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LUIS FELIPE DE OLIVEIRA

Director General
Airports Council
International
(ACI) World



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EDITORIAL



In Cluj-Napoca during the Aviation Event

Dr Kostas Iatrou
Director General
Hermes - Air Transport Organisation

Dear Hermes member,

The pandemic approaches its end. However, new challenges are ahead for 2022. Now more than ever the sustainable development of the sector is needed.

In February, during the 2022 Air Transport Symposium and the 2022 Air Transport Awards, we presented Mr Harry Theochari with the 2022 Hermes Award.

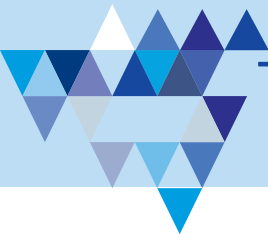
On Thursday 31 March in my capacity as Director General of Hermes I moderated a keynote panel in the Aviation Event hosted by our member, Dr David Ciceo, CEO of Cluj International Airport.

The 2022 Hermes AGM & Leaders Forum will take place on Thursday 9 June in Brussels and will be hosted by EUROCONTROL.

Finally, we are pleased to host the interview with Luis Felipe de Oliveira, Director General Airports Council International (ACI) World.

Enjoy reading!

Kostas Iatrou



TOP NEWS

January - March 2022

05/01/2022

ALLEGIANT AIR ORDERS UP TO 100 737 MAX JETS

Boeing [NYSE:BA] and Allegiant Air today announced an order for 50 737 MAX jets, with options for 50 additional airplanes. In Boeing’s first U.S. ultra-low cost carrier (ULCC) deal, Allegiant selected two models – the 737-7 and 737-8-200 – in the 737 MAX family, which provide the lowest seat-mile costs for a single-aisle airplane and high-dispatch reliability.



Source: Boeing

06/01/2022

ACI EUROPE: EU RULES ON AIRPORT SLOT THRESHOLDS OFFER PROTECTION FOR AIRLINES DURING THE PANDEMIC, WITH NO VIABLE REASON FOR SO-CALLED ‘GHOST FLIGHTS’ SAYS AIRPORT BODY

Airport trade body ACI EUROPE has today expressed dismay at the escalating industry and political rhetoric around so-called ‘ghost flights’ and reiterated its strong support for the European Commission’s position on the thresholds for use of airport slots by airlines. The usage threshold for the current season, Winter 21, is set at 50%. This is, as the European Commission has just reiterated, a significantly lower threshold than that set under the 80/20 ‘use it or lose it’ principle applicable in normal times. It is designed to reflect the uncertainties of a badly hit market and fragile recovery for aviation.

10/01/2022

easyJet PARTNERS WITH CRANFIELD AEROSPACE SOLUTIONS (CAES) ON DEVELOPMENT OF ZERO-EMISSION AIRCRAFT

easyJet, Europe’s leading airline, has announced it is working with Cranfield Aerospace Solutions to support the development of its hydrogen fuel cell propulsion system for commercial aircraft, as part of the airline’s ambition to de-carbonise aviation. Cranfield Aerospace Solutions is developing its hydrogen fuel cell propulsion system for an existing 9-seat Britten-Norman Islander aircraft, which is planned to be flying by 2023, and is now working with easyJet to understand how the adoption of zero-carbon technologies could integrate with an airline operations for future introduction of the technology. easyJet will support Cranfield



Source: Cranfield Aerospace Solutions

(cont.'d ►)

10/01/2022

easyJet PARTNERS WITH CRANFIELD AEROSPACE SOLUTIONS (CAES) ON DEVELOPMENT OF ZERO-EMISSION AIRCRAFT ▶ cont'd

Aerospace Solutions on the project, providing an airline operator’s perspective on the development of hydrogen propulsion and internal expertise, to assist in the development of this technology for commercial aviation.

17/01/2022

2021 GLOBAL AIR PASSENGER TOTALS SHOW IMPROVEMENT FROM 2020, BUT STILL ONLY HALF PRE-PANDEMIC LEVELS

Global passenger traffic recovered modestly in 2021, with the latest ICAO economic impact analysis of COVID-19 on civil aviation revealing that the number of passengers worldwide was 2.3 billion or 49 percent below pre-pandemic (2019) levels, up from the 60 percent drop seen in 2020.

Global seat capacity offered by airlines improved by 20 percent during the same period, exceeding the growth in passenger demand.

The overall passenger load factor in 2021 stood at 68 percent, compared to 82 percent in 2019, and airlines worldwide incurred losses of \$324 billion

following \$372 billion in 2020 (see Fig.1).

Continuing efforts by States to implement WHO and ICAO recommendations, including those issued by the ICAO Council’s Aviation Recovery Task Force (CART), and adopted in the Ministerial Declaration at ICAO’s High-level Conference on COVID-19, are helping to eliminate travel restrictions disproportionate to public health risks, and to lessen the pandemic’s impacts on global mobility so that air travel, trade and tourism can recover more quickly and bring prosperity back to many hard hit markets and regions worldwide.

A YEAR OF SPORADIC RECOVERIES

The first quarter of 2021 saw a decrease in the rate of global air traffic recovery due to the sharp spike at that time in COVID-19 infections. The situation stabilized slightly in the second and third quarters, mainly due to rising vaccination rates, and with an accompanying relaxation in travel restrictions in various parts of the world during the peak travel season.

However this upward trend stalled quickly in the fourth quarter, with the emergence of the Omicron variant.

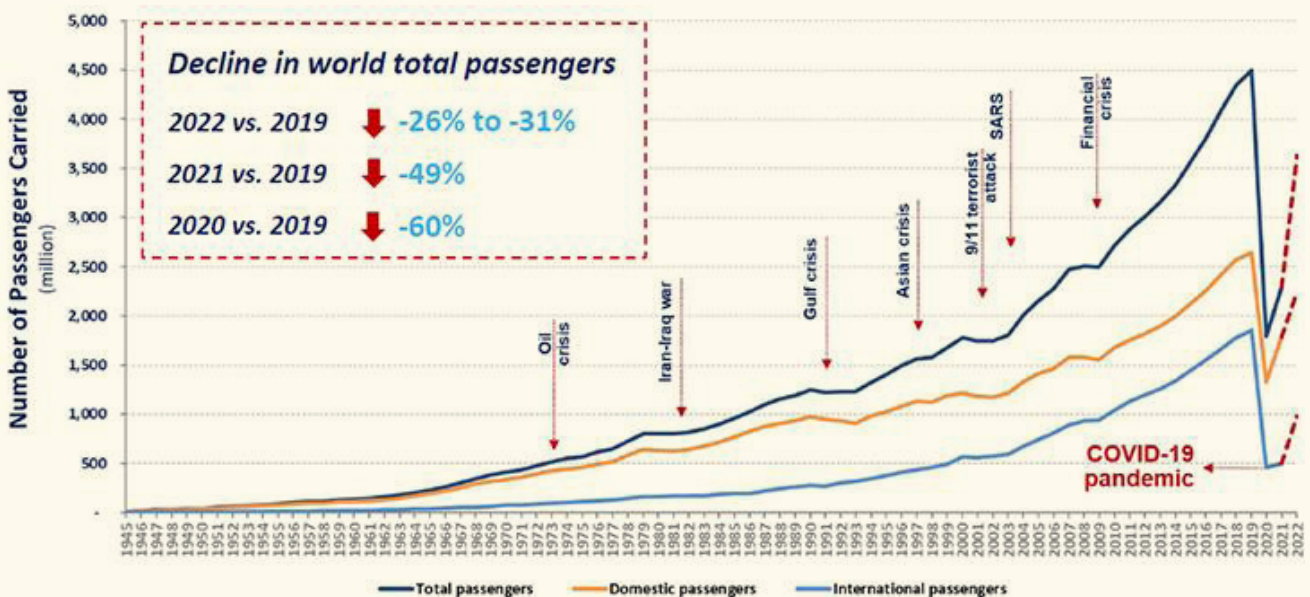


Fig.1 - World passenger traffic evolution, 1945-2022.

(cont.'d ▶)

17/01/2022

2021 GLOBAL AIR PASSENGER TOTALS SHOW IMPROVEMENT FROM 2020, BUT STILL ONLY HALF PRE-PANDEMIC LEVELS ▶cont'd

The impact of the pandemic continues to weigh disproportionately on domestic and international travel, with the former recovering at a faster pace. Overall, domestic passenger traffic has recovered to 68 percent of pre-pandemic levels, while international traffic remains at just 28 percent.

The global aviation recovery has also been characterized by significant regional variation, with the North and Latin America and Caribbean regions showing the highest recovery rates, Europe picking up noticeably during the summer travel season, and Africa and the Middle East recovering moderately, until Africa plunged again due to Omicron restrictions. The Asia/

Pacific was the weakest performing region as a result of slowed domestic and stagnant international traffic levels (see Fig.2).

OUTLOOK STILL UNCERTAIN

Both positive signs and downside risks confront analysts trying to gauge how the aviation recovery will play out over the remainder of 2022. ICAO currently projects that 2022 passenger totals will be 26 to 31 percent less than pre-pandemic levels, with seat capacity down 20 to 23 percent.

In an optimistic scenario, passenger traffic is expected to recover to 86 percent of its 2019 levels by December 2022, based on 73 percent international traffic recovery

and 95 percent domestic. More pessimistic scenarios point to a 75 percent recovery based on 58 percent international and 86 percent domestic recoveries. This projected continued decline in traffic could translate into estimated losses of \$186-\$217 billion in gross airline passenger operating revenues in 2022 compared to 2019.

ICAO's longer-term forecasts indicate that current downturns will also affect traffic patterns over the longer-term, with the 2018-2050 compound annual growth rate (CAGR) of global revenue passenger kilometres (RPKs) currently projected at 3.6 percent, down from the 4.2 percent forecast pre-COVID.



Note: Optimistic scenario for 2022 outlook

Fig. 2 - Regional difference in the pace of recovery (passenger number, compared to 2019 levels).

17/01/2022

NEW ICAO HEALTH MASTER LIST BOOSTS EFFICIENCY AND SECURITY OF HEALTH DOCUMENT AUTHENTICATION FOR TRAVELERS AND BORDER AUTHORITIES

ICAO has published its first Health Master List, a new data resource for States and aviation stakeholders to aid in the more efficient and secure authentication of traveler health certificates, including vaccination and test result certificates.

In support of WHO recommendations, ICAO has

embarked on an innovative Public Key Infrastructure collaboration with the Luxembourg State Agency, INCERT. The aim of the partnership is to address the urgent need for improved trust and processing of health documentation internationally during the COVID-19 pandemic, and beyond.



Source: ICAO

18/01/2022

TODAY, CHAIR OF THE HOUSE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE AND CHAIR OF THE SUBCOMMITTEE ON AVIATION RICK RELEASED THE FOLLOWING JOINT STATEMENT AFTER AT&T AND VERIZON VOLUNTARILY AGREED TO DELAY THE DEPLOYMENT OF 5G AROUND SOME U.S. AIRPORTS

Today, Chair of the House Committee on Transportation and Infrastructure Peter DeFazio (D-OR) and Chair of the Subcommittee on Aviation Rick Larsen (D-WA) released the following joint statement after AT&T and Verizon voluntarily agreed to delay the deployment of 5G around some U.S. airports.

“Today’s voluntary agreement by

AT&T and Verizon to temporarily delay 5G implementation around some U.S. airports is good news and will do a tremendous amount of good to prevent disastrous disruptions to our economy and aviation safety,” Chairs DeFazio and Larsen said. “The reality is that U.S. national airspace is the most complex in the world and is not subject to many of the man-

datory mitigations seen in other countries. It’s time for the FAA, airlines, manufacturers, the telecom industry, and airports to work together on a schedule to implement long-term measures at affected airports so that the laudable goal of implementing 5G technologies can coexist with the aviation sector without disruption.”

20/01/2022**FIRST AIRBUS A320NEO WITH AIRSPACE CABIN DELIVERED TO SWISS**

SWISS has taken delivery of its first Airbus A320neo featuring the new Airspace cabin configuration. The new Airspace cabin features include: slimmer sidewall panels for extra personal space at shoulder level; better views through the windows with their redesigned bezels and completely integrated window shades; the largest overhead bins for 60% more bags; the latest full LED lighting technologies; LED-lit 'entrance area'; and new lavatories with hygienic touchless features and antimicrobial surfaces.



Source: Airbus

20/01/2022**ZARA RUTHERFORD BECOMES THE YOUNGEST WOMAN TO CIRCUMNAVIGATE THE GLOBE SOLO IN A SMALL AIRCRAFT**

Today, Zara Rutherford, 19, completed her mission and became the youngest woman in history to fly solo around the world in a small aircraft. Her journey lasted 155 days or 5 months and 3 days. With her flight Zara wants to encourage young women to pursue their dreams and reduce the gender gap in aviation as well as in science, technology, engineering and mathematics (STEM).



Source: FlyZolo

27/01/2022

EUROCONTROL AND ACI EUROPE SIGN MEMORANDUM OF UNDERSTANDING, SIGNALLING ENHANCED CO-OPERATION AND JOINT COMMITMENT TO AVIATION'S SUCCESSFUL AND SUSTAINABLE FUTURE

With a long history of successful collaboration in many areas of mutual concern, the intergovernmental organisation representing 41 Member States and 2 Comprehensive Agreement States, and the trade association bringing together all of Europe's airports share many commonalities as aviation moves into a new chapter – in particular a shared focus on operational efficiency and sustainability. The Memorandum, which replaces an existing agreement dating from 2008, builds a framework of cooperation around 2 pillars:

Efficient air transport, through increased integration between operations at and around airport platforms and Air Traffic Management, moving to collaborative decision making. This is essential to have operations on time and make better use of existing capacity and unlock latent capacity - both on the ground and in the air. Such integration will ultimately result in a one-on-one information exchange between the Network Operations Plan (NOP) and the Airport Operations Plan (AOP). It will be delivered through the continued cooperation between ACI EUROPE together with its member airports, and the EUROCONTROL Network Manager as well as through the continued participation of EUROCONTROL in ACI EUROPE's Technical, Operations & Safety Committee (TOSC)¹. The network functions, delivered with the support of the Network Manager, form a key pillar of the EU Single European Sky project.

Sustainable air transport, through the continued development and outreach of Airport Carbon Accreditation, the global standard for carbon management and reduction at airports, as well as the continued rollout of EUROCONTROL's Collaborative Environmental Management (CEM), which provides process guidance through which airports are able to reduce their environmental impact in close cooperation with their operational stakeholders.



Source: EUROCONTROL

27/01/2022**THE TATA GROUP TODAY ANNOUNCED THE COMPLETION OF THE TRANSACTION FOR THE PURCHASE OF AIR INDIA FROM THE GOVERNMENT OF INDIA**

The Tata group today announced the completion of the transaction for the purchase of Air India from the Government of India. The Tata group takes over management and control of the airline, starting today. The transaction covers three entities – Air India, Air

India Express, and AI SATS. Air India is India's flag carrier and premier full-service airline. Air India Express is a low-cost carrier. AI SATS provides a comprehensive suite of ground handling and cargo handling services.

31/01/2022**ICAO COUNCIL DISCUSSES REPORT ON FACT FINDING INTO RYANAIR FR4978**

In the first meeting of its 225th Session today, ICAO Council member States considered the ICAO Secretariat's Report on the Fact Finding Investigation into the events surrounding the diversion of Ryanair flight FR4978 on 23 May 2021.

Also taking part in the discussions were official representatives of non-Council States considered to have a special interest in the proceedings namely, the Republic of Belarus, Lithuania, Poland and Ireland.

