humanitarian relief to remote areas; and providing high-priority travel for governmental and scientific personnel involved in the COVID19 response. Currently, the industry flies 100 flights with a medical purpose a day, which constitutes about 10% of our monthly movements. Many of these flights are considered life-saving.

Something that also goes unnoticed, is just how essential Business aviation is to the overall success of the aviation sector. Unsurprising, as the sector constitutes 8% of overall European traffic. However, the Business aviation sector goes through a continuous cycle of designing advanced airframes and cutting-edge propulsion system technologies. Constant product evolution driven by research and development demonstrates why our sector is the catalyst for innovation in aviation and a leader in decarbonising the aviation sector.

This hasn't happened by accident: our investments in technology such as composite structures, ever-cleaner engines and, Global Satellite Positioning, winglets and other key advancements have enabled us to produce these benefits and in turn genuine emissions reductions.

An inherent trait of operators of Business aviation, the craving to innovate and improve stems from the ability to offer the best-in-class service possible whilst operating smaller aircraft. In an industry that operates on thin margins, we need to strike a balance between the ability to innovate and taxation.

Some of the biggest challenges lie ahead of us in terms of moving forward as an industry, with sustainability and post-Covid recovery ranking on top of that list. With some voices arguing the Business aviation sector can only ever be sustainable through "carte blanche" taxation and banning certain operations, we need to focus on realistic and tangible change through innovation and cooperation.

For instance, it is widely misunderstood that Business aviation does not pay taxes on its operations. The fiscal regime for Business aviation in Europe is highly fragmented, with many different taxes being applied differently in the various European member states and also with many new proposals on the table, both nationally and Union-wide.

The sector pays its fair share and is not opposed to environmental taxation as long as those taxation derived funds are redirected towards sustainability within our

industry (e.g. R&D, Sustainable Aviation Fuels, etc). In turn, Business aviation could further contribute towards meeting the European Green Deal's ambitions, but through the use of an incredibly crude instrument such as taxation, the industry is much hampered in its way to becoming more sustainable.

In short; don't stifle an industry of its ability to innovate by siphoning off money that will end up in a general treasury, but work with our sector to help propel aviation into the next era of flight.

Now, what nobody would deny is that our sector has a different operational model and therefore a different emissions profile compared to scheduled aviation. Similarly to scheduled aviation, however, is that we are actively working towards decoupling our CO2 emissions from the growth of the sector.

Since 2009, the Business aviation community has been committed to reducing the environmental impact of its products and operations through our climate commitment. In fact, in many ways, it has been ahead of the curve in mitigating its impact on climate change. For instance: over the last 15 years, emissions per hour, per flight, per business aircraft have decreased by 36% (based on EUROCONTROL figures).

The good news is that there are actual short, medium and long-term solutions at hand that can help us achieve our climate targets that do not involve frivolous calls for the banning of certain types of Business aviation operations.

For instance, increased use of Sustainable Aviation Fuels (SAF) by Business aviation will result in a reduction in carbon dioxide emissions and some state a target of 10% SAF share of all aviation fuel demand by 2030 is feasible in Europe.

Let's face the facts together; if member states worked on the implementation of the SES with the same enthusiasm as they do on environmental taxation, we would already be emitting less collectively and would have been doing so for two decades.

With a climate commitment, climate goals, short term gains and future technologies such as electric aircraft, hydrogen and a basket of measures that we already have on the table, we are collectively ready for a revolution in aviation.

It is now time governments and business aviation leaders stand united behind a plan that will help us actually implement real solutions with real reductions.

Environmental action and economic growth are not mutually exclusive; we can make sustainability a top priority, without sacrificing the modern-day necessity of business flying, which connects citizens, companies and communities to economic opportunities as never before.

If the COVID19 pandemic has shown us anything, it is that Business aviation is there when connections need to be made most direly. It will continue to fulfil that role, to the benefit of Europe and Europeans, for many more years to come.



DEC 2022: Air Passenger Market Analysis

Chart 1: Global air passengers, RPK billion

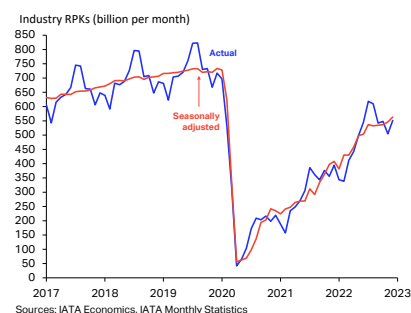


Chart 2 – Domestic RPK growth (airline region of registration basis), YoY% change versus 2019

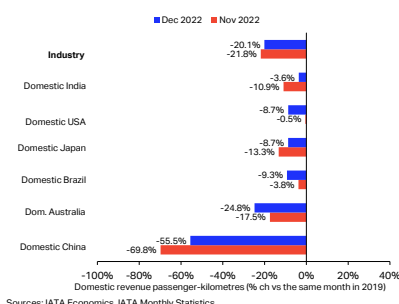


Chart 3: International RPK growth (airline region of registration basis), YoY% change versus 2019

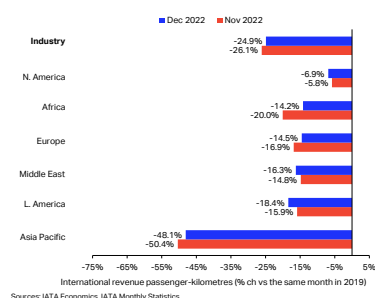


Chart 4: International RPKs, YoY% change versus 2019 – Top 10 route areas in 2019, ranked by performed traffic volume

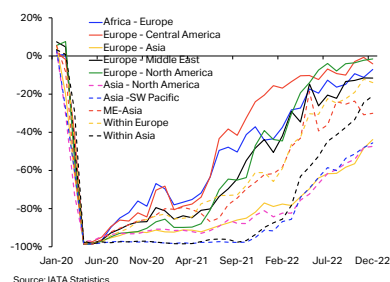


Chart 5: International RPKs by cabin class

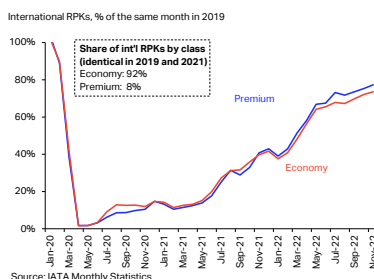
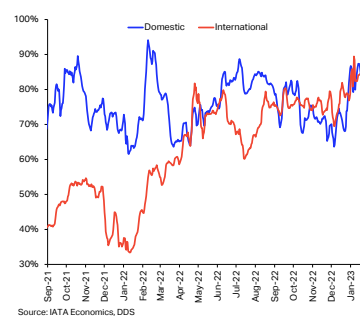


Chart 6: Passenger ticket sales, Domestic and International, YoY% versus 2019



Air passenger market in detail - December 2022

World share ¹	December 2022 (% year-on-year)				
	RPK	ASK	PLF (Rev/pt) ²	PLF (level) ³	
TOTAL MARKET	100.0%	39.7%	23.0%	9.7%	81.1%
Africa	2.1%	108.0%	72.5%	13.1%	76.9%
Asia Pacific	22.4%	63.3%	31.9%	14.8%	77.2%
Europe	30.4%	39.5%	19.9%	11.9%	83.8%
Latin America	6.4%	16.2%	20.0%	-2.6%	78.5%
Middle East	9.8%	65.1%	35.9%	14.1%	80.0%
North America	26.8%	18.4%	11.8%	4.7%	84.2%
International	58.0%	80.2%	47.8%	14.7%	82.0%
Africa	1.2%	118.0%	77.5%	14.5%	76.9%
Asia Pacific	8.9%	302.7%	153.5%	30.2%	81.5%
Europe	26.4%	46.5%	23.1%	13.3%	83.4%
Latin America	2.8%	37.0%	39.9%	-1.7%	79.0%
Middle East	8.4%	69.8%	38.8%	14.7%	80.2%
North America	8.7%	61.3%	37.5%	12.3%	83.6%
Domestic	42.0%	2.8%	-2.5%	3.9%	78.6%
Dom. Australia ⁴	1.0%	72.7%	19.5%	25.1%	81.6%
Domestic Brazil ⁴	1.8%	-5.7%	0.9%	-4.9%	77.4%
Dom. China P.R. ⁴	6.6%	-26.4%	-27.4%	0.9%	64.3%
Domestic India ⁴	2.0%	12.9%	0.9%	9.4%	88.9%
Domestic Japan ⁴	1.2%	23.9%	5.5%	10.6%	71.5%
Domestic US ⁴	19.2%	4.3%	2.2%	1.7%	84.3%

¹% of industry RPKs in 2022 ²Year-on-year change in load factor ³Load factor level