A point of convergence from States' discussions included the Council's appreciation to the ICAO fact finding investigation team for the exhaustive analysis undertaken, and the high quality of the report it produced.

The Council expressed concern at the gaps in information provided by Belarus and the inconsistencies contained in the evidence available at the time of the investigation in relation to crucial aspects of the factual reconstruction of the events, and highlighted that the bomb threat against FR4978 was deliberately false and had endangered the safety of an aircraft in flight.

The Council further recalled that communicating false information which endangers the safety of an aircraft is an offence under the Montreal Convention, and in this connection, strongly condemned such practices.

In light of some newly emerging information relating to the FR4978 events and timeline, the Council requested the ICAO investigation team to continue its work with a view to establishing the missing facts, including in connection with the related ongoing criminal and other investigations, and to report to it any further findings.

Additionally, the Council called upon all Member States and other relevant stakeholders, to continue to collaborate with the ICAO investigation, and requested the President of the Council to eventually forward the final Fact Finding Investigation Report to the United Nations Secretary-General.



Source: ICAO

31/01/2022

BOEING LAUNCHES 777-8 FREIGHTER TO SERVE GROWING DEMAND FOR CARGO, ENHANCED ENVIRONMENTAL PERFORMANCE

Boeing [NYSE: BA] today launched the new 777-8 Freighter and expanded its market-leading 777X and freighter families of jetliners with an order for up to 50 aircraft from one of the world's largest cargo carriers, Qatar Airways. Qatar Airways will be the 777-8 Freighter launch customer with a firm order for 34 jets and options for 16 more, a total purchase that would be worth more than \$20 billion at current list prices and the largest freighter commitment in Boeing history by value. The order also supports hundreds of U.S. suppliers from across 38 states, will sustain more than 35,000 U.S. jobs, and provide the American economy with an annual estimated economic impact of \$2.6 billion during the contract's delivery period.



Source: Boeing

03/02/2022

ETIHAD GUEST PARTNERS WITH FIRST ABU DHABI BANK AND VISA TO CREATE THE WORLD'S FIRST VISA CO-BRANDED SUSTAINABLE CREDIT CARD PROPOSITION TO REWARD SUSTAINABLE CHOICES

Ethad Guest, the award-winning loyalty programme of Etihad Airways, and the UAE's largest bank First Abu Dhabi Bank (FAB), in partnership with Visa, the world leader in digital payments, will launch a sustainably-focused Visa credit card. The card will reward shoppers for making sustainable choices in their everyday spending habits.

The FAB Etihad Guest Visa Sustainable Card will introduce a series of sustainability-focused bene-

fits that will educate and reward members for making sustainable choices and provide options to offset emissions for their spending. The partnership is powered by ecolytiq, provider of digital infrastructure for green finance, which will provide the Sustainability-as-a-Service® technology to track sustainable spending. This will support the change of behaviour and issuance of rewards for those making sustainable spending choices.



Source: Etihad

04/02/2022**EUROPEAN COUNTRIES SIGN BREAKTHROUGH “TOULOUSE DECLARATION ” WITH AVIATION -- DRIVING SECTOR’S DECARBONISATION PLANS FORWARD**

Launched by the French Presidency to the EU on the 4 February 2022, the so-called “Toulouse Declaration” is the first-ever public-private initiative supporting European aviation’s goal to reach net zero CO₂ emissions by 2050. This is also the first joint initiative of its kind globally, aligning all EU stakeholders on the principles and actions needed to decarbonise and transform Europe’s aviation sector, representing a true breakthrough.

07/02/2022**BOEING BUYS TWO MILLION GALLONS OF SUSTAINABLE AVIATION FUEL FOR ITS COMMERCIAL OPERATIONS**

Boeing [NYSE:BA] today announced a supply agreement for two million gallons (7.5 million liters) of blended sustainable aviation fuel (SAF) with EPIC Fuels to power its Commercial Airplanes operations in Washington state and South Carolina through 2022. The agreement is the largest announced SAF procurement by an airframer and further demonstrates Boeing’s commitment to decarbonizing aviation.



Source: Boeing

07/02/2022**AMERICAN AIRLINES AND GOL COMPLETE AGREEMENT TO FORM EXCLUSIVE PARTNERSHIP OFFERING INCREASED CUSTOMER BENEFITS**

Today, American Airlines announced it has signed a definitive investment agreement with GOL, Brazil’s largest airline, deepening the relationship between the two carriers to create the broadest and most rewarding network in the Americas. The combined networks will provide customers with more than 30 destinations in the U.S. served by American and more than 34 new destinations in South America served by GOL.

08/02/2022**LATEST DIGITAL AIR CARGO INNOVATION WILL ACCELERATE GLOBAL RECOVERY**

ICAO and the United Nations Economic Commission for Europe (UNECE) have completed new digital air cargo technical specifications guidance that will help to accelerate the transition towards safer and more resilient supply chains, while making important contributions to COVID-19 response and recovery efforts.

The digital innovations will permit the air transport sector to transition away from long-standing paper-based documents used to facilitate the movement of global air freight, promoting a contactless air cargo environment and greater cross-border trade resilience in the face of future pandemic threats.



Source: ICAO

08/02/2022

ACI WORLD LAUNCHES NEW INTERACTIVE AIRPORT INDUSTRY INTELLIGENCE TOOL

Airports Council International (ACI) World has launched the ACI Intelligence Hub, an innovative new platform allowing users to explore airport traffic and financial data in a self-serve and interactive manner. The Intelligence Hub will allow users to browse, extract or visualize the airport industry's most extensive collection of traffic and economic data, using the most up-to-date data from airports around the world and benefiting from ACI's direct reach to airports. Users will be able to interact with passenger, cargo and aircraft movement data in multiple modules. The platform will initially feature three modules available through subscription with a fourth one planned to be released later in 2022:

- **ANALYST MODULE:** Allowing users to extract customized passenger, cargo and aircraft movement data using the Annual Airport Traffic Database, with airport traffic from over 2,500 airports in more than 180 countries and territories covering 95% of global scheduled passenger traffic annually, as well as the Monthly Airport Traffic Database, which features airport data for over 1,200 of the world's major commercial airports.
- **EXECUTIVE MODULE:** Interactive dashboards featuring an overview of the airport industry with data broken down into world, regional and sub-regional figures for the past 5 years.
- **LIBRARY MODULE:** Access to a selection of ACI's world-renowned publications covering airport industry traffic data and economic insights. These include the Annual World Airport Traffic Reports (WATR), monthly traffic reports, quarterly economic bulletins, and more.
- **BENCHMARKING MODULE:** Tool to benchmark your airport performance against industry averages as well as different pre-defined groupings (regions, country grouping, airport size grouping, etc.) for a wide range of key performance indicators. This module is planned to be launched later in 2022.

11/02/2022

EUROCAE APPOINTS NEW DIRECTOR GENERAL

EUROCAE appoints Anna von Groote as new Director General. She will assume her new role on 14 February 2022 and will succeed Christian Schleifer-Heingärtner.



Source: EUROCAE

12/02/2022**ICAO ENHANCES UN COOPERATION TO ADVANCE COUNTER-TERRORISM INITIATIVES IN INTERNATIONAL CIVIL AVIATION**

ICAO Secretary General Juan Carlos Salazar recently signed a new cooperative agreement with the United Nations Counter-Terrorism Office (UNOCT) to further advance joint counter-terrorism cooperation to strengthen the security of international air transport, trade, and border management.

Formalized on 12 February 2022 with UNOCT Under-Secretary-General, Mr. Vladimir Ivanovich Voronkov, the agreement builds on ICAO's key role in supporting the implementation of the United Nations Global Counter-Terrorism Strategy (A/RES/75/291) and numerous Security Council resolutions



on counter-terrorism, aviation security, and facilitation (identity and border control management). It is additionally expected to maximize related deliverables

to Member States in a variety of areas of ICAO/UNOCT focus, including initiatives pertaining to unmanned aircraft systems (drones) and cybersecurity.

15/02/2022**AFRAA AND AFCAC REINFORCE COLLABORATION FOR THE DEVELOPMENT OF A SAFE, RELIABLE AND SUSTAINABLE AIR TRANSPORT SYSTEM IN AFRICA**

The African Airlines Association (AFRAA) and the African Civil Aviation Commission (AFCAC) have signed a memorandum of understanding (MoU).

The MoU will reinforce the collaboration between AFRAA and AFCAC to facilitate the achievement of their shared objectives and enhance their effectiveness in serving the interests of their respective members. The MoU was signed by Abdérahmane Berthé, AFRAA's Secretary General and Ms. Angeline Simana, AFCAC's Ag. Secretary General. Under the MoU, AFRAA and AFCAC will align their actions and work jointly on various areas including:

- Aviation Safety
- Air Transport Liberalization – YD adoption and implementation of SAATM
- Efficiency of Air Navigation Systems – Technology advancement
- Aviation Security and Facilitation
- Environment
- Human Capital development – Capacity Building
- Infrastructure and Regional integration
- Aviation Taxes/charges and traffic statistical data exchange
- Research and Development
- Aviation related Studies
- Exchange of statistical data, information and best practices

16/02/2022**ACI WORLD AND THE AIR SERVICES ASSOCIATION BUILD ON MEMORANDUM OF COOPERATION**

Airports Council International (ACI) World, in collaboration with Airport Services Association (ASA), have released a new Ground Handling Service Provider (GHSP) and Airport Operator Agreement Template to facilitate and promote a safe and efficient aviation ecosystem.

The Agreement Template is a crucial guidance document to improve collaboration between airport operators and GHSPs, by helping to formalize the re-

lationships between the organizations as well as to harmonize requirements and standards for operating at an airport and around an aircraft.

The guidance document can also help overcome some of the additional safety challenges brought on by the social and economic impact of the pandemic, namely the capacity to offer services according to defined service levels.

22/02/2022**AIRBUS AND CFM INTERNATIONAL TO PIONEER HYDROGEN COMBUSTION TECHNOLOGY**

Airbus has signed a partnership agreement with CFM International, a 50/50 joint company between GE and Safran Aircraft Engines, to collaborate on a hydrogen demonstration programme that will take flight around the middle of this decade.

The programme's objective is to ground and flight test a direct combustion engine fueled by hydrogen, in preparation for entry-into-service of a zero-emission aircraft by 2035.

The demonstration will use a A380 flying testbed equipped with liquid hydrogen tanks prepared at Airbus facilities in France and Germany. Airbus will also define the hydrogen propulsion system requirements, oversee flight testing, and provide

the A380 platform to test the hydrogen combustion engine in cruise phase.

CFM International (CFM) will modify the combustor, fuel system, and control system of a GE Passport turbofan to run on hydrogen. The engine, which is assembled in the US, was selected for this program because of its physical size, advanced turbo machinery, and fuel flow capability. It will be mounted along the rear fuselage of the flying testbed to allow engine emissions, including contrails, to be monitored separately from those of the engines powering the aircraft. CFM will execute an extensive ground test program ahead of the A380 flight test.



Source: Airbus

22/02/2022**AIRPORTS AND AIRLINES WELCOME NEW EU COUNCIL RECOMMENDATION ON TRAVEL INTO THE EU**

ACI EUROPE (Airports Council International) and the International Air Transport Association (IATA) welcomed the adoption today of an EU Council Recommendation for external travellers coming into the EU and called for further action to help re-start air connectivity.

The Recommendation adopted today includes the criteria that:

- EU States should accept all travellers fully vaccinated with EU approved vaccines without any restrictions or conditions.
- EU States should accept all travellers fully vaccinated with other WHO listed vaccines and recovered travellers either without any restrictions / conditions or only

with the requirement of a negative pre-departure PCR test.

- EU States could also fully accept fully vaccinated travellers not holding a valid EU DCC or equivalent, subject to a negative pre-departure PCR test.

25/02/2022**ICAO COUNCIL CONDEMNS VIOLATION OF TERRITORIAL INTEGRITY AND AIRSPACE OF UKRAINE**

The 36 States composing the ICAO Council discussed today the situation unfolding in Ukraine, during a scheduled meeting of the ICAO Governing Body's 225th Session.

Council States condemned the violation of the territorial integrity and sovereignty of a United

Nations Member State, including its airspace, as being inconsistent with the principles of the Charter of the United Nations and Article 1 of the Convention on International Civil Aviation (Chicago Convention). The Council also expressed grave concerns on the

latest developments in Ukraine, and solidarity with its people, in direct alignment with the sentiments expressed by the United Nations Secretary General in his statements to the UN General Assembly on 23 and 24 February 2022.



Source: ICAO

28/02/2022**FAA EXPANDS USE OF INDEPENDENT REVIEW GROUPS WHEN CERTIFYING AIRCRAFT**

The Federal Aviation Administration (FAA) is continuing to make progress in reforming its aircraft certification processes. This week, the agency expanded the use of independent groups of internal and external safety experts for certification projects such as commercial aircraft, smaller aircraft and drones. These reviews, called Technical Advisory Boards (TAB), help the FAA have a consistent and thorough approach for all aircraft certification projects.

The changes go beyond a key requirement of the Aircraft Certification, Safety, and Accountability Act. They will also:

- Promote establishing the TAB early in the certification process
- Specify different levels of TABs depending on the project scope and the risks the aircraft could pose when it enters into service.

01/03/2022**SWISS TO BE THE WORLD'S FIRST AIRLINE TO USE SYNHELION SOLAR FUEL**

SWISS and the Lufthansa Group have concluded a strategic collaboration with the Synhelion company to bring its solar aviation fuel to market. This will make SWISS the first airline in the world to use 'sun-to-liquid' fuel. The process devised by Synhelion uses concentrated sunlight to produce carbon-neutral kerosene. With this collaboration, SWISS and Synhelion are playing a pioneering role in the production and the adoption of sustainable aviation fuels.



Source: SWISS

01/03/2022**ACI: STRENGTHENING AIRPORT COMMERCIAL REVENUE AS AIR TRAVEL SETS TO INCREASE – NEW GUIDANCE SERIES LAUNCHED**

Airports Council International (ACI) World has today launched a new series of guidance material dedicated to helping airports strengthen their non-aeronautical (commercial) revenue to improve the traveller experience and contribute to the recovery of the sector as travel begins to increase.

The first set of available guidance focuses on airport ground access and includes the Optimal Integration of Airport Ground Access Services Handbook, and the Sustainable Airport Ground Access Policy Paper.

03/03/2022

EASA LAUNCHES EUROPEAN INFORMATION SHARING AND COOPERATION PLATFORM ON CONFLICT ZONES

The European Union Aviation Safety Agency launched the European Information Sharing and Cooperation Platform on Conflict Zones, an initiative which ensures that participating EASA member states and their operators have easy access to the best information

when planning flights near or over areas of conflict. The aim of the Platform is to enable its members to carry out risk assessments and take decisions based on reliable and updated data. In addition, the exchange of information between experts is expected to enhance the

confidence of those taking decisions regarding the operation of flights in conflict zone areas. EASA will ensure that the Platform remains a trusted environment and also moderate the content and discussions.

03/03/2022

JOINT FAA AND UNITED KINGDOM CAA STATEMENT ON EVTOL AIRCRAFT

The Federal Aviation Administration (FAA) and the United Kingdom Civil Aviation Authority recognize the potential of electric vertical take-off and landing (eVTOL) and other Advanced Air Mobility (AAM) aircraft to significantly benefit the public. To support future eVTOL aircraft development and operation, the US and UK civil aviation authorities are engaged in a range of bilateral and multilateral discussions focused on facilitating certification and validating new eVTOL aircraft, production, continued airworthiness, operations, and personnel licensing.



Source: FAA

07/03/2022

EMBRAER TAKES AIM AT AIR FREIGHT MARKET – LAUNCHES E190F AND E195F PASSENGER TO FREIGHT CONVERSIONS

Today Embraer enters the air freight market with the launch of the E190F and E195F Passenger to Freight Conversions (P2F). The E-Jets freighters are designed to meet the changing demands of e-commerce and modern trade that require fast deliveries and decentralised operations. Embraer is offering the unbeatable cargo economics and flexibility that rightsized jets provide.



10/03/2022

ICAO-EU COOPERATE TOWARDS AVIATION'S SAFE, SECURE, AND SUSTAINABLE RECOVERY

Recovery of the European and global air transport sectors, and increased collaboration towards the provision of assistance to States in all regions in support of the new Policy on ICAO Implementation Support provided to States approved by the ICAO Council last week, were among key topics reviewed during the ICAO/EU Memorandum of Cooperation Joint Committee meeting held at ICAO Headquarters on 10 March 2022.

Co-chaired by ICAO Secretary General Juan Carlos Salazar and the European Commission Director General for Mobility and Transport, Henrik Hololei, the meeting was attended by the Permanent Representatives of EU Member States to ICAO, the Head of the EU office in Montréal and other ICAO, EU, and European Union Aviation Safety Agency (EASA) officials.

The Committee adopted a new working arrangement aimed at supporting and promoting each other's activities in the area of accident and incident reporting in civil aviation. This specifically relates to the use of the European Co-ordination Centre for Accident and Incident Reporting Systems (ECCAIRS) tool for the implementation of Annex 13 — Aircraft Accident and Incident Investigation reporting requirements by ICAO and Member States, along with other safety data requirements. The use of this common tool should greatly enhance the data connectivity needed to become more proactive in safety.



14/03/2022

DIGITAL VACCINE PROOFS, AIR TRAVELLERS WITH DISABILITIES & ASSISTANCE TO AIRCRAFT ACCIDENT VICTIMS AND THEIR FAMILIES AMONG RANGE OF LATEST PRIORITIES

The ICAO Council has adopted a new set of international Standards and Recommended Practices (SARPs) addressing national civil aviation responses to public health emergencies, and the security and inspection of travel and related health documents.

The new Amendment 29 to Annex 9 – Facilitation to the Chicago Convention also addresses a wider range of facilitation provisions relating to the conduct of relief and repatriation flights, air travellers with disabilities, assistance to aircraft accident victims and their families, and the use of civil aviation for the trafficking in persons. The new SARPs will become applicable in November 2022.

The new public health standards adopted includes a requirement for countries to employ a multi-layered risk management approach when pursuing public health measures in the aviation sector to prevent or mitigate the spread of a communicable disease.

Further recommended is that States should issue digital vaccination certificates in line with WHO recommendations, and that the certificates should be interoperable with the specifications in the ICAO Technical Report Visible Digital Seal for non-constrained environments (VDS-NC).

The new public health Standards also update requirements relating to aircraft and facility disinsection and disinfection, emergency medical relief, and the establishment of airport public health plans for preparing for, responding to and managing communicable disease outbreaks.

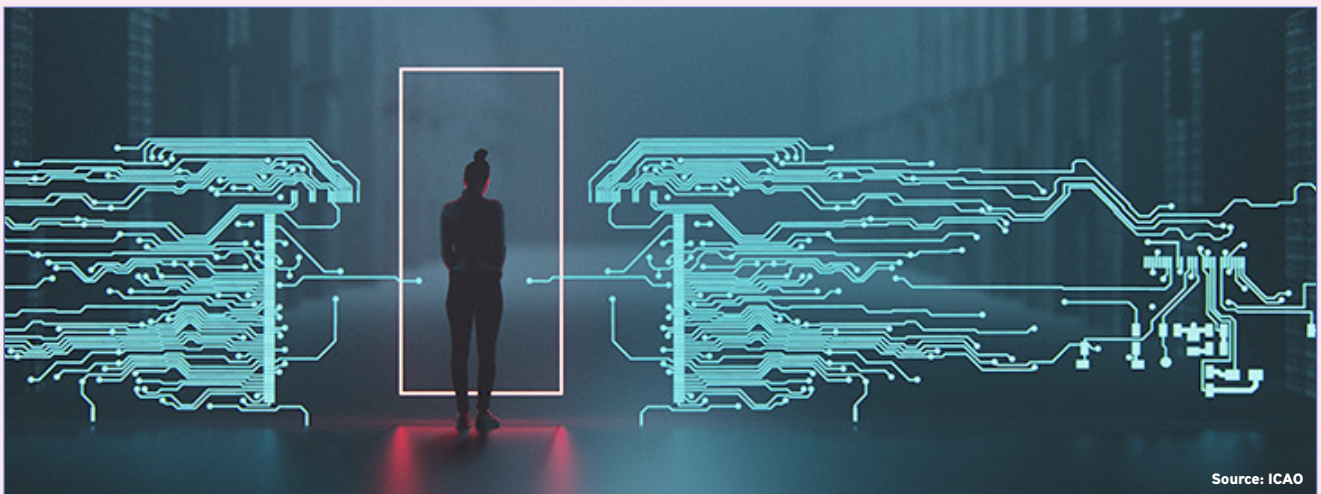
Regarding the inspection of digital health documents, Amendment 29 now requires countries to assist air-

lines in health proof evaluation to help deter fraud and abuse. Countries are also recommended to encourage airlines to have procedures in place to check and evaluate standardized health documentation related to air travel. It further recommends that governments consider automating the inspection of health-related documentation, or using contactless procedures.

With respect to the obligations placed on States to assure sufficient care and information for aircraft accident victims and their families, the Amendment now elevates former ICAO Recommended Practice 8.46, which requires countries to set out appropriate legislation and policies in this area, to an international Standard.

The international regulatory framework on facilitation of transport of persons with disabilities was amended such that five previous recommended practices have now been elevated to Standards, including provisions relating to the accessibility of flight service-related information for the hearing- and vision-impaired, the basic right to assistance for disabled travellers, and the establishment of designated vehicle parking and drop off areas for disabled persons at passenger terminal buildings.

Lastly, the Annex 9 Recommended Practice concerning the establishment of measures to ensure that government procedures are in place to combat the trafficking in persons, now encourages States to realize this capacity based on a comprehensive strategy including clear reporting systems and relevant points of contact for airport and aircraft operators



Source: ICAO

15/03/2022**ICAO COUNCIL ADOPTS NEW AMENDMENTS SUPPORTING ELECTRONIC PILOT LICENSES, FLIGHT OPERATIONS, AND CONTINUING AIRWORTHINESS RESPONSIBILITIES**

The ICAO Council made progress last week on adopting new Amendments to several safety-related Annexes of the Chicago Convention in relation to new international standards for electronic pilot licenses, flight operations, and continuing airworthiness responsibilities. In most cases the new standards will become applicable on 3 November 2022. Amendment 178 to Annex 1 – Personnel Licensing of the Chicago Convention introduces new provisions for the use of electronic pilot licenses, which are increasingly being used by ICAO Member States. It sets out a new common format to provide for simplified license verification by other States.

In Amendments to Annex 6 – Operation of Aircraft to the Convention, safety features have been proposed including the use of ground proximity warning systems by smaller aeroplanes, and the introduction of a runway overrun awareness and alerting system intended to reduce runway excursion incidents and accidents. There is also clarification on the need for an aircraft pilot to consider the level of rescue and fire-fighting services available at the airports being used.

Another Annex 6 Amendment established comprehensive provisions aligned with the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284), ensuring helicopter operations with dangerous goods receive the same oversight as other aircraft. The same Amendment also established new guidance on alternate safe landing considerations for off-shore helicopter operations.

Further Amendments adopted by the Council, to Annexes 7 – Aircraft Nationality and Registration Marks and 8 – Airworthiness of Aircraft of the Convention, concerned the development of a standardized certificate of de-registration to aid States in clearly communicating the transfer of an aircraft from one State to another (Annex 7), and assuring that mandatory continuing airworthiness information relating to aircraft modification or repair will be distributed (Annex 8).

Additional new provisions in Annex 8 concerned the now required availability of cargo compartment fire suppression system details to help improve cargo safety risk mitigation efforts.

16/03/2022**ICAO AND ILO TO ENHANCE COOPERATION ON CONTRIBUTING TO SUSTAINABLE DEVELOPMENT AND GENDER EQUALITY IN AVIATION SECTOR LABOUR**

Data collection and the promotion of the sustainable development benefits provided by aviation professions, particularly for women, are the focus of a new agreement signed by ICAO Council President Salvatore Sciacchitano and the International Labour Organization (ILO) Director-General Guy Ryder.

Under the new Memorandum of Understanding (MoU), ICAO and the ILO will work to leverage off their complementary efforts and policy coherence within their respective mandates for global aviation and labour, with the ultimate objective being more effective support to States now seeking to achieve the UN Agenda 2030 Sustainable Development Goals (SDGs).



Source: ICAO

18/03/2022**U.S. DEPARTMENT OF TRANSPORTATION ANNOUNCES PROPOSED RULE TO IMPROVE ACCESSIBILITY OF LAVATORIES ON SINGLE-AISLE AIRCRAFT**

The U.S. Department of Transportation today announced that it is publishing a Notice of Proposed Rulemaking (NPRM) that would improve the accessibility of lavatories for people with disabilities traveling on new single-aisle aircraft.

Currently, there is no federal requirement that lavatories on single-aisle aircraft be accessible to individuals with disabilities. The inability to use the lavatory on long flights can present significant challenges to passengers who use wheelchairs. Some passengers, knowing that they will not be able to use the toilet during a flight, dehydrate themselves so that they do not need to urinate. These actions can cause many adverse health effects. Other passengers use adult diapers or catheters, which they may find degrading and uncomfortable. Still other wheelchair users avoid flying altogether.

Single-aisle aircraft now operate the vast majority of domestic flights, including a large share of long, cross-country flights. The proposed rule would require airlines to make at least one lavatory on new single-aisle aircraft with 125 or more passenger seats large enough to permit a passenger with a disability (with the help of an assistant, if necessary) to approach, enter, and maneuver within the aircraft lavatory, to use all facilities in that lavatory, and to leave using the aircraft's onboard wheelchair.

21/03/2022**ONEWORLD MEMBERS TO PURCHASE UP TO 200 MILLION GALLONS OF SUSTAINABLE AVIATION FUEL PER YEAR FROM GEVO**

Members of the oneworld® Alliance plan to purchase up to 200 million gallons of sustainable aviation fuel per year from Colorado-based renewable fuels producer Gevo, in the second such joint commitment by the global airline alliance in four months.

Delivery of the fuel is expected to commence in 2027, for a five year-term. oneworld members Alaska Airlines, American Airlines, British Airways, Finnair, Japan Airlines and Qatar Airways expect to utilise the sustainable aviation fuel for operations in California including San Diego, San Francisco, San Jose and Los Angeles International Airports.

21/03/2022**RYANAIR AIMS TO BECOME CARBON NEUTRAL BY 2050**

Ryanair today (21 Mar) announced its decarbonisation strategy – Pathway to Net Zero. Developed to reduce its carbon emissions and the impact of its operations on the environment, this strategy outlines four core strategic pillars underpinning the airline's ambitious goal of net carbon zero by 2050:

- 34% decarbonisation through the increased use of sustainable aviation fuels (SAF)
- 32% decarbonisation through technological & operational improvements
- 24% decarbonisation through offsetting & other economic measures
- 10% decarbonisation through the introduction of better Air Traffic Management

With more than 1/3 of its decarbonisation to come from the increased use of SAF, Ryanair is working with the EU and fuel suppliers to accelerate supply of SAF. As part of this, Ryanair established the Ryanair Sustainable Aviation Research Centre in partnership with Trinity College Dublin. This partnership will deliver research in SAF, Zero Carbon Aircraft Propulsion Systems and Noise Mapping.



gevo®

Source: oneworld

22/03/2022**IATA ANNOUNCES FIRST INDUSTRY-DEVELOPED PASSENGER CO₂ CALCULATION METHODOLOGY**

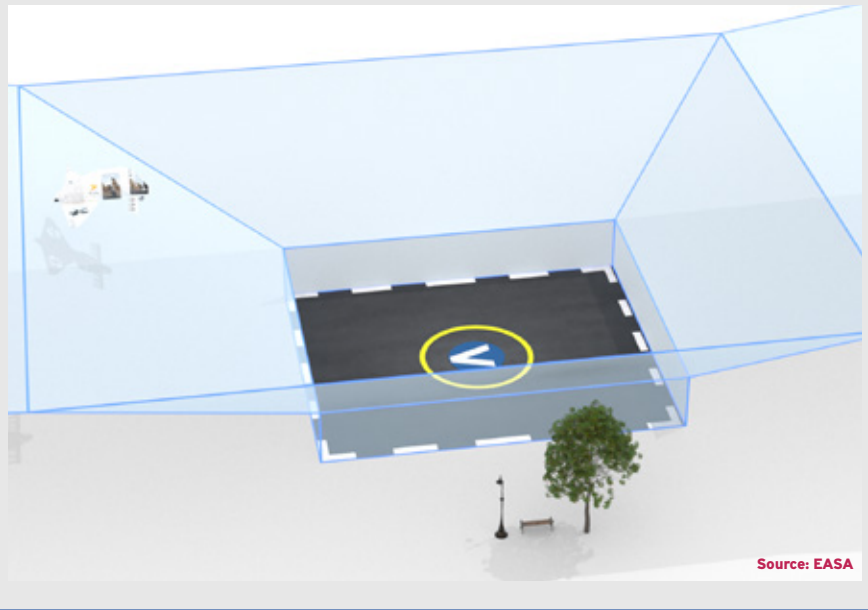
The International Air Transport Association (IATA) announced the launch of the IATA Recommended Practice Per-Passenger CO₂ Calculation Methodology. IATA's Methodology, using verified airline operational data, provides the most accurate calculation methodology for the industry to quantify CO₂ emissions per passenger for a specific flight.

As travelers, corporate travel managers, and travel agents are increasingly demanding precise flight CO₂ emission information, an accurate and standardized calculation methodology is critical. This is particularly true in the corporate sector where such calculations are needed to underpin voluntary emissions reductions targets.

24/03/2022**EASA ISSUES WORLD'S FIRST DESIGN SPECIFICATIONS FOR VERTIPOINTS**

The European Union Aviation Safety Agency published the world's first guidance for the design of vertiports, the ground infrastructure needed for the safe operation of Urban Air Mobility services such as air taxis in locations across Europe, including in urban areas.

The Prototype Technical Design Specifications for Vertiports offers guidance to urban planners and local decision-makers as well as industry to enable the safe design of vertiports that will serve these new types of vertical take-off and landing (VTOL) aircraft, which are already at an advanced stage of development.

**25/03/2022****TIACA ANNOUNCES THE TAKE-OFF OF THE BLUESKY PROGRAM**

In response to air cargo industry's call for an industry-specific tool to measure and recognize their sustainability progress, The International Air Cargo Association (TIACA) announces the take-off of the BlueSky program, the industry's first sustainability assessment, validation and verification program.

The BlueSky Program is a tool that the air cargo industry can use to track their sustainability progress, benchmark against peers and accelerate the industry's transformation.

The BlueSky program, to be launched in phases, is a multi-tiered platform which renews every two years.

Assessment Guidelines – the first tier, is a way for companies to begin their verification and validation through awareness and self-assessment.

Desktop Verification – the second tier, begins with an online assessment and verification of the documents provided. A performance score in each area will be provided through a company dashboard.

Onsite Validation – the third tier, includes the desktop verification and an onsite independent audit. A performance score in each area as well as an excellence badge, detailed report with recommendations on how to become more sustainable will be provided through an enhanced company dashboard.