Air passenger market in detail - December 2022

World share ¹	December 2022 (% ch vs the same month in 2019)				
	RPK	ASK	PLF (%-pt) ²	PLF (level) ³	
TOTAL MARKET	100.0%	-23.1%	-22.1%	-1.1%	81.1%
Africa	2.1%	-12.2%	-17.4%	4.6%	76.9%
Asia Pacific	22.4%	-43.5%	-40.2%	-4.4%	77.2%
Europe	30.4%	-13.5%	-14.0%	0.6%	83.6%
Latin America	6.4%	-10.5%	-6.2%	-3.8%	78.5%
Middle East	9.8%	-16.0%	-18.9%	2.7%	80.0%
North America	26.8%	-8.2%	-6.9%	-1.3%	84.2%
International	58.0%	-24.5%	-25.2%	0.3%	82.0%
Africa	1.8%	-14.2%	-19.3%	4.6%	76.8%
Asia Pacific	8.9%	-48.1%	-47.9%	-0.2%	81.5%
Europe	26.4%	-14.5%	-14.3%	-0.3%	83.4%
Latin America	2.8%	-18.4%	-15.5%	-2.9%	79.0%
Middle East	8.4%	-16.3%	-19.2%	2.9%	80.2%
North America	8.7%	-6.9%	-5.7%	-1.1%	83.6%
Domestic	42.0%	-20.1%	-16.8%	-3.3%	78.6%
Dom. Australia ⁴	1.0%	-24.8%	-23.6%	-1.3%	81.6%
Domestic Brazil ⁴	1.8%	-9.3%	-1.5%	-6.6%	77.4%
Dom. China P.R. ⁴	6.6%	-55.5%	-43.5%	-17.4%	64.3%
Domestic India ⁴	2.0%	-3.6%	-4.9%	0.8%	88.9%
Domestic Japan ⁴	1.2%	8.3%	-10.8%	1.6%	71.5%
Domestic US ⁴	19.2%	-8.7%	-7.0%	-1.6%	84.3%

¹% of industry RPKs in 2022 ²Change in load factor vs same month in 2019 ³Load factor level

RPK, 2022 % change versus

	2019		2021	
	2019	2021	2019	2021
TOTAL	-31.5%	64.4%	-28.1%	39.8%
Africa	-31.3%	84.9%	-31.8%	51.8%
Asia Pacific	-55.6%	34.0%	-49.4%	16.8%
Europe	-22.2%	100.2%	-18.4%	66.8%
Latin America & Caribb.	-14.2%	62.7%	-12.9%	54.6%
Middle East	-25.9%	144.4%	-25.2%	67.0%
North America	-11.3%	45.5%	-9.9%	28.5%
INTERNATIONAL	-37.8%	152.7%	-35.0%	85.2%
Africa	-34.1%	89.2%	-34.5%	51.0%
Asia Pacific	-68.2%	363.3%	-65.2%	129.9%
Europe	-24.5%	132.2%	-19.8%	84.0%
Latin America & Caribb.	-26.9%	119.2%	-26.3%	93.3%
Middle East	-26.5%	157.4%	-26.0%	73.8%
North America	-20.9%	130.2%	-17.7%	71.3%
DOMESTIC	-20.4%	10.9%	-15.7%	4.3%
Africa	-13.8%	66.7%	-14.5%	56.2%
Asia Pacific	-40.3%	-8.4%	-29.4%	-10.6%
Europe	-3.1%	4.6%	-6.7%	1.0%
Latin America & Caribb.	-0.5%	35.0%	1.6%	33.7%
Middle East	-10.0%	14.0%	-4.0%	-7.5%
North America	-6.3%	25.5%	-5.8%	15.4%

ASK, 2022 % change versus

	2019		2021	
	2019	2021	2019	2021
TOTAL	78.7%	-3.9%	11.8%	
Africa	72.3%	0.5%	12.9%	
Asia Pacific	71.8%	-10.1%	9.2%	
Europe	81.2%	-4.0%	13.5%	
Latin America & Caribb.	81.3%	-1.3%	4.0%	
Middle East	75.4%	-0.7%	23.9%	
North America	83.5%	-1.3%	9.8%	
INTERNATIONAL	78.5%	-3.5%	21.0%	
Africa	71.7%	0.4%	14.5%	
Asia Pacific	74.0%	-6.9%	37.3%	
Europe	80.6%	-5.0%	16.7%	
Latin America & Caribb.	82.2%	-0.6%	9.7%	
Middle East	75.8%	-0.5%	24.6%	
North America	84.7%	-0.4%	6.8%	

PLF

	2022 level		% -pt versus 2019		% -pt versus 2021		
	2022 level	% -pt versus 2019	% -pt versus 2021				
TOTAL	78.7%	-3.9%	11.8%				
Africa	72.3%	0.5%	12.9%				
Asia Pacific	71.8%	-10.1%	9.2%				
Europe	81.2%	-4.0%	13.5%				
Latin America & Caribb.	81.3%	-1.3%	4.0%				
Middle East	75.4%	-0.7%	23.9%				
North America	83.5%	-1.3%	9.8%				
INTERNATIONAL	78.5%	-3.5%	21.0%				
Africa	71.7%	0.4%	14.5%				
Asia Pacific	74.0%	-6.9%	37.3%				
Europe	80.6%	-5.0%	16.7%				
Latin America & Caribb.	82.2%	-0.6%	9.7%				
Middle East	75.8%	-0.5%	24.6%				
North America	84.7%	-0.4%	6.8%				
DOMESTIC MARKETS							
Dom. Australia	-18.8%	111.7%	-17.7%	63.1%	79.7%	-1.1%	18.3%
Dom. Brasil	-5.4%	29.9%	-1.2%	31.8%	79.2%	-3.5%	-1.2%
Dom. China P.R.	-54.4%	-39.8%	-40.9%	-35.2%	65.3%	-19.3%	-5.0%
Dom. India	-14.3%	48.8%	-8.1%	30.1%	81.4%	-5.9%	10.2%
Dom. Japan	-25.9%	75.9%	-11.5%	43.4%	61.8%	-12.0%	11.4%
Dom. United States	-5.9%	23.7%	-5.2%	14.0%	84.7%	-0.6%	6.7%

Note: the total industry and regional growth rates are based on a constant sample of airlines combining reported data and estimates for missing observations. Airline traffic is allocated according to the region in which the carrier is registered; it should not be considered as regional traffic. Historical statistics are subject to revision.



ICAO

ECONOMIC DEVELOPMENT

MAY 2022: Air Transport Monthly Monitor

World Results and Analyses. Total scheduled services
(Domestic and international)

Air Transport Bureau
E-mail: ecd@icao.int

<http://www.icao.int/sustainability/Pages/Air-Traffic-Monitor.aspx>

GLOBAL KEY FIGURES

MAY 2022
(versus MAY 2019)

RPK ▼ -31.3% **ASK** ▼ -28.9% **CTK** ▼ -2.0% **LF**: 79.1% ▼ -2.4%

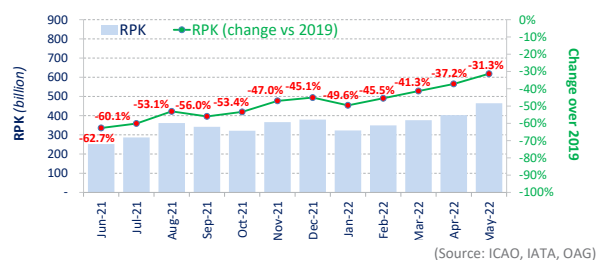
OUTLOOK* - JUN 2022
(versus JUN 2019)

ASK ▼ -24.8% * Source OAG

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

World passenger traffic in May 2022 was -31.3% below the 2019 level, +5.9 percentage points up from the decline in the previous month. Air travel recovery continued to accelerate, driven by the strong international rebound. The pent-up travel demand has been defying the challenging economic backdrop of high inflation and fuel prices. Domestic traffic recovery was moderate, affected by the decline in Chinese domestic market. All regions, except for North America, recorded traffic improvements compared to the previous month.

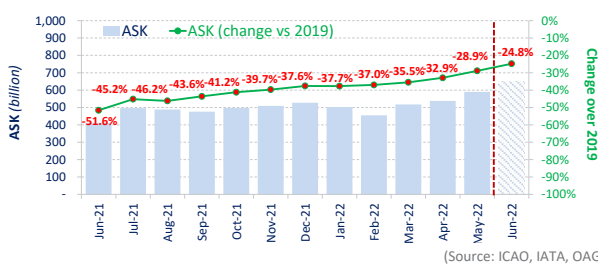


(Source: ICAO, IATA, OAG)

CAPACITY

Available Seat-Kilometres - ASK

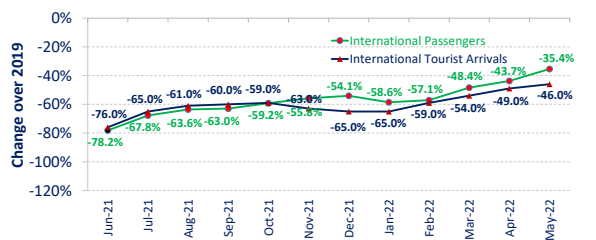
Capacity worldwide in May 2022 was -28.9% below the 2019 level, +4.0 percentage points up from the decline in the previous month (-32.9%). As air travel recovery continues, capacity offered in June is expected to increase to -24.8% down from the 2019 level.



(Source: ICAO, IATA, OAG)

International Passengers vs. Tourist Arrivals

International passenger numbers in May 2022 was -35.4% below the 2019 level, +8.3 percentage points up from the decline in the previous month. International air travel recovery improved across all regions, except for Latina America/Caribbean. The Middle East registered the most significant month-on-month improvement. The recovery in international tourist arrivals followed the similar trend as international passenger traffic.

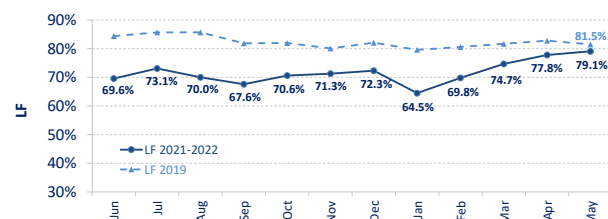


*UNWTO Definition

(Source: ICAO, UNWTO)

Load Factor - LF

The passenger Load Factor reached 79.1% in May 2022, +1.3 percentage points higher than the previous month. Load factor climbed to pre-pandemic level, and the May level was merely -2.4 percentage points down compared to May 2019.