28/03/2022

NEW STUDY CONFIRMS CO₂ REDUCTION BENEFITS OF SHIFTING SHORT-HAUL FLIGHTS TO RAIL ARE LIMITED

With an increase in global decarbonisation targets, transportation has come under increased scrutiny, and in particular aviation. One solution that has been proposed to reduce greenhouse gas emissions from transport is a modal shift from air to rail. This has already been encouraged both through massive investment in rail infrastructure and by bans and taxes on short-haul flights in certain countries, with potentially more to follow.

However, a new study commissioned by European aviation associations and carried out by eco-

nomics and finance consultancy Oxera, confirms that the extent to which rail travel can substitute for air travel is limited.

The report, “Short-haul flying and sustainable connectivity“, highlights the fact that the picture is far more complex than simply shifting from one transport mode to another. Building new railway lines has a high environmental cost due to the CO₂ emissions associated with cement and steel production, and emissions from the fuel used for construction of infrastructure. The study also identifies significant im-

pact on biodiversity and damage to wildlife habitats as additional environmental factors.

For many short-haul air routes with a lower traffic frequency, or at airports without a good high-speed rail connection, rail cannot be economically viable as it is based on a different business model with lower occupancy and speed rates. Moreover, there is no guarantee that passengers will switch from air to rail, choosing to travel by car instead, which could lead to higher CO₂ emissions.

28/03/2022

FIRST A380 POWERED BY 100% SUSTAINABLE AVIATION FUEL TAKES TO THE SKIES

airbus has performed a first A380 flight powered by 100% Sustainable Aviation Fuel (SAF).

Airbus’ A380 test aircraft MSN 1 took off from Blagnac Airport, Toulouse, France at 08h43 on Friday 25 March. The flight lasted about three hours, operating one Rolls-Royce Trent 900 engine on 100% SAF.

27 tonnes of unblended SAF were provided by TotalEnergies for this flight. The SAF produced in Normandy, close to Le Havre, France, was made from Hydroprocessed Esters and Fatty Acids (HEFA), free of aromatics and sulphur, and primarily consisting of used cooking oil, as well as other waste fats. A second flight, with the same aircraft, is scheduled to take place from Toulouse to Nice Airport, on the 29 March to test the use of SAF during take-off and landing.



Source: Airbus



Harry Theocharis receives the 2022 Hermes Award

During the 2022 Air Transport Awards on Thursday 10 February held in Ekali, Greece, Harry Theocharis received the 2022 Hermes Award for his contribution to air transport.

H.E. Harry Theoharis, former minister of Tourism of the Hellenic Republic said accepting the 2022 Hermes Award: "I am proud for the success of Greek tourism throughout the difficult period of the pandemic. It has been outcome of a collective effort by the private and public sectors, that was enhanced by modern and aesthetic advertising tourism campaigns. Solid foundations have been laid and the prospects of the Greek tourism's future are highly positive for the benefit of the industry and our people".





Jeff Poole President Hermes – Air Transport Organisation bestowed with the 2022 “Katerina & George Iatrou” Lifetime Achievement Award

During the 2022 Air Transport Awards on Thursday 10 February held in Ekali, Greece, Jeff Poole was bestowed with the 2022 “Katerina & George Iatrou” Lifetime Achievement Award.

Jeff Poole said accepting the award: “I am delighted to accept this very special award today following an extensive international career in the aerospace, aviation and tourism industries. I have been honoured and privileged to serve with and for many true professionals and great organisations. A Lifetime Achievement Award is always unique and special but this one is also very poignant as it is in memory of Katerina and George Iatrou, the wonderful parents of Dr Kostas Iatrou.”





Dr Iatrou Director General of Hermes receives the 2022 Keramianakis Award

During the 2022 Air Transport Awards on Thursday 10 February held in Ekali, Greece, Dr Kostas Iatrou, Director General of Hermes was bestowed with the 2022 Keramianakis Award of Hellenic Aviation Society for his contribution to air transport.

Dr Andreas Papatheodorou, President of Hellenic Aviation Society said: "When referring to the air transport sector, Dr Kostas Iatrou is undoubtedly a class of his own: based on his unique personality and meticulous work in ATN – Air Transport News and Hermes – Air Transport Organisation, he has managed to bring together all the key stakeholders of the air transport business ecosystem, thus enhancing their mutual dialogue and setting the fundamentals for a better future in the post COVID-19 world. In this context, the Executive Board of Hellenic Aviation Society has unanimously agreed to award this year's prestigious Keramianakis Award to Dr Kostas Iatrou for his invaluable services to the air transport sector."





Hermes Board elects Eamonn Brennan as Vice President and Professor Andreas Papatheodorou as Treasurer of the Organisation

“Welcoming the announcement on becoming a Vice President of Hermes, Eamonn Brennan, Director General EUROCONTROL said ‘Hermes is a really unique organisation representing views from all across the international aviation sector. Our sector has many challenges to contend with such as how to decarbonise, how we can best recover from the pandemic, rising fuel prices, airspace closures due to military actions, and so on. It’s essential that policy makers can exchange their views and ideas to consider the best way our industry can meet all of these challenges effectively and Hermes is a great platform to help achieve that goal.’”



“It is a great honour and pleasure for me to join Hermes – Air Transport Organization’s Executive Board as its new Treasurer. I very much hope that the gradual recovery of the air transport sector from the COVID-19 pandemic will boost Hermes leading to a rise of its membership as well as to the creation of a solid financial position” added Professor Andreas Papatheodorou.





March 31st, 2022

The Director General of Hermes participates in the Aviation-Event 2022 CLJ



Dr Kostas Iatrou, Director General of Hermes, moderated a one-to-one keynote with Rafael Schwartzman, Regional Vice President Europe, IATA. In his opening remarks, Dr Iatrou said that new challenges are ahead for air transport in 2022 with the main topic being the sustainable development of the sector, which is the theme of the 2022 Hermes recommendations. Keynote speakers were also Dr David Ciceo, CEO of Cluj International Airport & Hermes member and Luis Felipe de Oliveira, Director General of ACI & Hermes member.

Dr. Ciceo provided an overview of Romania’s aviation industry and its growing relevance to the country’s ecosystem, delivering important connectivity internationally and domestically, otherwise not served by other modes of travel.

Mr. de Oliveira presented the key achievements, progress and focus areas of the ambitious agenda for ACI’s member airports.

The event was hosted by Cluj International Airport and Romanian Airports Association.



June 9th, 2022



2022

HERMES AGM & LEADERS FORUM Sustainability of the Aviation Industry

Thursday 9 June · 2022 Brussels · EUROCONTROL Headquarters

Host Organisation





Thursday 9 June 2022 - EUROCONTROL Headquarters

2022 Hermes AGM & Leaders Forum: SUSTAINABILITY OF THE AVIATION INDUSTRY

11:00-11:10 WELCOME ADDRESSES

- Dr Kostas Iatrou, *Director General, Hermes - Air Transport Organisation*
- Eamonn Brennan, *Director General, EUROCONTROL & Hermes VP*

11:10-11:20 SETTING THE SCENE - 2022 HERMES RECOMMENDATIONS

11:20-12:00 KEYNOTE ADDRESSES

- Henrik Hololei, *Director-General - DG MOVE, European Commission & Hermes Board Member*
- Luis Felipe de Oliveira, *Director General, ACI*
- Simon Hocquard, *Director General, CANSO*
- Mehmet Nane, *CEO, Pegasus Airlines*
- Salvatore Sciacchitano, *President of the Council, ICAO (virtual)*

12:00-12:05 FAMILY PHOTO

12:05-13:30 LUNCH

13:30-15:15 LEADERS PANEL

MODERATOR: Eamonn Brennan, *Director General, EUROCONTROL & Hermes VP*

- Nick Calio, *President & CEO, A4A*
- Abdul Wahab Teffaha, *Secretary General, AACO*
- Montserrat Barriga, *Director General, ERA*

15:15-15:30 CONCLUSIONS

Jeff Poole, *President, Hermes - Air Transport Organisation*

15:30-16:00 COFFEE BREAK

16:00-17:00 2022 HERMES AGM

- Opening of the AGM - Dr Kostas Iatrou, *Director General*
- Election of AGM President - Jeff Poole, *President*
- Annual Report of Hermes - Dr Kostas Iatrou, *Director General*
- Approval of the Financial Statements for the Year Ended 31 December 2021 and Appointment of Auditors for 2022, Prof Andreas Papatheodorou, *Treasurer*
- Election of Members to the Board of Directors
- Welcome of New Members
- Token of Appreciation - Jeff Poole, *President*
- Any Other Business
- Close of the AGM

17:00-20:00 COCKTAIL & DINNER RECEPTION



LUIS FELIPE DE OLIVEIRA

Director General
Airports Council
International
(ACI) World





SUSTAINABILITY OF THE AVIATION INDUSTRY

1. How do you define sustainability in aviation?

Modern definitions of sustainability recognize that we must take a holistic approach that balances environmental, social, and economic factors to ensure lasting prosperity. These are often referred to as the three pillars of sustainability, or sometimes as people, planet, and profit.

Environmental Sustainability is focused on living within our means,

ensuring that we consume natural resources such as fuels, land, raw materials, and water, at a sustainable rate, and limit damaging activities.

Social Sustainability considers the contribution of an organization to the well-being of society as a whole, by taking a balanced and ethical approach. This includes ensuring the wellbeing of employees, customers, and local communities.

Economic Sustainability requires an organization to use resources efficiently to sustain its operations and (if relevant) return a profit. It also considers the organization's role as a contributor to the local, national, and international economy, both directly and indirectly.

Aviation sustainability requires therefore a balanced business model which limits the impact of aviation on the environment and people,

while it maximizes the social and economic benefits it brings to society and the planet.

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

Investment in sustainability does increase efficiency and allows for the business to be maintained and grow. There is no other way for the sector to thrive. Sustainability investment increases the value that aviation brings to society and reduces its impact on environment. It is good for business overall, but a business that looks beyond just profitability. Profits have a limited benefit for any business if it cannot be sustained in the long term. Aviation has an ever-growing potential to provide significant social and economic benefits. Sustainability will enable this positive impact to be increased and sustained. However, the pandemic has put financial pressure on the entire aviation ecosystem and investment will be scarce on the road to recovery. It is important that airports also receive government incentives to deal with the situation. In addition, green financing will play a key role in achieving our global goal of zero carbon emissions by 2050.

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

There are several best practices that airport operators and other stakeholders can implement to reduce emissions, most of them focused on energy efficiency, reduction of energy consumption, use of renewable energy and electrification of ground



vehicles. Bellow some practical examples:

- Installation of solar panels (nearby fields, parking/terminal rooftops, etc.)
- Installation of LED lighting in terminals and apron
- Electrifying ground service equipment and vehicle fleet
- Installing common use charging points for airside and landside vehicles
- Sustainable taxiing
- Becoming single-use plastic free facilities

- Installing waste plants onsite
- Smart buildings (sensors, energy efficient materials, etc.)
- Upgrades to HVAC systems and water systems for more energy efficiencies

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

Different airports will have different pathways and that's part of the solution to decarbonize. The implementation of different sustainability practices for airports will depend on their region, level of decarbonization of the grid, availability of renewable energy onsite, airport size, technology maturity development of some solutions, business cases, national strategies, stakeholder engagement, and availability of finance. Some practices are easily replicated, such as the ones related to improve efficiency and reduce energy consumption. For best practices to be fully implemented, there should be some degree of flexibility to adjust them to different realities.

5. What are the regulatory impediments to increasing sustainability?

Decarbonizing the aviation industry will require agile mechanisms that can produce the appropriate framework, responding to the pace of development and implementation of innovative solutions and new technologies. States should support and facilitate a regulatory environment where aviation infrastructure and operations are adapted to and aligned with the global goal to reduce the sector's environmental impact and build resilience and prepar-



edness to prevent, resist, respond, and recover from the inevitable impacts of climate change or other disruptive events.

Creating fertile grounds for all forms of investments in airports and the broader aviation ecosystem will be paramount. This means a policy framework that incentivizes airports and aviation stakeholders to build resilience and implement more efficient and innovative operating procedures, technologies, and methods will permit the industry to thrive, reduce costs where possible, become more efficient as a whole and continue its development, driving well-needed global economic growth.

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

Ensuring the environmental, economic, and social sustainability of the aviation industry must be accompanied by the availability of appropriate policy and a performance-

based regulatory framework, allowing for certainty for the necessary investments to be made on sustainable sources of energy for aviation. Some degree of consistency around the globe are also required to create a level playing field and avoid unintended impacts of different national policy positions. At the same time these policies should have a degree of flexibility to adapt to the changes and technology evolution while facilitating its application.

These tools need to incentivize innovation to accelerate and focus on solutions which address the main challenges and risks to the overall air transport system, allowing the industry to implement approaches in a timely and harmonized way while ensuring global applicability.

An agile and performance-based policy framework will not only help the industry recover from its current low in a shorter time but should strive to ensure the development of a more sustainable and resilient industry in the long-term. Environmental, economic, and social sustainability is at the heart of many industry concerns



and ensuring that the policy and regulatory machinery in place is structured to accompany the industry on the path to long-term sustainability is essential. Finally, it is important to point out that taxing the sector is not a solution, especially because the current tax system does not bring back investments in sustainable aviation. Government policies must support the industry to move forward and contribute to the economic and social development of the communities we serve.

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

There are several collaborative approaches that aviation stakeholders can take. Increasing the collaboration and information sharing amongst aviation stakeholders can greatly improve efficiency and reduce CO2 emissions at several stages of the flight operation. The Airport Collaborative Decision Making (A-CDM) showcases the importance of

the relationships between airport operators, airlines, ground handlers and air traffic controllers sharing data to increase predictability in the airport operations, thereby reducing delays and enhancing efficiency. The focus of A-CDM allows airport partners to share data on the state of their operation, so that each organization has a more complete operational picture across the airport system. Overall, A-CDM can achieve improvements in flow control and optimise capacity of runways, terminals, gates and airspace. Again, governments play a key role here. Joint efforts will surely support the decarbonization of the sector, thus contributing to a better and sustainable future for generations to come.

8. 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?

Investing in increasing efficiency is a short-term solution that can make

a good business case, as it can reduce both costs and emissions when payback periods are considered. Circular economy alternatives, such as energy as a service (Schiphol) can facilitate their implementation without requiring the upfront investment.

The decarbonization of the electricity grid, something that is not under their direct control, is the most important element to enable airport operators to decarbonize. If governments invest into that in the short term and more evenly across the globe, there is more chance for the global airports to decarbonize.

The most promising alternative in the short-term to reduce aviation emissions is Sustainable Aviation Fuel, a solution which can be drop-in, requiring minimal infrastructure adaptation from airports. SAF requires substantial investment to become a reality across the globe, hence policy consistency and clarity on incentives, mandates or other mechanisms need to be considered from local, regional, and international perspectives.



Air Transport Symposium 2022

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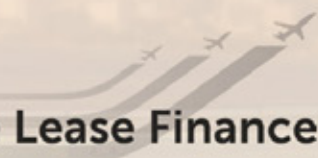
THE NEW ERA: BUILDING THE FUTURE OF AIR TRANSPORT

Ekali, Greece / 10 February 2022

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In spite of experiencing a fourth wave of the COVID-19 pandemic, the world is now more optimistic regarding the way forward; increased levels of vaccination and standardization of health and safety procedures gradually boost confidence in air travel and allow the industry to think about how to build back better.

The 2022 Air Transport Symposium entitled: “The new era: Building the future of air transport” will host leading executives in the airline and airport sectors who will focus on this very issue of reshaping the future of air transport in a creative yet realistic setting.