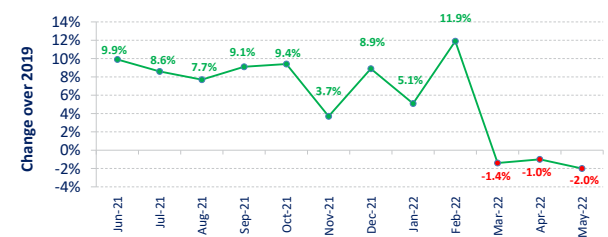


(Source: IATA)

CARGO TRAFFIC

Cargo Tonne-Kilometres - CTK

World cargo traffic in May 2022 was -2.0% below the 2019 level, -1.0 percentage point down from the decline in the previous month. Air cargo traffic remained on a sideways trend with a deterioration in the decline. The volatility in cargo traffic was attributed to multiple macroeconomic factors such as the softening in global trade and the ongoing disruptions on supply chain due to the war. Whereas Europe saw the most noticeable deterioration, Asia/Pacific was the only region recording month-on-month improvements, owing to the increasing manufacturing activities as the lockdown in China was eased. Despite the slowdown, North America and Africa continued to post positive growth over the pre-pandemic level.



(Source: IATA)

ACRONYMS: **ACI:** Airports Council International; **ASK:** Available Seat-Kilometres; **IATA:** International Air Transport Association; **CTK:** Cargo Tonne-Kilometres; **LF:** Passenger Load Factor; **OAG:** Official Airline Guide; **RPK:** Revenue Passenger-Kilometres; **UNWTO:** World Tourism Organization; **YoY:** Year-on-year; **YTD:** Year-to-date.

▶ CONTINUED FROM PAGE 76



ICAO

ECONOMIC DEVELOPMENT

MAY 2022: Air Transport Monthly Monitor

World Results and Analyses. Total scheduled services
(Domestic and international)

TOP 15 AIRPORTS (Ranked by aircraft departures, passengers and volume of freight)

MAY 2022: -9.4%, -11.4%, and +1.6% (vs. 2019) in terms of aircraft movements, passengers and freight for the Top 15

MAY 22

Airports (ranking by number of departures)	Movements	vs. 2019	Airports (ranking by number of passengers)	Passengers*	vs. 2019	Airports (ranking by tonnes of freight)	Freight**	vs. 2019
Chicago IL, US (ORD)	62,287	-22.0%	Atlanta GA, US (ATL)	8,398,234	-15.1%	Hong Kong SAR, CN (HKG)	363,000	-8.3%
Dallas/Fort Worth TX, US (DFW)	56,913	-7.3%	Dallas/Fort Worth TX, US (DFW)	6,637,523	1.2%	Memphis TN, US (MEM)	329,489	-13.1%
Atlanta GA, US (ATL)	56,891	-27.8%	Chicago IL, US (ORD)	6,095,049	-20.3%	Anchorage AK, US (ANC)	301,412	27.4%
Las Vegas NV, US (LAS)	51,487	22.2%	Denver CO, US (DEN)	5,982,477	-1.0%	Incheon, KR (ICN)	254,390	15.2%
Denver CO, US (DEN)	50,614	-5.6%	Los Angeles CA, US (LAX)	5,835,467	-23.4%	Louisville KY, US (SDF)	230,907	1.8%
Los Angeles CA, US (LAX)	48,721	-16.3%	Istanbul, TR (IST)	5,661,151	8.1%	Taipei, CN (TPE)	221,850	21.4%
Charlotte NC, US (CLT)	42,267	-14.1%	London, GB (LHR)	5,341,644	-21.1%	Los Angeles CA, US (LAX)	208,270	21.8%
Miami FL, US (MIA)	40,885	17.8%	New Delhi, IN (DEL)	5,238,965	-0.8%	Shanghai, CN (PVG)	197,996	-33.9%
Amsterdam, NL (AMS)	40,691	-12.5%	Paris, FR (CDG)	5,227,412	-19.1%	Miami FL, US (MIA)	196,103	3.1%
New York NY, US (JFK)	38,516	-2.7%	Amsterdam, NL (AMS)	5,217,649	-19.0%	Tokyo, JP (NRT)	194,948	18.9%
Istanbul, TR (IST)	37,578	3.8%	New York NY, US (JFK)	4,769,615	-14.6%	Paris, FR (CDG)	190,164	10.9%
Newark NJ, US (EWR)	37,497	-0.2%	Dubai, AE (DXB)	4,724,229	-9.1%	Doha, QA (DOH)	190,088	0.2%
Paris, FR (CDG)	37,104	-15.4%	Frankfurt, DE (FRA)	4,580,326	-26.4%	Chicago IL, US (ORD)	181,293	21.2%
New Delhi, IN (DEL)	37,076	-1.3%	Las Vegas NV, US (LAS)	4,580,140	-0.5%	Frankfurt, DE (FRA)	165,858	-5.1%
Frankfurt, DE (FRA)	36,565	-20.8%	Miami FL, US (MIA)	4,455,699	17.6%	Singapore, SG (SIN)	153,400	-10.7%

Note: Total scheduled and non-scheduled services

(Source: ACI)

In terms of aircraft movements, the Top 15 airports reported a combined fall of -9.4%, compared to 2019. Ten out of the Top 15 airports were US airports. Chicago overtook Atlanta and ranked 1st, albeit with a decline of -22.0%. Atlanta became 3rd and recorded the largest decline of -27.8%. Three airports posted increases, i.e. Las Vegas, Miami, and Istanbul.

In terms of passengers, the Top 15 airports posted a total fall of -11.4%, compared to 2019. Over half of the Top 15 airports were US airports. Atlanta remained 1st with a decline of -15.1%. The largest fall was recorded by Frankfurt at -26.4%, followed by Los Angeles (-23.4%) and London Heathrow (-21.1%). Three airports posted increases, i.e. Miami, Istanbul, and Dallas/Fort Worth.

In terms of freight, the Top 15 airports reported an increase of +1.6%, compared to 2019. Ten out of the Top 15 airports posted increase, including seven with double-digit growth. Anchorage recorded the strongest growth at +27.4%, followed by Los Angeles at +21.8%. Shanghai recorded the largest fall of -33.9%, followed by Memphis at -13.1%.

TOP 15 AIRLINE GROUPS (Ranked by RPK)

MAY 2022: -15.3% (vs. 2019) in terms of RPK for the Top 15

In terms of RPK, the Top 15 airline groups accounted for 53.9% of the world's total RPK in May 2022 and declined by -15.3% compared to 2019. This decline was 16 percentage points smaller than the fall in world's average RPK.

With the continued ease of travel restrictions and pent-up demand, the Top 15 airlines saw smaller declines compared to the previous month. Due to the lingering lockdown, the major Chinese airlines were still out of the Top 15 list.

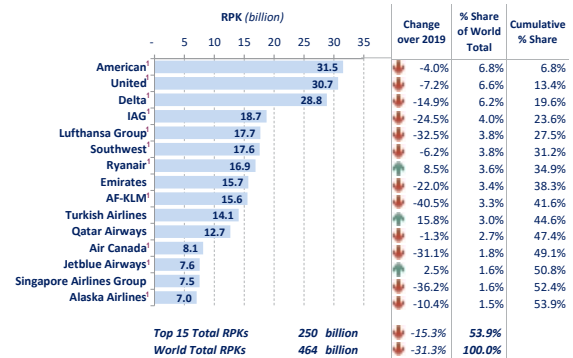
The U.S. airlines retained the Top 3 positions, with American at 1st, followed by United and Delta. Rankings of Southwest, Jetblue and Alaska, however, dropped slightly.

Airlines in Europe continued to show improvements supported by the surge in international travel, especially the Within Europe traffic. Both IAG and Lufthansa moved up 1 position from 4th to 5th.

Performance of airlines in the Middle East were relatively stable. Emirates maintained the 8th position, while Qatar dropped 1 position to 11th.

Singapore Airlines re-appeared in the Top 15 for the first time since the pandemic and ranked 14th with a decline of -36.2% in RPK from the 2019 level.

MAY 22



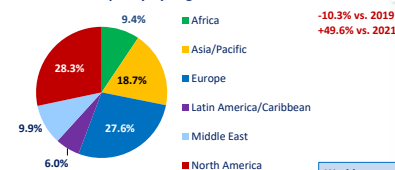
(Source: ICAO, airlines' websites)

Note: Total scheduled and non-scheduled services

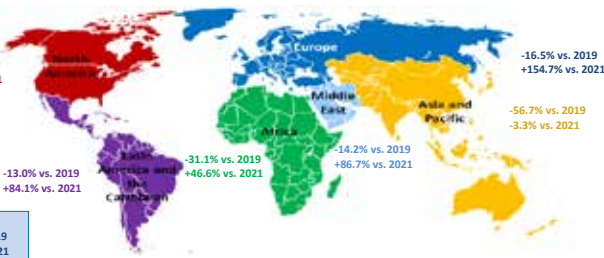
CAPACITY BY REGION (ICAO Statistical Regions)

MAY 2022: -28.9% (vs. 2019) in terms of World ASK

% Share of Capacity by Region



(Source: ICAO, IATA, OAG)
Note: Total scheduled services



Worldwide capacity contracted by -28.9% in May 2022, compared to 2019. Airlines continued to increase capacity in tandem with the rebound in travel demand.

All regions posted smaller declines in capacity compared to the previous month. The most significant month-on-month improvement was recorded by the Middle East followed by Africa.

* Total Passengers ** Loaded and Unloaded Freight in Tonnes 1. ICAO estimates

ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; CTK: Cargo Tonne-Kilometres; LF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date.