WELCOME ADDRESSES

Dr Kostas Iatrou, *Director General, Hermes – Air Transport Organisation*

Dr Christos Tsitouras, *Governor, Hellenic Civil Aviation Authority*

SETTING THE SCENE

Professor Andreas Papatheodorou, *Chairperson of the Symposium & President, Hellenic Aviation Society*

HELLENIC AVIATION SOCIETY KERAMIANAKIS AWARD CEREMONY

KEYNOTE ADDRESS

Pieter Elbers, *President & CEO, KLM*

LEADERS SESSION

MODERATOR: **Ioanna Papadopoulou**, *Director, Athens International Airport*

-**Adel Ali**, *CEO, Air Arabia*

-**Mehmet Nane**, *CEO, Pegasus Airlines*

-**Dr Yiannis Paraschis**, *CEO, Athens International Airport*

-**Kadri Samsunlu**, *CEO, iGA Istanbul Airport*

CALL FOR ACTION AND CONCLUSION

2022 AIR TRANSPORT AWARDS CEREMONY



Dr Kostas Iatrou welcomed the participants saying that the pandemic has shown the importance of human communication and the role of aviation as the business of freedom and democracy. And this symposium will discuss the future of air transport on a more solid basis.



Dr Christos Tsitouras, Governor of the Hellenic Civil Aviation Authority, in his address stressed that their role focuses on setting up in Greece a agile and effective framework that will enable the delivery of the needed change in the post covid era while ensuring security, safety and environmental protection.



Prof. Andreas Papatheodorou, Chairperson of the Symposium and President of the Hellenic Aviation Society, started off by saying that after the collapse of aviation in 2020, an annus horribilis, and with recovery expected by 2024, this year will set the fundamentals for full recovery and return to new normality. Even if traffic returns to the 2019 levels, things are never going to be the same and aviation needs to face three set of challenges. He then presented these challenges: first the business challenges as the whole aviation system

experienced severe profit and revenue reduction and now needs to survive beyond state subsidies and support. Innovation is needed to find alternative ancillary sources of revenue and even reshape the business model. The environmental challenges have become even more pressing as the world has experienced abnormal high temperatures, forest fires and the industry needs to grow within a sustainable context to achieve neutral carbon growth. The increase in fuel prices and the threat of a new energy crisis should act as an incentive



for SAFs. He stressed that environmental challenges intersect with technological advancements, such as unmanned vehicles, drones, air taxis, development of new even supersonic aircraft. These advancements also need a new solid regulatory environment so that the market participants keep operating in a safe and secure environment.

He concluded by saying that if aviation wants to progress further it needs to combine the PPPs of the past with the BBBs (Building Back Better) of the post covid era, to reconsider partnerships, to build stronger ties with local economies in a sustainable context.

The keynote speaker *Peter Elbers*, President and



CEO of KLM, started off by expressing his hope that the symposium would coincide with the end of the pandemic. The challenges were present before Covid-19 but were accelerated during the crisis. The Covid crisis has given airlines the time to think and prepare for environmental challenges. There is a lot of pressure around Europe on airlines to change much quicker than the industry could do so far. The only way to achieve this is through the collaboration of all stakeholders. KLM has embraced an ambitious plan in terms of in-

creasing SAFs and have already introduced SAFs in its cargo business, much ahead of the initial business plan. KLM was also the very first to operate a passenger flight performed on sustainable synthetic kerosene, first step in the change from biosynthetic fuels to synthetic fuels. He added that there are business challenges to be fulfilled and even after customers come back- and people do want to fly again- business challenges go hand in hand with the technological ones.





Mrs Ioanna Papadopoulou, Director Communications & Marketing: Athens International Airport was the moderator of the Leaders panel. The first question she asked was about the meaning of the term “Building Back Better” in aviation. Adel Ali, CEO of Air Arabia, lamented the complacency of the sector before the pandemic, airlines that have to anticipate issues and “think beyond the seat factor and cutting down cost but look at having good sustainable business that makes profit”.



For the airports, Kadri Samsunlu, CEO iGA – Istanbul Airport, said that since if airlines do not use airports, airports do not exist, for him the “Building Back Better” consists in the private and public sector finding ways to better work together to better prepare the sector for the future. Airports are asked to help airlines, but they are left on their own to deal with their commitments. Airlines and airports should have a better integration as they are dealing with the same customer



Mehmet Nane, CEO of Pegasus Airlines, said when Turkey and hence their airline faced crisis in 2016 it was decided to work on the 3 Cs, cost, cash and capacity and the airline came out of the crisis stronger. With this global crisis two more Cs, have been added: Complacency and customer, passengers and domestic employees. Airlines have realized they need to provide a health secure environment to both customers and employees. “The way ahead is the 3 Cs plus 2 Cs.”



Dr Yiannis Paraschis, CEO of Athens International Airport, said that the pandemic crisis will have a lasting impact on aviation and on the physical economy in general in the medium and long term. These effects are related to the disruption of the supply chains worldwide that will lead to inflation, disruption in the energy sector, in the workplace and the labour market and all that with the increased push for sustainability. Airlines and airports never thought that would be exposed to such risks, to go from 100% to 2 or 0% activity and agreed with the complacency mentioning



“they were taking many things for granted”. They thought they were operating in worldwide regulated industry which had achieved some form of standardization, and then with Covid each country set its own rules. Adaptability, flexibility, resilience are key attributes that need to be incorporated in aviation business models.

Mrs Papadopoulou commented that the industry should not simply get resilient, it should “aim at becoming antifragil” and then turned on the subject of the new generation of aircraft and fuel and whether they will accelerate the shift from dehubbing towards point-to-point travel, a trend that started during the pandemic., *Mr Nane* answered that there is no commercialised new fuel technology yet. The synthetic part of SAFs is very crucial and the amount of SAFs manufactured is not enough to cover the current requirements. Fuel manufac-

turers, engine manufacturers OEM manufacturers need to come together with the airport to find an amicable solution and decide what they want to achieve and to do and demonstrate it. He highlighted that while sea freight produces three times more pollution than aviation, the public insists that aviation is the great pollutant. Mr Ali agreed saying that the aviation has failed to get the message across that “it are not the bad guy” when it comes to pollution. *Mr Samsunlu* said that the industry is working now on rebuilding connectivity. The new technology is favouring point-to point in certain segments of the business and airlines such easyJet, Ryanair and Pegasus keep adding destinations between destinations. But the hub system still works for intercontinental flights and there are still benefits. *Mr Ali* stressed that “airlines go where the customer wants to go and the customer profile is changing”. Still long range narrow body aircraft might change the scenery. He added that low cost carriers that have not been successful in Europe-USA destinations with the new aircraft that have lower cost embedded they will try it and there will be more competition, which is good for airports with Mr Ali adding that the definition of long haul has changed from six to eight hours to fourteen to fifteen hours. He also said that although competition is good for the industry and for the customer, there are areas that need collaboration and coordination to faster generate technologies. As the quality of life improves, aviation market will grow, it is a natural progress for all segments but





this will put pressure on the busy airports on environmental issues.

Dr Paraschis said that certain tendencies prevailed in aviation after the pandemic: leisure point-to-point and short haul with summer being more resilient than winter. Whatever business model and technology available can better serve these features, these will have a competitive advantage. There are strong tendencies for certain technologies and business models. As for business travel he pointed out two elements: it's substitution by digital services and the fact that 80% of the emissions are generated by long haul flights.

The next question centered on the workplace and the talent crisis the industry is facing, with “companies competing for people” together with the “great resignation” movement. The panelists pointed out companies will be more caring for their personnel offering flexible working schemes. *Mr Nane* pointed out that that generation Z has different habits, get bored easily and that when work from home the loyalty to the office to the team gets weaker. *Dr Paraschis* added that while digitalization has changed the way aviation works, it has made it less attractive to younger skilled workers. As *Mr Nane* put it “the E-commerce and delivery boost are sucking talented digital, marketing people”. Thus, the “great resignation” becomes the “great renegotiation” between the companies and the people. With life work balance reconsider people will want to travel more and they will need income to do it. And still despite all the digital solutions, “not everything can be brought to a digital level” and aviation remains a people's business and needs people to operate and people want to communicate. The

key element is to offer a more personalized service and to train human resources to provide innovative solutions to improve customer experience. Another point mentioned is with aviation having to keep with technological solutions and giving higher wages, cost will increase and once the cost is carried to the customer, it is the beginning of the vicious cycle.

When asked about the lessons learnt from the crisis *Mr Ale* answered that surprisingly the airline industry was more fragile before the pandemic than after the pandemic. The airlines that will survive are those that will incorporate in to their normal practice the lessons learnt and have realized that airline “should be run like a business and not as airline”. *Mr Nane* answered that the cost reduction practices will continue. While office space will decrease, there will be extra costs to help socialization within departments and between departments.

Mr Samsunlu said that aviation is now careful of how force majeure is defined and has realized that even small emerging events around the world should be monitored to which *Dr Paraschis* agreed saying that the industry is not fully protected from major events of lasting duration such as sustainability threats and climate change.

In his concluding remarks *Prof. Papatheodorou* stated that aviation has moved away from complacency and constant growth to a new world of resilience. Aviation has become more agile, more adaptive and more effective realizing the need for the customization of services, to move away from polarization to more orchestrated efforts and that sustainability is “no longer license to grow but license to operate”.



EVENTS 



2022 AIR TRANSPORT AWARDS



THURSDAY 10 FEBRUARY 2022



Ekali - Greece
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2022 Air Transport Awards

*Elbers, Theoharis, Air Arabia and iGA Istanbul Airport
among the winners*

Ekali, 10 February 2022

This year's awards ceremony for the Air Transport Awards took place next to the inaugural 2022 Air Transport Symposium with the participation of industry leaders.

The **2022 Air Transport Awards** are in partnership with **Hermes – Air Transport Organisation** and **ATN – Air Transport News**.

Welcoming the participants, Dr Kostas Iatrou, President of the 2022 Air Transport Awards:

“This year we celebrate the tenth anniversary of the awards.

I am pleased that all these years we recognised the leaders, companies and organisations that contributed to the development of air transport”.



Dr Yiannis Paraschis, CEO, Athens International Airport said: “It is indeed with great honour that I accept this highly prestigious award (**ATN Individual Award**)! Having experienced for more than two years now a crisis of unprecedented scale and world-wide magnitude, it has become more than evident that “weathering the storm” is never an “one individual’s” business. This distinction acknowl-



edges the firm commitment of a highly capable and dedicated team of professionals and it belongs, first and foremost, to the Athens International Airport staff and the total of 13,000 employees from 300 public and private sector



operating entities, all members of the Athens airport community”.

Commenting on the **ATN Corporate Award**, **Pegasus Airlines** CEO Mehmet T. Nane said: “We are proud to be a part of this special event and to receive such an important award at the 2022 Air Transport Awards” and continued: “We left behind a busy and somewhat strenuous year, which we have spent in the shadow of the pandemic and economic difficulties. Despite all the challenges, 2021 was a year of recovery for our sector. As Pegasus Airlines, in 2022, we will continue to expand and renew our fleet with new generation, more environmentally friendly aircraft; to offer unique digital solutions so that our guests can ‘travel with minimum contact’; and to work tirelessly with the goal of becoming the greenest airline of our country and our region”.

Henrik Hololei, Director-General for Mobility and Transport, European Commission said: “It is a real pleasure to accept this year’s **ATN International Organisation Award** on behalf of the **European Commission** and especially on behalf of my colleagues in DG MOVE. We continue to face extremely challenging times and we all hope that the depth of the crisis is behind us. Looking ahead, the recovery will be used to further accelerate the green and digital transition of the European aviation sector. The European Commission and DG MOVE will continue support these efforts.”

Jeffrey Goh, CEO of Star Alliance said: “**Star Alliance** is truly honoured to be a repeat winner of the prestigious **Alliance of the Year Award**. Continued recognition of this nature is testament to our innovative spirit and our shared commitment in improving the customer experience. This award encourages us as we collectively emerge from the deepest crisis our industry has ever encountered.”



“In spite of the Covid-19 pandemic, we have managed to continue our operations at the same speed as before without any problems. Although we are a young organization, we have become the most resilient airport in the world through our dynamic structure, our infrastructure which is suitable for technological developments, and our work leading the aviation industry. We are delighted to have been awarded internationally two years in a row on behalf of Turkey, the award of “**Airport of the Year**“. Being distinguished for this valuable



award for the second time is the biggest proof that we are succeeding with our iGA Istanbul Airport project.” said Kadri Samsunlu, CEO, **iGA Istanbul Airport**.

Adel Al Ali, Group Chief Executive Officer of **Air Arabia** said: “Winning the prestigious ‘**Air-line of the Year**’ award reflects the success of everyone at team Air Arabia as well as our continued commitment to quality and operational excellence. Since Air Arabia first introduced the low-cost business model to the Middle East and North Africa region, we continue working towards achieving our goal of making air travel accessible to everyone. This recognition further inspires us to bring even more innovative services that continue to underpin our industry leadership position”



H.E. **Harry Theoharis**, former minister of Tourism of the Hellenic Republic said accepting the 2022 **Hermes Award**: “I am proud for the success of Greek tourism throughout the difficult period of the pandemic. It has been outcome of a collective effort by the private and public sectors, that was enhanced by modern and aesthetic advertising tourism campaigns. Solid foundations have been laid and the prospects of the Greek tourism’s future are highly positive for the benefit of the industry and our people”.

Jeff Poole, President, Hermes – Air Transport Organisation: “I am delighted to accept this very special award today following an extensive international career in the aerospace, aviation and tourism industries. I have been honoured and privileged to serve with and for many true professionals and great organisations. A **Lifetime Achievement Award** is always unique and special but this one is also



very poignant as it is in memory of Katerina and George Iatrou, the wonderful parents of Dr Kostas Iatrou.”

Finally, Dr Kostas Iatrou was bestowed with the 2022 Keramianakis Award of Hellenic Aviation Society for his contribution to air transport.



In particular, the winners by category are as follows:

Pieter Elbers, President & CEO, KLM: “I am truly honored to be awarded for the **Leader of the Year Award** at the 2022 Air Transport Awards. I would like to dedicate this award to all my KLM colleagues; they are the heart of KLM. This award is a great testimonial for the outstanding work and great resilience of all of them throughout these past two very tough Covid19 years. They remained (stayed) focused on what we do best: **connect people, reunite families, strengthen business relationships and transport essential goods.**”

- ATN Individual Award: **Dr Yiannis Paraschis, CEO, Athens International Airport**
- ATN Corporate Award: **Pegasus Airlines**
- ATN International Organisation Award: **European Commission**
- Alliance of the Year: **Star Alliance**
- Airport of the Year: **iGA Istanbul Airport**
- Airline of the Year: **Air Arabia**
- Hermes Award: **Harry Theoharis**
- “Katerina & George Iatrou” Lifetime Achievement Award: **Jeff Poole, President, Hermes – Air Transport Organisation**
- Leader of the Year: **Pieter Elbers, President & CEO, KLM**

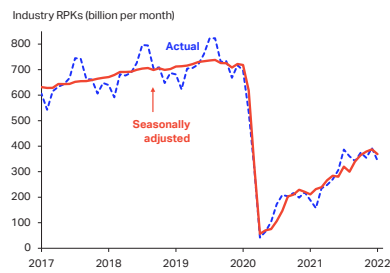
About Air Transport Awards

Air Transport Awards are the only international prizes that award all the main categories of the air transport industry.