ICAO

ECONOMIC DEVELOPMENT

JUN 2022: Air Transport Monthly Monitor

World Results and Analyses. Total scheduled services
(Domestic and international)

<http://www.icao.int/sustainability/Pages/Air-Traffic-Monitor.aspx>

Air Transport Bureau
E-mail: ecd@icao.int

GLOBAL KEY FIGURES

JUN 2022

(versus JUN 2019)

RPK ▼ -29.2% ASK ▼ -27.5% CTK ▲ 0.8% LF: 82.4% ▼ -2.0%

OUTLOOK* - JUL 2022

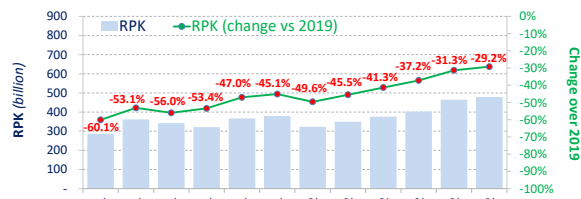
(versus JUL 2019)

ASK ▼ -21.2% * Source OAG

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

World passenger traffic in June 2022 was -29.2% below the 2019 level, +2.1 percentage points up from the decline in the previous month. Despite the high fuel prices and inflation, the lifting of COVID-19 curbs and pent-up travel demand continued to drive the recovery of air travel. After trending sideways for several months, domestic travel started to rebound, particularly in Asia/Pacific. The region became the main contributor to the improvement, owing to the surge in domestic traffic in China alongside the gradual ease of lockdowns and travel restrictions.

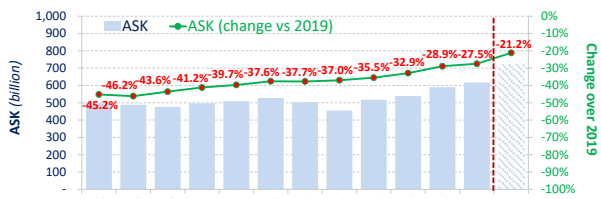


(Source: ICAO, IATA, OAG)

CAPACITY

Available Seat-Kilometres - ASK

Capacity worldwide in June 2022 was -27.5% below the 2019 level, +1.4 percentage points up from the decline in the previous month (-28.9%). As air travel recovery continues, capacity offered in July is expected to improve to -21.2% down from the 2019 level.



(Source: ICAO, IATA, OAG)

International Passengers vs. Tourist Arrivals

International passenger numbers in June 2022 were -34.8% below the 2019 level, +0.6 percentage points up from the decline in the previous month. All regions saw significant month-on-month improvements in international air travel. The recovery in Asia/Pacific picked up sharply and recorded the strongest increase over the previous month. The recovery in international tourist arrivals followed the similar trend as international passenger traffic.

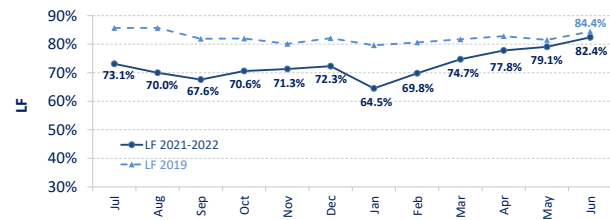


* UNWTO Definition

(Source: ICAO, UNWTO)

Load Factor - LF

The passenger Load Factor reached 82.4% in June 2022, +3.3 percentage points higher than the previous month. The continued upward trend in load factor drove the June figure -2.0 percentage points down from the level seen in the same month of 2019.

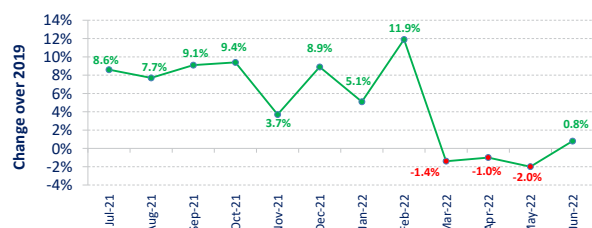


(Source: IATA)

CARGO TRAFFIC

Cargo Tonne-Kilometres - CTK

World cargo traffic in June 2022 was 0.8% above the 2019 level, +2.8 percentage points up from the decline in the previous month. Following three months of declines, air cargo traffic growth returned to a positive rate. Facing various headwinds at present, the growth of air cargo in the near term remains uncertain. Three regions, i.e. North America, Africa and the Middle East, posted gains compared to 2019, with the former two increased double-digitally. Europe was the weakest performing region, in part due to the impact of the war on Within Europe market. Asia/Pacific remained below 2019 level, however, it showed significant improvement month-on-month, owing to the ease of lockdown restrictions in China.



(Source: IATA)

ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; CTK: Cargo Tonne-Kilometres; LF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date.

▶ CONTINUED FROM PAGE 78



ECONOMIC DEVELOPMENT

JUN 2022: Air Transport Monthly Monitor

World Results and Analyses. Total scheduled services
(Domestic and international)

TOP 15 AIRPORTS (Ranked by aircraft departures, passengers and volume of freight)

JUN 2022: -10.0%, -15.1%, and +7.9% (vs. 2019) in terms of aircraft movements, passengers and freight for the Top 15

JUN 22

Airports (ranking by number of departures)	Movements	vs. 2019	Airports (ranking by number of passengers)	Passengers*	vs.2019	Airports (ranking by tonnes of freight)	Freight**	vs. 2019
Chicago IL, US (ORD)	61,949	-23.1%	Atlanta GA, US (ATL)	8,239,522	-17.1%	Hong Kong SAR, CN (HKG)	361,000	-4.7%
Atlanta GA, US (ATL)	60,989	-22.1%	Dallas/Fort Worth TX, US (DFW)	6,867,677	0.4%	Memphis TN, US (MEM)	343,151	-1.3%
Dallas/Fort Worth TX, US (DFW)	57,967	-5.6%	Chicago IL, US (ORD)	6,489,509	-17.9%	Anchorage AK, US (ANC)	307,658	+29.2%
Denver CO, US (DEN)	53,047	-4.5%	Denver CO, US (DEN)	6,254,557	-2.1%	Shanghai, CN (PVG)	263,237	-10.0%
Las Vegas NV, US (LAS)	48,019	+21.1%	Los Angeles CA, US (LAX)	6,118,003	-23.9%	Incheon, KR (ICN)	243,165	+10.4%
Los Angeles CA, US (LAX)	47,751	-19.2%	Istanbul, TR (IST)	5,996,071	0.8%	Louisville KY, US (SDF)	241,612	9.3%
Charlotte NC, US (CLT)	44,065	-8.5%	London, GB (LHR)	5,991,128	-17.3%	Taipei, CN (TPE)	214,939	24.0%
Amsterdam, NL (AMS)	39,579	-12.5%	Paris, FR (CDG)	5,450,028	-21.2%	Los Angeles CA, US (LAX)	206,770	+24.4%
Istanbul, TR (IST)	38,852	2.2%	Amsterdam, NL (AMS)	5,232,957	-19.5%	Tokyo, JP (NRT)	200,664	+15.3%
New York NY, US (JFK)	38,634	-2.2%	New Delhi, IN (DEL)	5,126,045	-6.8%	Doha, QA (DOH)	194,984	+12.5%
Paris, FR (CDG)	37,358	-15.5%	Frankfurt, DE (FRA)	4,992,606	-24.1%	Chicago IL, US (ORD)	188,234	+24.1%
New Delhi, IN (DEL)	36,381	-2.5%	New York NY, US (JFK)	4,822,260	-15.6%	Miami FL, US (MIA)	187,673	+11.1%
Frankfurt, DE (FRA)	35,883	-21.8%	Las Vegas NV, US (LAS)	4,690,207	5.0%	Paris, FR (CDG)	169,000	6.1%
Miami FL, US (MIA)	35,750	7.6%	Dubai, AE (DXB)	4,665,711	-34.1%	Singapore, SG (SIN)	163,300	0.9%
Seattle WA, US (SEA)	35,251	-12.3%	Madrid, ES (MAD)	4,536,555	-18.5%	Frankfurt, DE (FRA)	160,649	-2.7%

Note: Total scheduled and non-scheduled services

(Source: ACI)

In terms of aircraft movements, the Top 15 airports reported a combined fall of -10.0% compared to 2019. Ten out of the Top 15 airports were US airports. Chicago remained 1st, albeit recording the largest decline of -23.1%. Three airports posted increases, i.e., Las Vegas, Istanbul, and Miami. The former recorded a robust growth of +21.1%.

In terms of passengers, the Top 15 airports posted a total fall of -15.1%, compared to 2019. The Top 15 list was dominated by airports in the US and Europe. Atlanta remained 1st with a decline of -17.1%. Dubai recorded the largest fall of -34.1%, followed by Frankfurt (-24.1%) and Los Angeles (-23.9%). Three airports posted increases, i.e., Dallas/Fort Worth, Istanbul, and Las Vegas.

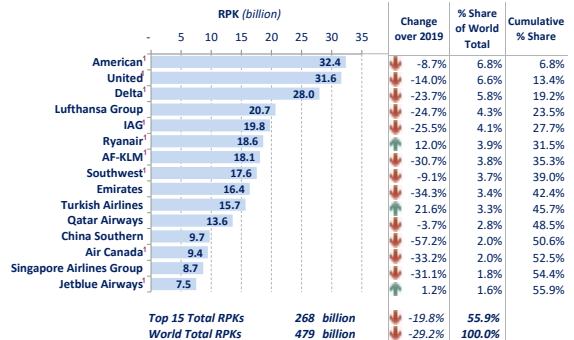
In terms of freight, the Top 15 airports reported an increase of +7.9%, compared to 2019. Over half of the Top 15 airports posted double-digit growth. Anchorage recorded the strongest growth at +29.2%, followed by Los Angeles at +24.4%. Four airports posted declines, with Shanghai recording the largest fall of -10.0%, followed by Hong Kong at -4.7%.

TOP 15 AIRLINE GROUPS (Ranked by RPK)

JUN 2022: -19.8% (vs. 2019) in terms of RPK for the Top 15

JUN 22

In terms of RPK, the Top 15 airline groups accounted for 55.9% of the world's total RPK in June 2022 and declined by -19.8% compared to 2019. This decline was 9.4 percentage points smaller than the fall in world's average RPK.



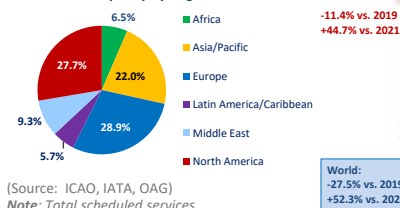
(Source: ICAO, airlines' websites)

Note: Total scheduled and non-scheduled services

CAPACITY BY REGION (ICAO Statistical Regions)

JUN 2022: -27.5% (vs. 2019) in terms of World ASK

% Share of Capacity by Region



(Source: ICAO, IATA, OAG)

Note: Total scheduled services

Worldwide capacity contracted by -27.5% in June 2022, compared to 2019. Capacity offered by airlines posted slight improvements over the previous month, with only Asia/Pacific and Latin America/Caribbean recording smaller declines.

The other regions posted modest month-on-month decline, excepted for Middle East, which saw a decline by over 10 percentage points.

* Total Passengers ** Loaded and Unloaded Freight in Tonnes 1. ICAO estimates

ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; CTK: Cargo Tonne-Kilometres; LF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date.



ICAO

ECONOMIC DEVELOPMENT

JUL 2022: Air Transport Monthly Monitor

World Results and Analyses. Total scheduled services
(Domestic and international)

Air Transport Bureau
E-mail: ecd@icao.int

<http://www.icao.int/sustainability/Pages/Air-Traffic-Monitor.aspx>

GLOBAL KEY FIGURES

JUL 2022

(versus JUL 2019)

RPK ▼ -25.4% ASK ▼ -23.6% CTK ▼ -3.0% LF: 83.5% ▼ -2.2%

OUTLOOK* - AUG 2022

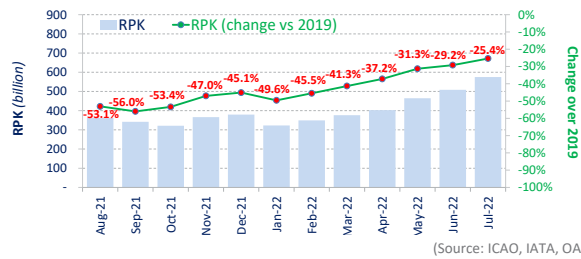
(versus AUG 2019)

ASK ▼ -21.2% * Source OAG

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

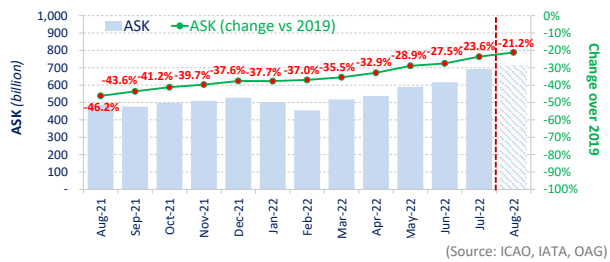
World passenger traffic in July 2022 was -25.4% below the 2019 level, +3.8 percentage points up from the decline in the previous month. Relaxation of travel restrictions compounded by the strong travel demand led to the acceleration in traffic recovery. The main contributor to the improvement was Asia/Pacific, driven by the increase in Chinese domestic traffic. Nevertheless, recovery of the region still lags behind other regions. Overall, North America and Latin America/Caribbean were leading the recovery chart, approaching the pre-pandemic levels.



CAPACITY

Available Seat-Kilometres - ASK

Capacity worldwide in July 2022 was -23.6% below the 2019 level, +3.9 percentage points up from the decline in the previous month (-27.5%). As air travel recovery continues, capacity offered in August is expected to improve to -21.2% down from the 2019 level.



International Passengers vs. Tourist Arrivals

International passenger numbers in July 2022 was -28.7% below the 2019 level, +6.1 percentage points up from the decline in the previous month. All regions saw acceleration in international air travel recovery, particularly in Asia/Pacific, which recorded the strongest month-on-month increase.

The recovery in international tourist arrivals followed the similar trend as international passenger traffic.

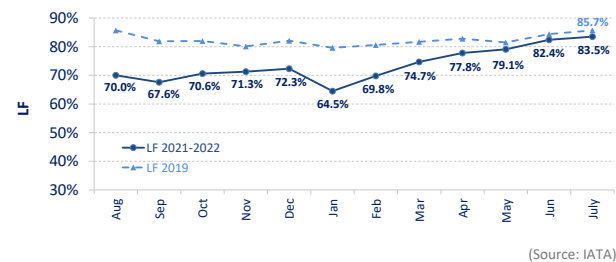


*UNWTO Definition

Load Factor - LF

The passenger Load Factor reached 83.5% in July 2022, +1.1 percentage points higher than the previous month.

With the continued improvement, load factor in July has recovered to only -2.2 percentage points below the level saw in the same month of 2019.

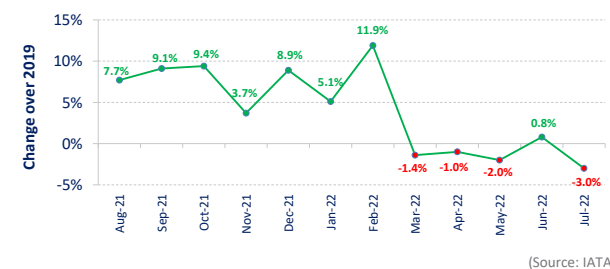


CARGO TRAFFIC

Cargo Tonne-Kilometres - CTK

World cargo traffic in July 2022 was -3.0% below the 2019 level, -3.8 percentage points down from the decline in the previous month. After a short-lived positive growth, air cargo traffic posted a decline compared to the 2019 level. Headwinds such as the high inflation and rising interest rates have caused the weakening in air cargo demand. However, the ease of COVID-19 restrictions and supply chain disruption will likely support the global trade and air cargo demand in the months ahead.

Performance has been a mix among regions. While North America continued to be significantly above the 2019 level, Europe remained the weakest performing region showing the largest contraction.



ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; CTK: Cargo Tonne-Kilometres; LF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date.

▶ CONTINUED FROM PAGE 80



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ECONOMIC DEVELOPMENT

JUL 2022: Air Transport Monthly Monitor

World Results and Analyses. Total scheduled services
(Domestic and international)

TOP 15 AIRPORTS (Ranked by aircraft departures, passengers and volume of freight)

JUL 2022: -9.7%, -15.3%, and +5.4% (vs. 2019) in terms of aircraft movements, passengers and freight for the Top 15

JUL 22

Airports (ranking by number of departures)	Movements	vs. 2019	Airports (ranking by number of passengers)	Passengers*	vs. 2019	Airports (ranking by tonnes of freight)	Freight**	vs. 2019
Chicago IL, US (ORD)	63,498	-22.5%	Atlanta GA, US (ATL)	8,470,230	-17.1%	Hong Kong SAR, CN (HKG)	346,000	-11.7%
Atlanta GA, US (ATL)	62,981	-21.8%	Dallas/Fort Worth TX, US (DFW)	6,992,526	-2.2%	Memphis TN, US (MEM)	325,590	-6.2%
Dallas/Fort Worth TX, US (DFW)	59,085	-9.1%	Istanbul, TR (IST)	6,740,544	5.4%	Anchorage AK, US (ANC)	293,676	11.7%
Denver CO, US (DEN)	54,781	-7.0%	Chicago IL, US (ORD)	6,623,567	-18.8%	Shanghai, CN (PVG)	271,868	-10.2%
Las Vegas NV, US (LAS)	50,639	25.4%	Denver CO, US (DEN)	6,451,344	-4.2%	Incheon, KR (ICN)	230,313	3.4%
Los Angeles CA, US (LAX)	49,970	-19.4%	Los Angeles CA, US (LAX)	6,337,451	-25.2%	Louisville KY, US (SDF)	226,599	-2.8%
Charlotte NC, US (CLT)	43,921	-10.5%	London, GB (LHR)	6,312,252	-18.6%	Taipei, CN (TPE)	211,299	17.4%
Istanbul, TR (IST)	41,932	5.3%	Dubai, AE (DXB)	6,245,155	-22.0%	Tokyo, JP (NRT)	201,534	13.9%
New York NY, US (JFK)	40,890	-0.7%	Paris, FR (CDG)	6,017,614	-19.0%	Paris, FR (CDG)	197,826	19.2%
Paris, FR (CDG)	39,337	-16.2%	New York NY, US (JFK)	5,398,311	-10.3%	Los Angeles CA, US (LAX)	196,079	19.8%
Amsterdam, NL (AMS)	38,544	-17.0%	Amsterdam, NL (AMS)	5,179,725	-23.0%	Doha, QA (DOH)	195,746	6.4%
Seattle WA, US (SEA)	38,052	-11.0%	Frankfurt, DE (FRA)	5,022,720	-27.4%	Miami FL, US (MIA)	187,512	15.4%
Miami FL, US (MIA)	37,500	9.3%	Madrid, ES (MAD)	5,022,501	-15.5%	Singapore, SG (SIN)	163,300	-4.1%
New Delhi, IN (DEL)	35,638	-7.9%	Antalya, TR (AYT)	5,005,510	-8.0%	Chicago IL, US (ORD)	160,759	15.1%
Boston MA, US (BOS)	35,435	-8.3%	New Delhi, IN (DEL)	4,908,062	-15.5%	Cincinnati OH, US (CVG)	157,549	73.0%

Note: Total scheduled and non-scheduled services

(Source: ACI)

In terms of **aircraft movements**, the Top 15 airports reported a combined fall of -9.7% compared to 2019. Eleven out of the Top 15 airports were US airports. **Chicago** remained 1st, with a decline of -22.5%. For the second consecutive month, three airports posted increases, i.e., **Las Vegas**, **Istanbul**, and **Miami**, with the former recording a robust growth of +25.4%.