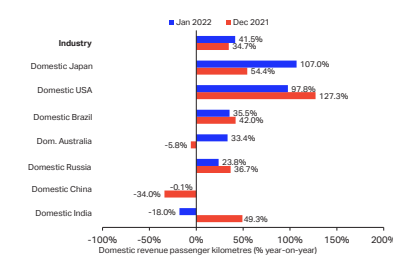
JAN 2022: Air Passenger Market Analysis

Chart 1 – Global air passenger volumes (RPKs)



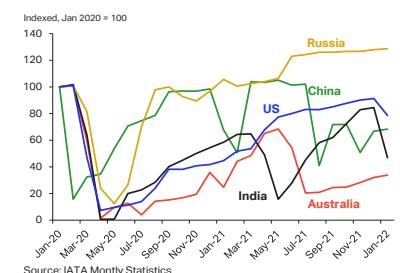
Sources: IATA Economics, IATA Monthly Statistics

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



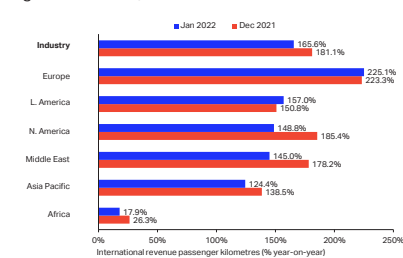
Sources: IATA Economics, IATA Monthly Statistics

Chart 3: Domestic RPKs, seasonally adjusted



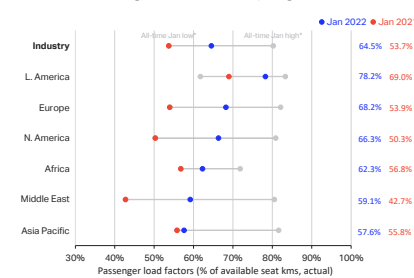
Source: IATA Monthly Statistics

Chart 4 – International RPK growth (airline region of registration basis), YoY %



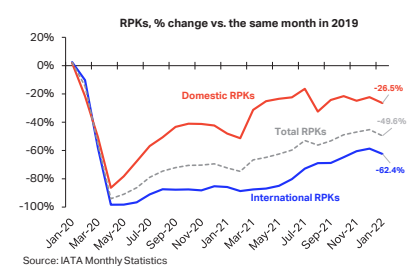
Sources: IATA Economics, IATA Monthly Statistics

Chart 5: Passenger load factor by region



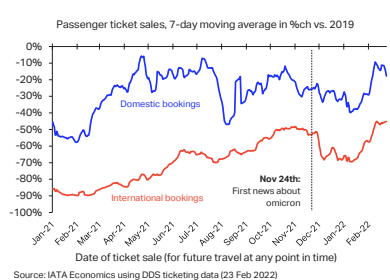
Sources: IATA Economics, IATA Monthly Statistics

Chart 6: RPK comparison with 2019 levels



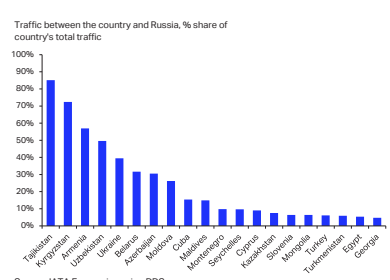
Source: IATA Monthly Statistics

Chart 7: Passenger ticket sales (dom. vs. int'l), global



Source: IATA Economics using DDS ticketing data (23 Feb 2022)

Chart 8: Countries with high share of traffic to and from Russia in 2021



Source: IATA Economics using DDS

Air passenger market detail - January 2022

	World share		January 2022 (% year-on-year)				% year-to-date			
	in 2021 ¹	RPK	ASK	PLF (%-pt) ²	PLF (level) ³	RPK	ASK	PLF (%-pt) ²	PLF (level) ³	
TOTAL MARKET	100.0%	82.3%	51.8%	10.8%	64.5%	82.3%	51.8%	10.8%	64.5%	
Africa	1.9%	21.3%	10.6%	5.5%	62.3%	21.3%	10.6%	5.5%	62.3%	
Asia Pacific	27.5%	19.4%	15.7%	1.8%	57.6%	19.4%	15.7%	1.8%	57.6%	
Europe	24.9%	161.4%	106.7%	14.3%	68.2%	161.4%	106.7%	14.3%	68.2%	
Latin America	6.5%	80.5%	59.2%	9.2%	78.2%	80.5%	59.2%	9.2%	78.2%	
Middle East	6.5%	128.1%	64.8%	16.4%	59.1%	128.1%	64.8%	16.4%	59.1%	
North America	32.7%	109.7%	59.0%	16.0%	66.3%	109.7%	59.0%	16.0%	66.3%	
International	37.8%	165.6%	87.9%	18.0%	61.7%	165.6%	87.9%	18.0%	61.7%	
Africa	1.5%	17.9%	6.3%	6.0%	60.5%	17.9%	6.3%	6.0%	60.5%	
Asia Pacific	3.2%	124.4%	54.4%	14.7%	47.0%	124.4%	54.4%	14.7%	47.0%	
Europe	18.6%	225.1%	129.9%	19.4%	66.4%	225.1%	129.9%	19.4%	66.4%	
Latin America	2.1%	157.0%	91.2%	19.4%	75.7%	157.0%	91.2%	19.4%	75.7%	
Middle East	5.9%	145.0%	71.7%	17.5%	58.6%	145.0%	71.7%	17.5%	58.6%	
North America	6.2%	148.8%	78.0%	17.0%	59.9%	148.8%	78.0%	17.0%	59.9%	
Domestic	62.4%	41.5%	27.2%	6.8%	67.4%	41.5%	27.2%	6.8%	67.4%	
Dom. Australia ⁴	0.7%	33.4%	43.0%	-3.8%	53.4%	33.4%	43.0%	-3.8%	53.4%	
Domestic Brazil ⁴	1.9%	35.5%	32.3%	2.0%	83.5%	35.5%	32.3%	2.0%	83.5%	
Dom. China P.R. ⁴	17.6%	-0.1%	3.2%	-2.0%	60.6%	-0.1%	3.2%	-2.0%	60.6%	
Domestic India ⁴	2.2%	-18.0%	-13.7%	-3.4%	65.6%	-18.0%	-13.7%	-3.4%	65.6%	
Domestic Japan ⁴	1.1%	107.0%	51.1%	11.7%	43.4%	107.0%	51.1%	11.7%	43.4%	
Dom. Russian Fed. ⁴	4.8%	23.8%	21.5%	1.6%	84.4%	23.8%	21.5%	1.6%	84.4%	
Domestic US ⁴	25.7%	97.8%	51.7%	16.1%	69.0%	97.8%	51.7%	16.1%	69.0%	

¹% of industry RPKs

²Year-on-year change in load factor

³Load factor level

⁴Note: The seven domestic passenger markets for which broken-down data are available account for approximately 46% of global total RPKs and 86% of total domestic RPKs

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.

▶ CONTINUED FROM PAGE 52



FEB 2022: Air Passenger Market Analysis

Chart 1 – Global air passenger volumes (RPKs)

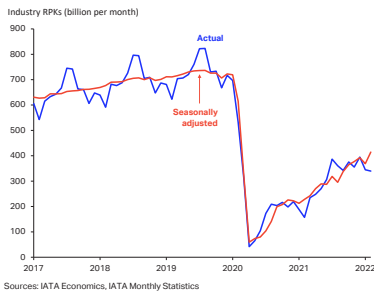


Chart 2 – Domestic RPK growth (airline region of registration basis), %YoY

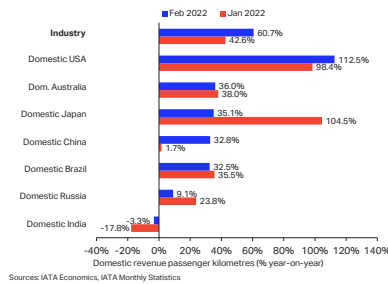


Chart 3 – International RPK growth (airline region of registration basis), %YoY

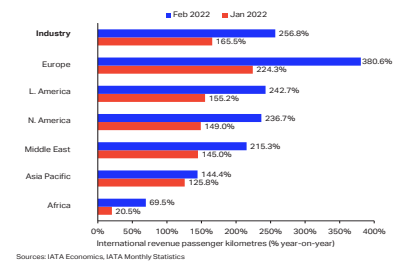


Chart 4: Seasonally adjusted international RPKs

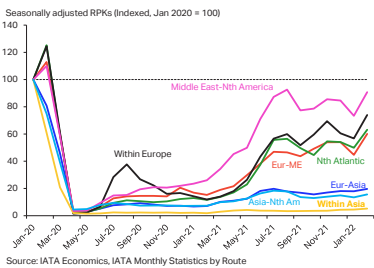


Chart 5: International RPKs by cabin class

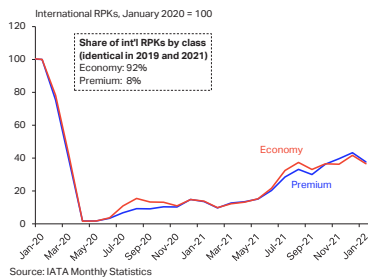


Chart 6: Passenger ticket sales (dom. vs. int'l), global

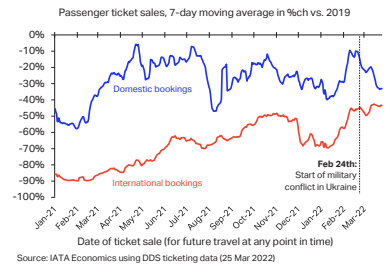
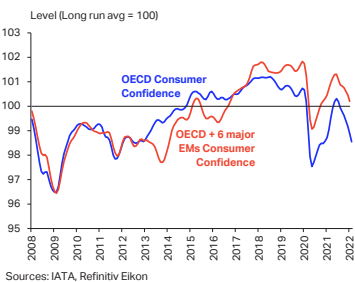


Chart 7: Consumer confidence compared to average



Air passenger market in detail - February 2022

	World share ¹	February 2022 (% year-on-year)				% year-to-date			
		RPK	ASK	PLF (%-pt) ²	PLF (level) ³	RPK	ASK	PLF (%-pt) ²	PLF (level) ³
TOTAL MARKET	100.0%	115.9%	68.4%	15.4%	69.8%	98.0%	58.4%	13.1%	67.1%
Africa	1.9%	60.2%	33.1%	11.0%	64.8%	39.3%	22.4%	7.6%	63.1%
Asia Pacific	27.6%	42.9%	31.9%	4.8%	62.9%	31.4%	23.6%	3.6%	60.4%
Europe	24.9%	232.8%	136.1%	20.9%	72.1%	191.3%	119.1%	17.4%	70.1%
Latin America	6.5%	100.5%	75.1%	10.0%	79.5%	88.1%	64.9%	9.7%	78.9%
Middle East	6.5%	194.1%	80.9%	24.9%	64.8%	157.4%	72.2%	20.5%	61.9%
North America	32.7%	134.9%	69.1%	20.9%	74.5%	122.1%	63.8%	18.5%	70.3%
International	37.6%	256.8%	112.4%	26.4%	65.4%	203.5%	98.7%	21.9%	63.4%
Africa	1.5%	69.5%	34.7%	12.9%	63.0%	41.3%	20.9%	8.9%	61.4%
Asia Pacific	3.2%	144.4%	60.8%	16.1%	47.0%	134.2%	57.6%	15.4%	47.1%
Europe	18.6%	380.6%	174.8%	30.3%	70.9%	285.6%	148.5%	24.4%	68.6%
Latin America	2.1%	242.7%	146.3%	21.7%	77.0%	189.7%	112.3%	20.4%	76.3%
Middle East	5.9%	215.3%	89.5%	25.8%	64.7%	176.4%	79.9%	21.5%	61.6%
North America	6.2%	236.7%	91.7%	27.4%	63.6%	165.2%	84.3%	21.8%	61.7%
Domestic	62.4%	60.7%	39.7%	9.7%	74.3%	51.1%	33.2%	8.4%	70.8%
Dom. Australia ⁴	0.6%	36.0%	28.9%	3.4%	64.2%	37.0%	34.1%	1.3%	60.2%
Domestic Brazil ⁴	1.9%	32.5%	25.9%	4.0%	80.9%	34.2%	29.4%	2.9%	82.4%
Dom. China P.R. ⁴	17.8%	32.8%	27.7%	2.6%	66.9%	15.5%	14.4%	0.6%	64.0%
Domestic India ⁴	2.2%	-3.3%	-15.4%	10.7%	85.4%	-10.5%	-14.3%	3.2%	75.0%
Domestic Japan ⁴	1.1%	35.1%	74.8%	-11.0%	37.5%	70.7%	59.2%	2.7%	40.9%
Dom. Russian Fed. ⁴	4.5%	9.1%	15.2%	-4.6%	81.7%	16.8%	18.6%	-1.2%	83.2%
Domestic US ⁴	25.6%	112.5%	60.4%	19.3%	78.7%	105.6%	55.9%	17.8%	73.8%

¹% of industry RPKs in 2021

²Year-on-year change in load factor

³Load factor level

⁴Note: the seven domestic passenger markets for which broken-down data are available account for approximately 54% of global total RPKs and 86% of total domestic RPKs

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



JAN 2022: Air Cargo Market Analysis

Chart 1: CTK levels, actual and seasonally adjusted

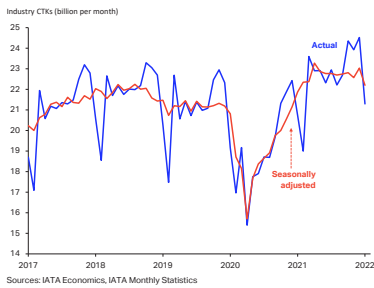


Chart 2: New export order component of the manufacturing PMI

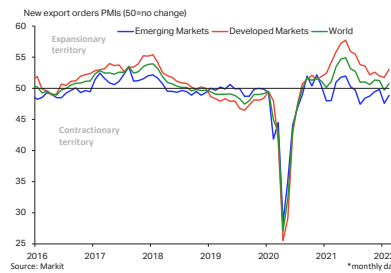


Chart 3: CTK growth versus global new export orders



Capacity deteriorated in January, impacting CTKs

Chart 4: ACTK levels, actual and seasonally adjusted

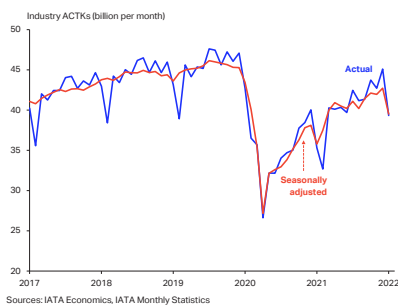


Chart 5: Cargo load factors by region of registration

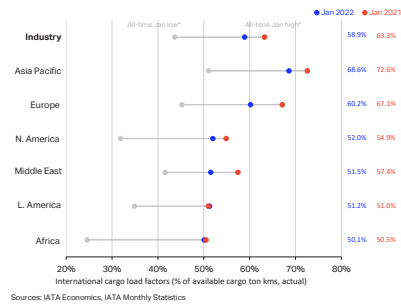


Chart 6: Int'l CTK growth (airline region of registration)

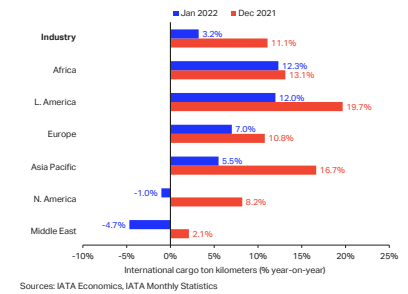
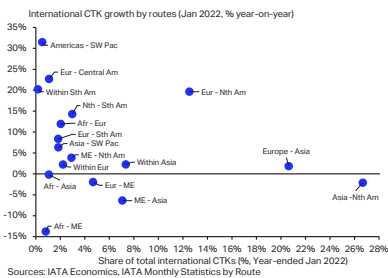