In terms of **passengers**, the Top 15 airports posted a total fall of -15.3%, compared to 2019. The Top 15 list was dominated by airports in the US and Europe. **Atlanta** remained 1st with a decline of -17.1%. **Frankfurt** recorded the largest contraction of -27.4%, followed by **Los Angeles** (-25.2%). **Istanbul** was the only airport within the Top 15 recording a positive growth, at 5.4%.

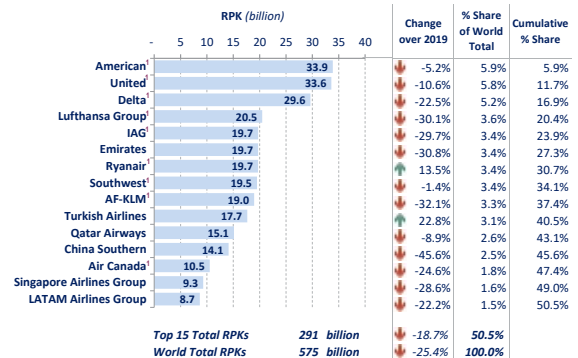
In terms of **freight**, the Top 15 airports reported an increase of +5.4%, compared to 2019. Over half of the Top 15 airports posted double-digit growth. **Cincinnati** recorded the most significant growth at +73.0%, followed by **Los Angeles** at +19.8%. Five airports posted declines, with **Hong Kong** recording the largest fall of -11.7%.

TOP 15 AIRLINE GROUPS (Ranked by RPK)

JUL 2022: -18.7% (vs. 2019) in terms of RPK for the Top 15

JUL 22

In terms of RPK, the Top 15 airline groups accounted for 50.5% of the world's total RPK in July 2022 and declined by -18.7% compared to 2019. This decline was 6.7 percentage points smaller than the fall in world's average RPK.



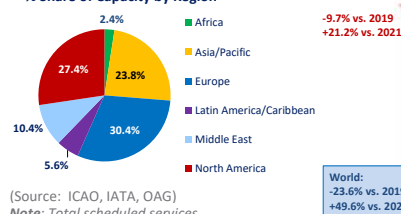
(Source: ICAO, airlines' websites)

Note: Total scheduled and non-scheduled services

CAPACITY BY REGION (ICAO Statistical Regions)

JUL 2022: -23.6% (vs. 2019) in terms of World ASK

% Share of Capacity by Region



(Source: ICAO, IATA, OAG)

Note: Total scheduled services

Worldwide capacity contracted by -23.6% in July 2022, compared to 2019. All regions posted improvements from the previous month, with the largest increase in Asia/Pacific, in line with the traffic recovery in the region.

Both North America and Latin America/Caribbean have recovered to less than 10% below their 2019 capacity levels.

* Total Passengers ** Loaded and Unloaded Freight in Tonnes 1. ICAO estimates

ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; CTK: Cargo Tonne-Kilometres; LF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date.



ICAO

ECONOMIC DEVELOPMENT

AUG 2022: Air Transport Monthly Monitor

World Results and Analyses. Total scheduled services
(Domestic and international)

<http://www.icao.int/sustainability/Pages/Air-Traffic-Monitor.aspx>

Air Transport Bureau
E-mail: ecd@icao.int

GLOBAL KEY FIGURES

AUG 2022

(versus AUG 2019)

RPK ▼ -26.3% ASK ▼ -22.8% CTK ▼ -2.9% LF: 81.8% ▼ -3.5%

OUTLOOK* - SEP 2022

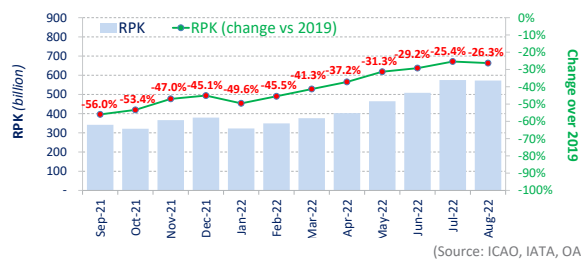
(versus SEP 2019)

ASK ▼ -24.3% * Source OAG

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

World passenger traffic in August 2022 was -26.3% below the 2019 level, -0.9 percentage point down from the decline in the previous month. Despite the slight slowdown, the recovery in passenger traffic remained strong overall amidst peak summer travel period. Performance has been divergent between domestic and international traffic. While domestic traffic was the main contributor to the slip, international traffic was relatively stable.

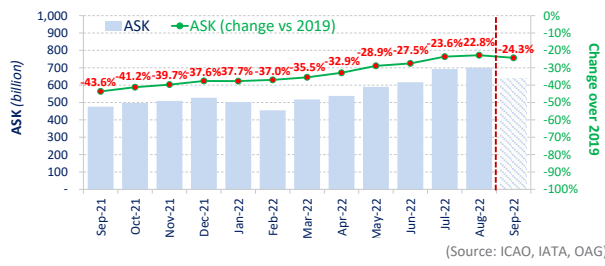


(Source: ICAO, IATA, OAG)

CAPACITY

Available Seat-Kilometres - ASK

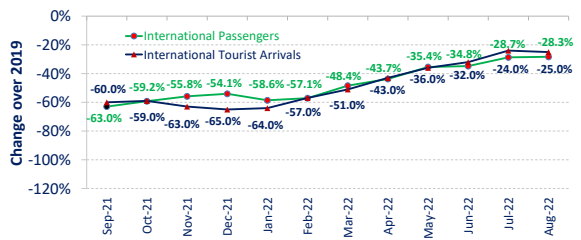
Capacity worldwide in August 2022 was -22.8% below the 2019 level, +0.8 percentage point up from the decline in the previous month (-23.6%). After the peak summer travel season, capacity expansion in September is expected to slow down slightly to -24.3% below the 2019 level.



(Source: ICAO, IATA, OAG)

International Passengers vs. Tourist Arrivals

International passenger numbers in August 2022 was -28.3% below the 2019 level, +0.4 percentage point up from the decline in the previous month. Asia/Pacific and the Middle East were the only two regions recording month-on-month improvements. The recovery in international tourist arrivals followed the similar trend as international passenger traffic.

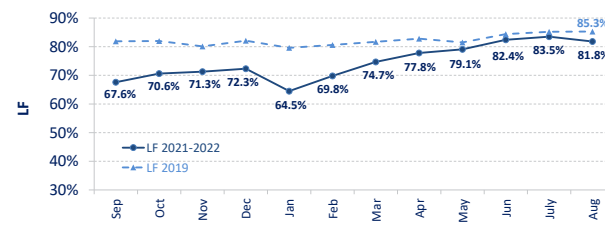


*UNWTO Definition

(Source: ICAO, UNWTO)

Load Factor - LF

The passenger Load Factor reached 81.8% in August 2022, -1.7 percentage points below than the previous month. Load factor in August has recovered to -3.5 percentage points below the level saw in the same month of 2019.

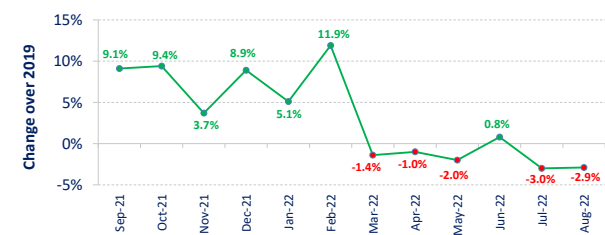


(Source: IATA)

CARGO TRAFFIC

Cargo Tonne-Kilometres - CTK

World cargo traffic in August 2022 was -2.9% below the 2019 level, +0.1 percentage points up from the decline in the previous month. Air cargo traffic continued to be below the pre-pandemic level, however, it showed significant month-on-month improvement, owing to the rebound in global trade and cargo demand. The performance has been a mix among regions. Africa demonstrated the most significant improvement, followed by Europe and the Middle East. Latin America/Caribbean, Asia/Pacific and North America showed slight moderation. Africa and North America were the only two regions with cargo traffic above pre-pandemic level, while Europe continued to be the weakest performing region.



(Source: IATA)

ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; CTK: Cargo Tonne-Kilometres; LF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date.