Chart 7: International CTKs by route (segment-based)



Air cargo market in detail - January 2022

	World share ¹				January 2022 (% year-on-year)				January 2022 (% ch vs the same month in 2019)				
	TOTAL MARKET	CTK	ACTK	CLF (%-pt) ²	CLF (level) ³	CTK	ACTK	CLF (%-pt) ²	CLF (level) ³	CTK	ACTK	CLF (%-pt) ²	CLF (level) ³
TOTAL MARKET	100.0%	2.7%	11.4%	-4.6%	54.1%	5.1%	-8.9%	7.2%	54.1%				
Africa	1.9%	12.4%	13.0%	-0.3%	49.2%	22.2%	-12.2%	13.8%	49.2%				
Asia Pacific	32.4%	4.9%	11.4%	-3.7%	60.9%	-0.5%	-17.6%	10.5%	60.9%				
Europe	22.9%	7.0%	18.8%	-6.5%	58.4%	6.5%	-8.1%	8.0%	58.4%				
Latin America	2.2%	11.9%	12.9%	-0.4%	41.7%	-5.7%	-28.9%	10.3%	41.7%				
Middle East	13.4%	-4.6%	6.2%	-5.8%	51.3%	1.9%	-11.8%	6.8%	51.3%				
North America	27.2%	-1.2%	8.7%	-4.7%	47.4%	13.5%	6.5%	2.9%	47.4%				
International	87.2%	3.2%	10.8%	-4.3%	58.9%	6.0%	-9.7%	8.7%	58.9%				
Africa	1.9%	12.3%	13.2%	-0.4%	50.1%	23.4%	-10.3%	13.7%	50.1%				
Asia Pacific	29.5%	5.5%	11.6%	-4.0%	68.6%	3.9%	-15.4%	12.7%	68.6%				
Europe	22.5%	7.0%	19.3%	-6.9%	60.2%	6.4%	-8.0%	8.1%	60.2%				
Latin America	1.8%	12.0%	11.4%	0.3%	51.2%	-6.0%	-28.1%	12.0%	51.2%				
Middle East	13.4%	-4.7%	6.3%	-5.9%	51.5%	1.9%	-11.8%	6.9%	51.5%				
North America	18.1%	-1.0%	4.4%	-2.9%	52.0%	12.7%	2.5%	4.7%	52.0%				

¹ % of industry CTKs in 2021

² Change in load factor

³ Load factor level

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.

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FEB 2022: Air Cargo Market Analysis

Chart 1: CTK levels, actual and seasonally adjusted



Chart 2: CTK growth versus global new export orders

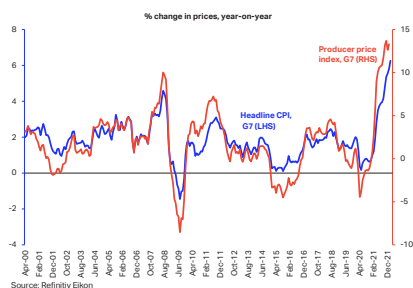


Chart 3: New export order manufacturing PMIs

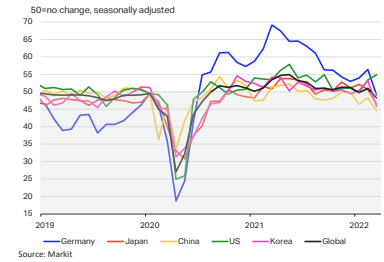


Chart 4: Int'l belly cargo and freighter capacity growth

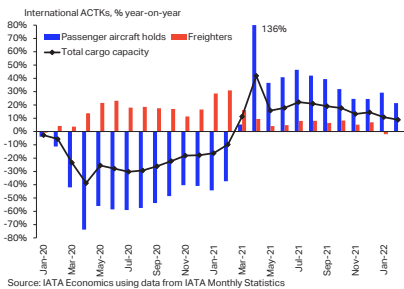


Chart 5: Int'l CTK growth (airline region of registration)

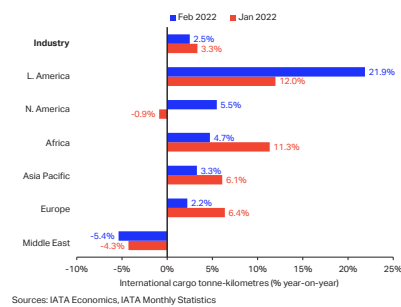


Chart 6: SA int'l CTKs by route (segment-based)

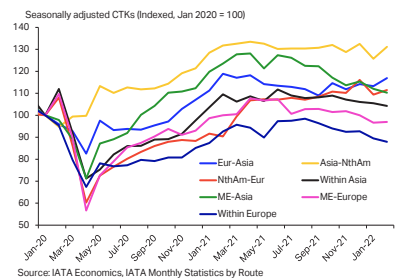
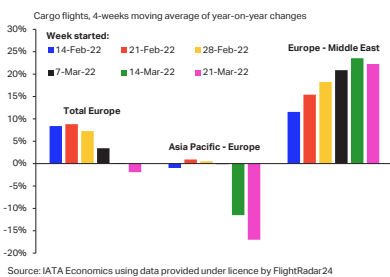


Chart 7: SA int'l CTKs by route (segment-based)



Air cargo market in detail - February 2022

	World share ¹	February 2022 (% year-on-year)				% year-to-date			
		CTK	ACTK	CLF (%-pt) ²	CLF (level) ³	CTK	ACTK	CLF (%-pt) ²	CLF (level) ³
TOTAL MARKET	100.0%	2.9%	12.5%	-4.9%	53.2%	2.7%	11.9%	-4.8%	53.6%
Africa	1.9%	4.6%	8.2%	-1.7%	50.2%	8.0%	11.3%	-1.5%	49.1%
Asia Pacific	32.4%	3.0%	15.5%	-7.1%	59.2%	4.4%	14.0%	-5.5%	60.0%
Europe	22.9%	2.2%	10.0%	-4.8%	63.6%	4.3%	14.0%	-5.7%	60.9%
Latin America	2.2%	21.2%	18.9%	0.9%	47.6%	16.3%	15.3%	0.4%	44.6%
Middle East	13.4%	-5.3%	7.2%	-7.0%	52.9%	-4.8%	6.2%	-6.3%	52.2%
North America	27.2%	6.1%	13.4%	-3.0%	42.9%	1.5%	10.7%	-4.1%	44.9%
International	87.2%	2.5%	8.9%	-3.8%	61.3%	2.9%	9.9%	-4.1%	60.1%
Africa	1.9%	4.7%	8.6%	-1.9%	50.8%	8.0%	11.7%	-1.7%	49.9%
Asia Pacific	29.5%	3.3%	11.8%	-5.7%	69.1%	4.8%	12.2%	-4.9%	68.7%
Europe	22.5%	2.2%	10.0%	-5.0%	65.7%	4.3%	14.2%	-5.9%	62.9%
Latin America	1.8%	21.9%	13.9%	3.9%	58.9%	16.8%	12.5%	2.0%	54.9%
Middle East	13.4%	-5.4%	7.3%	-7.1%	53.4%	-4.8%	6.7%	-6.4%	52.6%
North America	18.1%	5.5%	4.9%	0.3%	54.3%	2.1%	4.5%	-1.2%	53.2%

¹% of industry CTKs in 2021

²Year-on-year change in load factor

³Load factor level

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

NOV 2021: 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

NOV 2021

(versus NOV 2019)

RPK ▼ -47.0% ASK ▼ -39.7% FTK ▲ 3.7% LF: 71.3% ▼ -8.8%

OUTLOOK* - DEC 2021

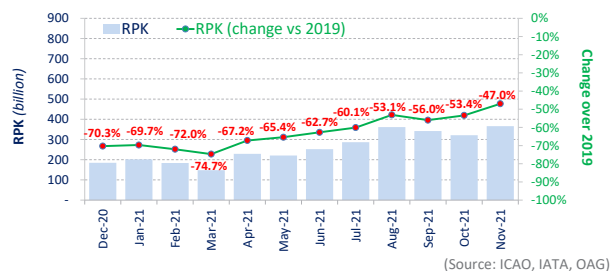
(versus DEC 2019)

ASK ▼ -37.4% * Source OAG

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

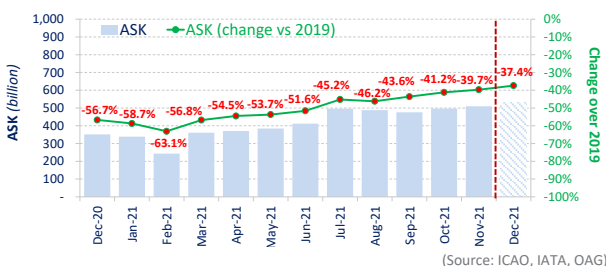
World passenger traffic fell by -47.0% in November 2021 (compared to 2019), +6.4 percentage points up from the decline in the previous month. Air travel recovery continued after a slight dip in September. Domestic air travel deteriorated, mainly due to the larger fall in Chinese domestic as a result of the imposition of stricter travel restrictions. The emergence of the Omicron variants at the end of the month may stall the steady travel recovery trend, while on the positive side, demand for the holiday travel is likely to be strong.



CAPACITY

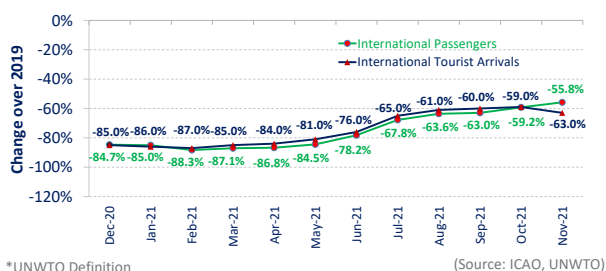
Available Seat-Kilometres - ASK

Capacity worldwide fell by -39.7% in November 2021 (compared to 2019), +1.5 percentage points up from the decline in the previous month (-41.2%). As holiday season approaches, airlines are expected to add back capacity gradually. The December capacity is expected to improve to -37.4% down from the 2019 level.



International Passengers vs. Tourist Arrivals

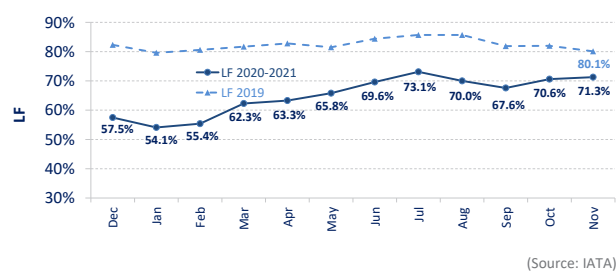
International passenger numbers fell by -55.8% in November 2021 (compared to 2019), +3.4 percentage points up from the decline in the previous month. All regions showed improvements, particularly in North America and Latin America/Caribbean. Compared to air travel, the recovery in international tourist arrivals weakened amid the low tourism season.



* UNWTO Definition

Load Factor - LF

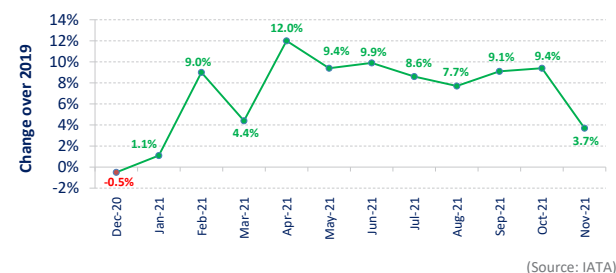
The passenger Load Factor reached 71.3% in November 2021, +0.7 percentage point higher than the previous month. Load factor improved slightly as air travel demand increased more than capacity. Despite the improvement, the November LF remained -8.8 percentage points below the 2019 level.



FREIGHT TRAFFIC

Freight Tonne-Kilometres - FTK

World freight traffic reported a growth of +3.7% in November 2021 (compared to 2019), -5.7 percentage points down from the growth in the previous month. After months of strong expansion, air cargo growth experienced a significant slowdown. This weakened performance was unexpected considering that November is usually a peak period for air cargo owing to the major year-end consumer events. The softening was widespread across all regions, particularly in Africa, which saw a remarkable deterioration from double-digit rise to negative growth. Latin America/Caribbean continued to be the weakest performing region with further worsened decline. North America maintained a double-digit growth and demonstrated the most resilience.



ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; FTK: Freight 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 56



ICAO

ECONOMIC DEVELOPMENT

NOV 2021: 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)

NOV 2021: -9.4%, -19.2%, and +11.4% (vs. 2019) in terms of aircraft departures, passengers and freight for the Top 15

NOV 21

Airports (ranking by number of departures)	Departures	vs. 2019	Airports (ranking by number of passengers)	Passengers*	vs. 2019	Airports (ranking by tonnes of freight)	Freight**	vs. 2019
Chicago IL, US (ORD)	30,873	-18.0%	Atlanta GA, US (ATL)	3,769,658	-13.3%	Hong Kong SAR, CN (HKG)	474,000	+7.7%
Atlanta GA, US (ATL)	30,289	-14.7%	Dallas/Fort Worth TX, US (DFW)	2,926,570	-2.5%	Memphis TN, US (MEM)	355,803	+0.3%
Dallas/Fort Worth TX, US (DFW)	27,615	-7.1%	Chicago IL, US (ORD)	2,648,553	-19.6%	Shanghai, CN (PVG)	310,245	-8.2%
Denver CO, US (DEN)	25,030	-0.6%	Denver CO, US (DEN)	2,642,429	-0.4%	Anchorage AK, US (ANC)	309,342	+22.7%
Los Angeles CA, US (LAX)	23,734	-13.1%	Los Angeles CA, US (LAX)	2,464,150	-26.8%	Incheon, KR (ICN)	278,643	+14.6%
Charlotte NC, US (CLT)	21,955	-8.9%	New Delhi, IN (DEL)	2,350,153	-25.7%	Louisville KY, US (SDF)	241,597	+7.3%
Miami FL, US (MIA)	18,895	+13.2%	Las Vegas NV, US (LAS)	1,997,381	-4.6%	Taipei, CN (TPE)	239,765	+21.0%
Phoenix AZ, US (PHX)	18,505	+1.6%	Charlotte NC, US (CLT)	1,954,364	-4.0%	Tokyo, JP (NRT)	226,174	+19.0%
Houston TX, US (IAH)	17,914	-10.0%	Miami FL, US (MIA)	1,951,956	+6.3%	Miami FL, US (MIA)	223,324	+27.6%
New Delhi, IN (DEL)	17,767	-14.1%	Orlando FL, US (MCO)	1,942,481	-7.3%	Doha, QA (DOH)	221,107	+11.5%
Las Vegas NV, US (LAS)	17,439	-7.3%	Dubai, AE (DXB)	1,939,688	-45.0%	Los Angeles CA, US (LAX)	220,872	+29.0%
Newark NJ, US (EWR)	17,110	-5.8%	Phoenix AZ, US (PHX)	1,934,679	+4.4%	Chicago IL, US (ORD)	215,939	+43.6%
New York NY, US (JFK)	16,074	-9.6%	Istanbul, TR (IST)	1,913,276	-30.4%	Dubai, AE (DXB)	204,410	-7.0%
Seattle WA, US (SEA)	15,538	-13.0%	New York NY, US (JFK)	1,797,338	-21.7%	Frankfurt, DE (FRA)	184,379	+4.8%
Mexico City, MX (MEX)	15,533	-19.4%	Tokyo, JP (HND)	1,758,086	-53.5%	Paris, FR (CDG)	184,200	+15.9%

Note: Total scheduled and non-scheduled services

(Source: ACI)

In terms of aircraft departures, the Top 15 airports reported a combined fall of -9.4%, compared to 2019. All but two of the Top 15 airports were US airports. Chicago remained 1st with a decline of -18.0%. For the first time Mexico City made it to the Top 15 albeit with the largest fall of -19.4%. Miami and Phoenix were the only airports posting increases.