▶ CONTINUED FROM PAGE 82



ECONOMIC DEVELOPMENT

ICAO AUG 2022: Air Transport Monthly Monitor

World Results and Analyses. Total scheduled services
(Domestic and international)

TOP 15 AIRPORTS (Ranked by aircraft departures, passengers and volume of freight)

AUG 2022: -12.0%, -17.2%, and +6.8% (vs. 2019) in terms of aircraft movements, passengers and freight for the Top 15

AUG 22

Airports (ranking by number of departures)	Movements	vs. 2019	Airports (ranking by number of passengers)	Passengers*	vs. 2019	Airports (ranking by tonnes of freight)	Freight**	vs. 2019
Atlanta GA, US (ATL)	62,994	-22.2%	Atlanta GA, US (ATL)	8,243,421	-16.6%	Memphis TN, US (MEM)	340,286	-6.5%
Chicago IL, US (ORD)	62,073	-25.2%	Istanbul, TR (IST)	6,807,121	1.0%	Hong Kong SAR, CN (HKG)	336,000	-11.2%
Dallas/Fort Worth TX, US (DFW)	58,390	-11.6%	Dallas/Fort Worth TX, US (DFW)	6,492,368	-5.5%	Anchorage AK, US (ANC)	309,525	36.5%
Denver CO, US (DEN)	54,900	-5.8%	Chicago IL, US (ORD)	6,413,937	-19.7%	Shanghai, CN (PVG)	259,381	-11.2%
Las Vegas NV, US (LAS)	50,585	+24.0%	Dubai, AE (DXB)	6,395,491	-22.2%	Louisville KY, US (SDF)	236,061	1.1%
Los Angeles CA, US (LAX)	49,175	-20.4%	Denver CO, US (DEN)	6,330,418	-1.9%	Incheon, KR (ICN)	226,507	3.1%
Istanbul, TR (IST)	41,574	2.2%	Los Angeles CA, US (LAX)	6,085,057	-25.2%	Taipei, CN (TPE)	204,984	12.1%
Charlotte NC, US (CLT)	40,089	-18.9%	London, GB (LHR)	6,040,270	-21.4%	Miami FL, US (MIA)	201,590	22.9%
Paris, FR (CDG)	39,933	-15.4%	Paris, FR (CDG)	6,020,196	-19.5%	Los Angeles CA, US (LAX)	194,683	15.1%
Amsterdam, NL (AMS)	39,819	-14.7%	New York NY, US (JFK)	5,436,712	-10.2%	Doha, QA (DOH)	188,357	8.2%
New York NY, US (JFK)	39,032	-5.2%	Amsterdam, NL (AMS)	5,327,361	-21.8%	Paris, FR (CDG)	187,507	23.4%
Seattle WA, US (SEA)	38,082	-11.9%	Frankfurt, DE (FRA)	5,192,325	-24.9%	Tokyo, JP (NRT)	186,591	10.8%
Tokyo, JP (HND)	36,616	-6.4%	Antalya, TR (AYT)	5,187,080	-7.6%	Chicago IL, US (ORD)	166,928	14.3%
Miami FL, US (MIA)	36,413	7.4%	Tokyo, JP (HND)	5,158,668	-37.3%	Cincinnati OH, US (CVG)	157,226	65.9%
Frankfurt, DE (FRA)	35,998	-22.4%	New Delhi, IN (DEL)	5,008,011	-13.3%	Singapore, SG (SIN)	152,700	-9.6%

Note: Total scheduled and non-scheduled services

(Source: ICAO)

In terms of **aircraft movements**, the Top 15 airports reported a combined fall of -12.0% compared to 2019. Ten out of the Top 15 airports were US airports. **Atlanta** ascended to 1st, with a decline of -22.2%. For the third consecutive month, three airports posted increases, i.e., **Las Vegas**, **Istanbul**, and **Miami**, with the former recording a robust growth of +24.0%.

In terms of **passengers**, the Top 15 airports posted a total fall of -17.2%, compared to 2019. The Top 15 list started to have a mix of airports from different regions. **Atlanta** remained 1st with a decline of -16.6%. **Tokyo** re-appeared in the Top 15, albeit recording the largest contraction of -37.3%. **Istanbul** was the only airport within the Top 15 recording a positive growth, at +1.0%.

In terms of **freight**, the Top 15 airports reported an increase of +6.8%, compared to 2019. The majority of the Top 15 airports posted growth. **Cincinnati** recorded the most significant growth at +65.9%, followed by **Anchorage** at +36.5%. Four airports posted declines, with **Hong Kong** and **Shanghai** recording the largest fall of -11.2%.

TOP 15 AIRLINE GROUPS (Ranked by RPK)

AUG 2022: -18.2% (vs. 2019) in terms of RPK for the Top 15

AUG 22

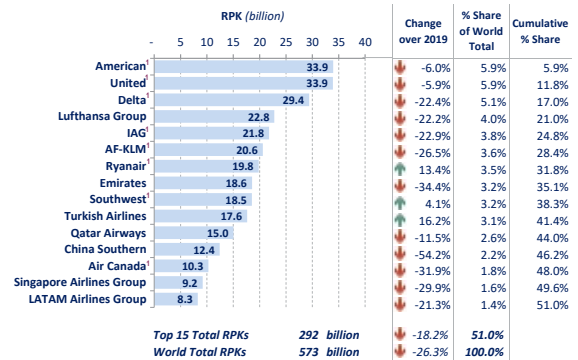
In terms of RPK, the Top 15 airline groups accounted for 51.0% of the world's total RPK in August 2022 and declined by -18.2% compared to 2019. This decline was 8.1 percentage points smaller than the fall in world's average RPK.

The US airlines retained the Top 3 positions, with **American** at 1st, followed closely by **United**. **Delta** recovered relatively slower and ranked 3rd. **Southwest** dropped one position down to 9th, however, the airline recorded a positive growth compared to the 2019 traffic level.

Recovery of airlines in Europe continued to improve, supported by the strong travel demand, particularly travel within Europe. **Lufthansa** and **IAG** kept the same positions at 4th and 5th, respectively, while **AF-KLM** improved 3 positions to 6th. **Ryanair** and **Turkish Airlines** continued to record positive growth over the pre-pandemic levels.

Two Middle Eastern airlines continued to recover steadily. **Emirates** dropped 2 positions to 8th, while **Qatar** remained at 11th.

China Southern retained the 12th position and continued to record the largest decline among the Top 15 group at -54.2%. **Singapore Airlines** maintained the 14th position with a decline of -29.9%, followed by **LATAM** at 15th.



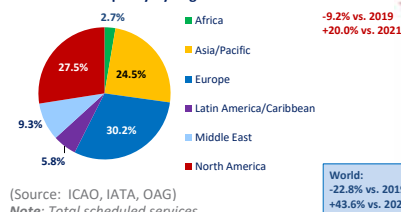
(Source: ICAO, airlines' websites)

Note: Total scheduled and non-scheduled services

CAPACITY BY REGION (ICAO Statistical Regions)

AUG 2022: -22.8% (vs. 2019) in terms of World ASK

% Share of Capacity by Region



(Source: ICAO, IATA, OAG)

Note: Total scheduled services

Worldwide capacity contracted by -22.8% in August 2022, compared to 2019. All regions posted improvements from the previous month, except for Latin America/Caribbean, which recorded the same contraction from the 2019 level.

Both North America and Latin America/Caribbean have recovered to less than 10% below their 2019 capacity levels.

* Total Passengers ** Loaded and Unloaded Freight in Tonnes 1. ICAO estimates

ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; CTK: Cargo Tonne-Kilometres; LF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date.



ICAO

ECONOMIC DEVELOPMENT

SEP 2022: Air Transport Monthly Monitor

World Results and Analyses. Total scheduled services
(Domestic and international)

Air Transport Bureau
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<http://www.icao.int/sustainability/Pages/Air-Traffic-Monitor.aspx>

GLOBAL KEY FIGURES

SEP 2022

(versus SEP 2019)

RPK ▼ -26.2% ASK ▼ -25.9% CTK ▼ -3.6% LF: 81.6% ▼ -0.3%

OUTLOOK* - OCT 2022

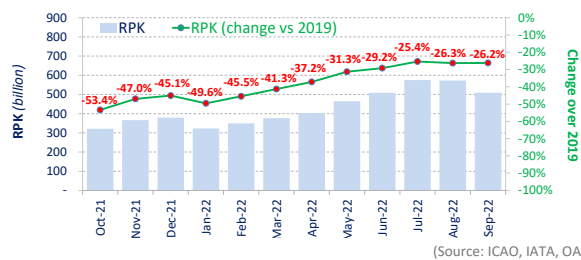
(versus OCT 2019)

ASK ▼ -24.7% * Source OAG

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

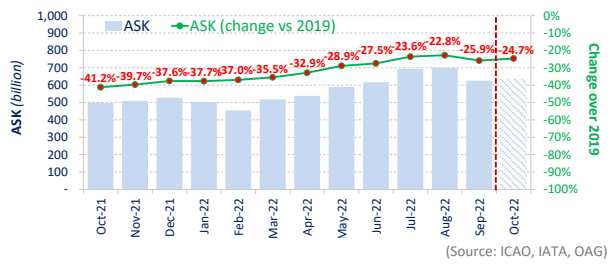
World passenger traffic in September 2022 was -26.2% below the 2019 level, +0.1 percentage point up from the decline in the previous month. The momentum of air travel recovery appeared stable in traditionally low travel season compared to the summer peak. Three regions, i.e. North America, the Middle East and Africa, posted an acceleration in growth, with the former recording a solid pick-up and becoming the top-performing region. The domestic market of North America demonstrated the most resilience and exceeded the pre-pandemic level.



CAPACITY

Available Seat-Kilometres - ASK

Capacity worldwide in September 2022 was -25.9% below the 2019 level, -3.1 percentage points down from the decline in the previous month (-22.8%). As air travel recovery continues, capacity offered in October is expected to improve to -24.7% below the 2019 level.



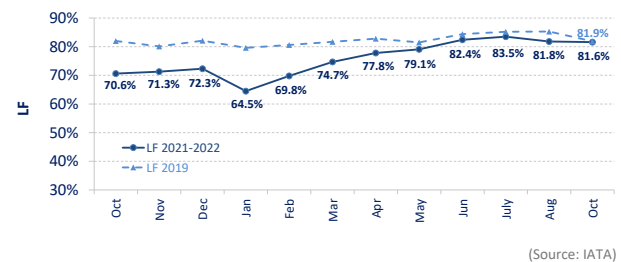
International Passengers vs. Tourist Arrivals

International passenger numbers in September 2022 was -27.4% below the 2019 level, +0.9 percentage point up from the decline in the previous month. All regions, except for Europe, posted improvements in recovery. The recovery in international tourist arrivals followed the similar trend as international passenger traffic.



Load Factor - LF

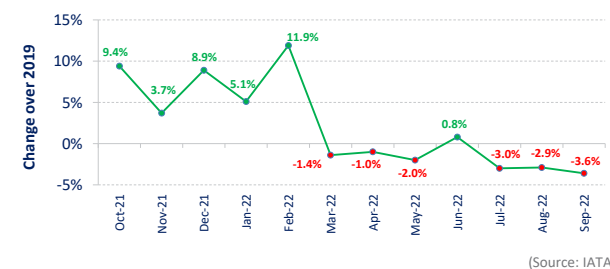
The passenger Load Factor reached 81.6% in September 2022, -0.2 percentage point below than the previous month. With the continued improvement, load factor in September has recovered to -0.3 percentage point below the level saw in the same month of 2019.



CARGO TRAFFIC

Cargo Tonne-Kilometres - CTK

World cargo traffic in September 2022 was -3.6% below the 2019 level, -0.7 percentage point down from the decline in the previous month. Air cargo demand continued to soften facing various headwinds such as the high interest rates, rising inflation, reduced consumer online spending as well as the weak international export demand. Performance diverged across regions. In particular, Africa and North America continued to outperform other regions and achieved double-digit growth over the pre-pandemic levels. Both regions have also shown improvements compared to the previous month, while cargo traffic of the other regions posted slight deterioration and remained below the pre-pandemic level.



ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; CTK: Cargo Tonne-Kilometres; LF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year; YTD: Year-to-date.

▶ CONTINUED FROM PAGE 84



ICAO

ECONOMIC DEVELOPMENT

SEP 2022: Air Transport Monthly Monitor

World Results and Analyses. Total scheduled services
(Domestic and international)

TOP 15 AIRPORTS (Ranked by aircraft departures, passengers and volume of freight)

SEP 2022: -9.9%, -10.8%, and +7.9% (vs. 2019) in terms of aircraft movements, passengers and freight for the Top 15

SEP 22

Airports (ranking by number of departures)	Movements	vs. 2019	Airports (ranking by number of passengers)	Passengers*	vs. 2019	Airports (ranking by tonnes of freight)	Freight**	vs. 2019
Chicago IL, US (ORD)	61,309	-21.7%	Atlanta GA, US (ATL)	8,013,866	-8.2%	Hong Kong SAR, CN (HKG)	339,000	-14.6%
Atlanta GA, US (ATL)	60,668	-16.3%	Istanbul, TR (IST)	6,407,322	2.6%	Memphis TN, US (MEM)	337,340	2.2%
Dallas/Fort Worth TX, US (DFW)	55,854	-8.9%	Dallas/Fort Worth TX, US (DFW)	6,304,008	2.5%	Anchorage AK, US (ANC)	287,464	26.0%
Denver CO, US (DEN)	53,647	-2.2%	Denver CO, US (DEN)	6,290,682	5.6%	Shanghai, CN (PVG)	273,014	-12.7%
Las Vegas NV, US (LAS)	52,986	+30.7%	Chicago IL, US (ORD)	6,110,276	-13.7%	Louisville KY, US (SDF)	235,104	12.8%
Los Angeles CA, US (LAX)	45,631	-17.8%	Dubai, AE (DXB)	5,815,292	-16.9%	Incheon, KR (ICN)	224,904	1.1%
Charlotte NC, US (CLT)	41,589	-13.4%	London, GB (LHR)	5,780,628	-14.7%	Miami FL, US (MIA)	202,154	27.5%
Istanbul, TR (IST)	40,091	4.6%	Los Angeles CA, US (LAX)	5,622,638	-19.8%	Taipei, CN (TPE)	198,210	7.9%
Amsterdam, NL (AMS)	39,573	-13.5%	Paris, FR (CDG)	5,366,347	-21.3%	Paris, FR (CDG)	196,574	23.6%
New York NY, US (JFK)	37,534	-1.2%	Amsterdam, NL (AMS)	5,196,931	-20.0%	Tokyo, JP (NRT)	190,596	7.8%
Paris, FR (CDG)	36,947	-18.0%	New Delhi, IN (DEL)	5,071,521	-11.0%	Doha, QA (DOH)	187,597	4.0%
Seattle WA, US (SEA)	36,684	-3.8%	New York NY, US (JFK)	4,961,303	-3.9%	Los Angeles CA, US (LAX)	187,503	17.5%
New Delhi, IN (DEL)	35,266	-10.2%	Frankfurt, DE (FRA)	4,886,634	-27.2%	Cincinnati OH, US (CVG)	186,441	102.4%
Boston MA, US (BOS)	34,588	-7.4%	Madrid, ES (MAD)	4,786,675	-14.0%	Chicago IL, US (ORD)	166,038	14.2%
Frankfurt, DE (FRA)	34,171	-26.8%	Las Vegas NV, US (LAS)	4,758,947	9.7%	Frankfurt, DE (FRA)	154,589	-6.1%

Note: Total scheduled and non-scheduled services

(Source: ACI)

In terms of **aircraft movements**, the Top 15 airports reported a combined fall of -9.9% compared to 2019. Ten out of the Top 15 airports were US airports. **Chicago** overtook Atlanta and ascended to 1st, with a decline of -21.7%. For the fourth consecutive month, **Las Vegas** and **Istanbul** posted increases with the former recording a robust growth of +30.7%.

In terms of **passengers**, the Top 15 airports posted a total fall of -10.8% compared to 2019. The Top 15 list continued to have a mixed of airports from different regions. **Atlanta** remained 1st with a decline of -8.2%. **Frankfurt** recorded the largest contraction of -27.2%, followed by **Paris** (-21.3%). **Las Vegas** recorded the highest positive growth, followed by **Denver**, at +9.7% and +5.6%, respectively.

In terms of **freight**, the Top 15 airports reported an increase of +7.9% compared to 2019. Seven of the Top 15 airports posted double-digit growth. **Cincinnati** recorded the most significant growth at +102.4%, followed by **Miami** at +27.5%. **Hong Kong** outstripped Memphis and became 1st, however it recorded the largest fall of -14.6%.

TOP 15 AIRLINE GROUPS (Ranked by RPK)

SEP 2022: -17.4% (vs. 2019) in terms of RPK for the Top 15

SEP 22

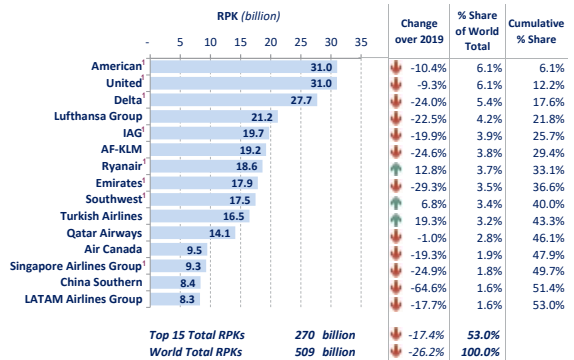
In terms of RPK, the Top 15 airline groups accounted for 53.0% of the world's total RPK in September 2022 and declined by -17.4% compared to 2019. This decline was 8.8 percentage points smaller than the fall in world's average RPK.

The US airlines retained the Top 3 positions, with **American** at 1st, followed by **United** and **Delta**. **Southwest** maintained the 9th place and recorded positive growth over the pre-pandemic traffic level.

Performance of airlines in Europe were stable compared to the previous month. **Lufthansa**, **IAG** and **AF-KLM** kept the same positions at 4th, 5th and 6th, respectively. **Ryanair** and **Turkish Airlines** maintained the same positions and continued to post positive growth.

Two Middle Eastern airlines, **Emirates** and **Qatar**, continued to recover steadily, and maintained the same positions at 8th and 11th.

China Southern dropped two positions to 14th with a deteriorated decline at -64.6%. **Singapore Airlines** improved one position to 13th, while **LATAM** remained at the 15th.

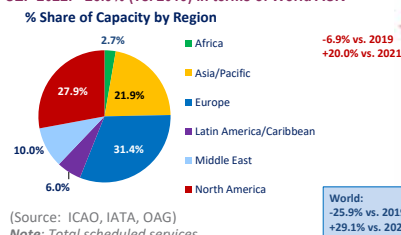


(Source: ICAO, airlines' websites)

Note: Total scheduled and non-scheduled services

CAPACITY BY REGION (ICAO Statistical Regions)

SEP 2022: -25.9% (vs. 2019) in terms of World ASK



(Source: ICAO, IATA, OAG)
Note: Total scheduled services

Worldwide capacity contracted by -25.9% in September 2022, compared to 2019. Performance has been mixed among the regions. Whereas North America and Africa posted improvements, the other regions showed a slowdown in capacity recovery.

Asia/Pacific recorded the largest contraction from the pre-pandemic level, followed by Africa and the Middle East.

* Total Passengers ** Loaded and Unloaded Freight in Tonnes 1. ICAO estimates

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