In terms of passengers, the Top 15 airports posted a total fall of -19.2%, compared to 2019. US airports continued to dominate the list, with 11 in the Top 15. Atlanta continued to lead the chart with a decline of -13.3%. Tokyo and Dubai recorded the largest fall of -53.5% and -45.0%, while Miami and Phoenix recorded a positive growth of +6.3% and +4.4%, respectively.

In terms of freight, the Top 15 airports reported an increase of +11.4%, compared to 2019. Nine out of the Top 15 airports grew double-digitally, with the strongest increase in Chicago (+43.6%). Hong Kong remained at 1st with a solid growth of +7.7%. Shanghai and Dubai continued to post declines for the third consecutive month.

TOP 15 AIRLINE GROUPS (Ranked by RPK)

NOV 2021: -37.5% (vs. 2019) in terms of RPK for the Top 15

NOV 21

In terms of RPK, the Top 15 airline groups accounted for 57.7% of the world's total RPK in November 2021 and declined by -37.5% compared to 2019. This decline was 15.9 percentage points smaller than the fall in world's average RPK.

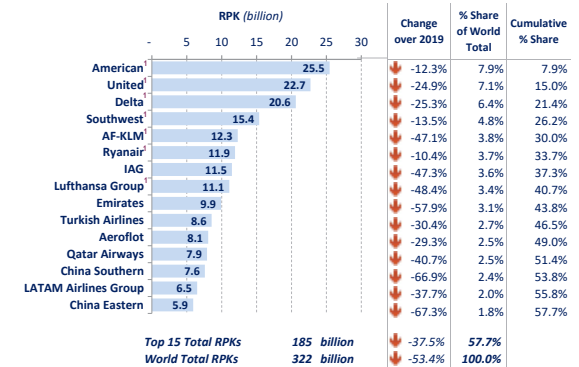
November marked another month of shift in positions, largely driven by significant swings in traffic in major domestic markets, particularly China.

US airlines retained the Top 4 positions with American at 1st, followed by United, Delta and Southwest. Among the four, American and Southwest continued to post smaller declines.

After a modest pick-up, domestic passenger traffic in China deteriorated substantially due to the tightened travel restriction against the renewed outbreaks. Only two airline groups, China Southern and China Eastern remained in the Top 15, at 13th and 15th, respectively.

European airlines continued to show improvements on the back of easing travel restrictions. The most noticeable rise was recorded by Ryanair, which jumped 4 places to 6th. AF-KLM and IAG improved 2 and 1 positions, respectively, while Lufthansa dropped 2 positions to 8th.

Owing to the steady recovery in international travel, Emirates and Qatar moved up 5 and 3 positions to 9th and 12th, respectively. For the first time in the past two years, LATAM re-appeared in the Top 15 group and ranked 14th.



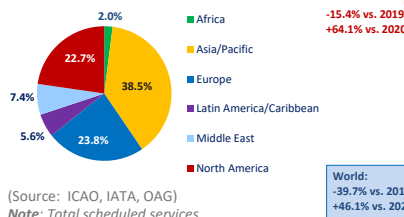
(Source: ICAO, airlines' websites)

Note: Total scheduled and non-scheduled services

CAPACITY BY REGION (ICAO Statistical Regions)

NOV 2021: -39.7% (vs. 2019) in terms of World ASK

% Share of Capacity by Region



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

Worldwide capacity contracted by -39.7% in November 2021, compared to 2019, a slight improvement from the -41.2% fall in October. The recovery was broad-based across all major regions, except for Asia/Pacific, which posted the largest contraction with further deterioration.

North America demonstrated the most resilience, followed by Latin America/Caribbean.

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

ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; FTK: Freight 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

DEC 2021: 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

DEC 2021
(versus DEC 2019)

RPK ▼ -45.1% **ASK** ▼ -37.6% **FTK** ▲ 8.9% **LF**: 72.3% ▼ -9.8%

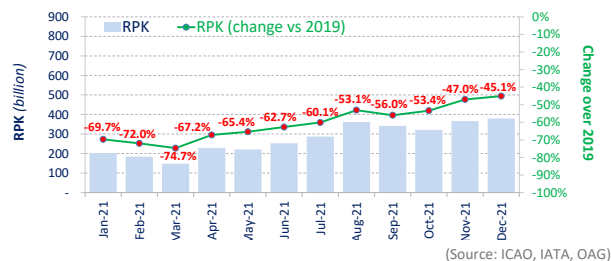
OUTLOOK* - JAN 2022
(versus JAN 2019)

ASK ▼ -38.0% * Source OAG

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

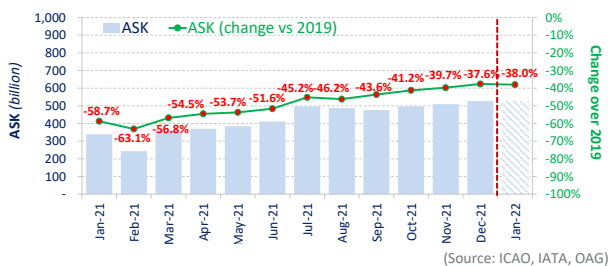
World passenger traffic fell by -45.1% in December 2021 (compared to 2019), +1.9 percentage points up from the decline in the previous month. Air travel recovery continued in spite of the Omicron disruptions, owing to the strong demand during the holiday season. The ever-changing restrictions and travel policies remained the biggest challenges and had a measurable impact on travel demand throughout the year. For 2021 as a whole, passenger traffic globally improved modestly, reaching only half of the 2019 level.



CAPACITY

Available Seat-Kilometres - ASK

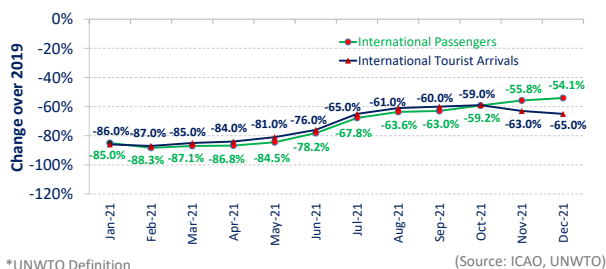
Capacity worldwide fell by -37.6% in December 2021 (compared to 2019), +2.1 percentage points up from the decline in the previous month (-39.7%). Due to reimposed travel bans amid the Omicron outbreak, the January capacity is expected to fall to -38.0% down from the 2019 level.



International Passengers vs. Tourist Arrivals

International passenger numbers fell by -54.1% in December 2021 (compared to 2019), +1.7 percentage points up from the decline in the previous month. International travel recovery started to pick up gradually from summer, but number of international passengers in 2021 was still far below the 2019 level.

Recovery in international tourist arrivals followed a similar trend, however, it deteriorated towards the year end amid the Omicron outbreak.

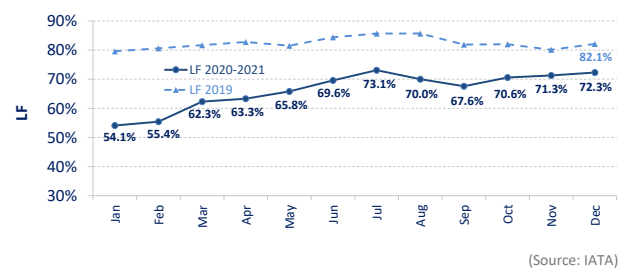


*UNWTO Definition

Load Factor - LF

The passenger Load Factor reached 72.3% in December 2021, +1.0 percentage point higher than the previous month. Despite the improvement, the December LF was -9.8 percentage points below the 2019 level.

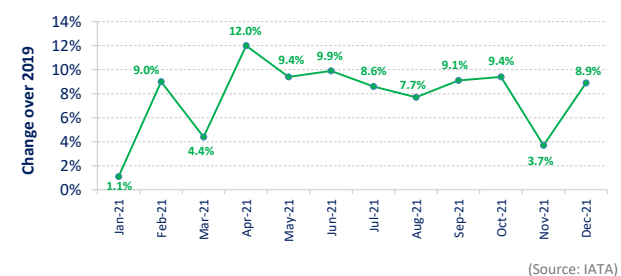
Compared to 2020, LF has improved significantly in 2021, however, the overall LF remained below 70%.



FREIGHT TRAFFIC

Freight Tonne-Kilometres - FTK

World freight traffic reported a growth of +8.9% in December 2021 (compared to 2019), +5.2 percentage points up from the growth in the previous month. After a temporary slowdown in November, air cargo growth rebounded to the trend saw in most of the months of the year. Air cargo has been growing strongly throughout the year, driven by the solid demand of goods as well as the supply chain congestion issues which has caused shifting of volume from surface to air. Overall in 2021, air cargo rose over +6.0%, outperforming the global trade rebound. North America, Africa and the Middle East were the main contributors to the robust growth. However, Latin America/Caribbean remained weak and was the only region with negative growth.



ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; FTK: Freight 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 58



ICAO

ECONOMIC DEVELOPMENT

DEC 2021: 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)

DEC 2021: -12.1%, -20.8%, and +15.3% (vs. 2019) in terms of aircraft departures, passengers and freight for the Top 15

DEC 21

Airports (ranking by number of departures)	Departures	vs. 2019	Airports (ranking by number of passengers)	Passengers*	vs. 2019	Airports (ranking by tonnes of freight)	Freight**	vs. 2019
Chicago IL, US (ORD)	30,744	-20.4%	Atlanta GA, US (ATL)	3,649,312	-19.7%	Hong Kong SAR, CN (HKG)	473,000	+9.2%
Atlanta GA, US (ATL)	29,965	-19.2%	Dallas/Fort Worth TX, US (DFW)	2,999,373	-6.2%	Memphis TN, US (MEM)	388,350	+11.1%
Dallas/Fort Worth TX, US (DFW)	28,618	-6.9%	Denver CO, US (DEN)	2,683,804	-7.3%	Shanghai, CN (PVG)	326,546	-8.4%
Denver CO, US (DEN)	24,879	-7.7%	Chicago IL, US (ORD)	2,681,227	-22.1%	Louisville KY, US (SDF)	308,586	+5.4%
Los Angeles CA, US (LAX)	23,989	-18.5%	Los Angeles CA, US (LAX)	2,597,443	-30.5%	Incheon, KR (ICN)	283,534	+23.1%
Charlotte NC, US (CLT)	22,064	-10.0%	New Delhi, IN (DEL)	2,505,641	-20.6%	Anchorage AK, US (ANC)	280,168	+22.9%
Miami FL, US (MIA)	21,574	+12.2%	Miami FL, US (MIA)	2,285,413	+6.6%	Taipei, CN (TPE)	247,263	+22.0%
New Delhi, IN (DEL)	18,978	-8.9%	Dubai, AE (DXB)	2,246,381	-41.8%	Miami FL, US (MIA)	245,397	+44.1%
Phoenix AZ, US (PHX)	18,218	-8.2%	Orlando FL, US (MCO)	2,087,303	-10.0%	Tokyo, JP (NRT)	236,200	+30.1%
Houston TX, US (IAH)	18,053	-12.5%	Mexico City, MX (MEX)	2,029,732	-9.9%	Los Angeles CA, US (LAX)	225,647	+34.5%
Newark NJ, US (EWR)	17,264	-9.0%	Tokyo, JP (HND)	1,961,885	-45.3%	Chicago IL, US (ORD)	219,360	+62.8%
Las Vegas NV, US (LAS)	16,981	-8.3%	Istanbul, TR (IST)	1,951,556	-29.0%	Doha, QA (DOH)	218,616	+12.1%
New York NY, US (JFK)	16,530	-12.6%	Las Vegas NV, US (LAS)	1,936,763	-9.1%	Dubai, AE (DXB)	203,461	-7.1%
Tokyo, JP (HND)	16,122	-17.8%	Charlotte NC, US (CLT)	1,921,662	-11.4%	Frankfurt, DE (FRA)	188,767	+18.9%
Amsterdam, NL (AMS)	15,891	-20.1%	New York NY, US (JFK)	1,905,888	-25.3%	Singapore, SG (SIN)	183,800	+5.2%

Note: Total scheduled and non-scheduled services

(Source: ACI)

In terms of **aircraft departures**, the Top 15 airports reported a combined fall of -12.1%, compared to 2019. All but three of the Top 15 airports were US airports. Despite recording the largest fall of -20.4%, **Chicago** retained the 1st position. **Tokyo** re-appeared in the Top 15 for the first time in the past two years. **Miami** was the only airport posting increases.

In terms of **passengers**, the Top 15 airports posted a total fall of -20.8%, compared to 2019. US airports continued to dominate the list, with 10 in the Top 15. **Atlanta** remained 1st with a decline of -19.7%. In line with departures, **Miami** was the only airport posting positive growth, at +6.6%. **Tokyo** and **Dubai** recorded the largest fall of -45.3% and -41.8%, respectively.

In terms of **freight**, the Top 15 airports recorded an increase of +15.3%, compared to 2019. Ten of the Top 15 airports grew double-digitally, with **Chicago** recording the strongest growth at a robust +62.8%. **Hong Kong** remained 1st with a solid growth of +9.2%. **Shanghai** and **Dubai** continued to post declines for the fourth consecutive month.

TOP 15 AIRLINE GROUPS (Ranked by RPK)

DEC 2021: -35.7% (vs. 2019) in terms of RPK for the Top 15

DEC 21

In terms of RPK, the Top 15 airline groups accounted for 62.0% of the world's total RPK in December 2021 and declined by -35.7% compared to 2019. This decline was 17.7 percentage points smaller than the fall in world's average RPK.

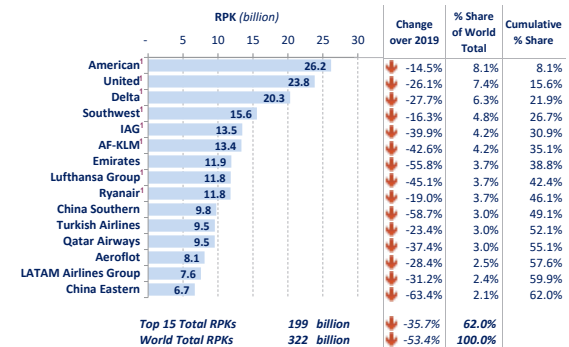
December rankings were relatively stable with changes mainly among the European airlines.

The Top 4 positions were retained by the U.S. airlines, with **American** at 1st, followed by **United**, **Delta** and **Southwest**. They also demonstrated the most resilience among the Top 15.

As restrictions remain tight to limit the spread of the Omicron variant, domestic passenger traffic in China stagnated, and as a result, only **China Southern** and **China Eastern** ranked in the Top 15, at 10th and 15th, respectively. Both airlines recorded the largest contractions compared to 2019.

Despite the Omicron outbreak, air travel in Europe continued, however, performance varied among the European airlines. While **IAG** ascended to 5th and **Lufthansa** stayed at 8th, the others fell between 1 to 3 positions.

Emirates climbed 2 positions to 7th owing to the steady improvement in international travel, whereas **Qatar** remained at 12th. With the gradual traffic pick up of Latin America/Caribbean, **LATAM** maintained the 14th position for the second consecutive month.



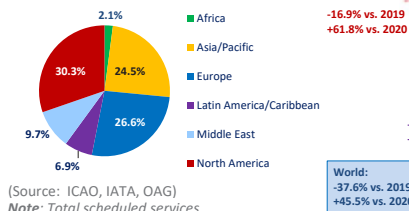
(Source: ICAO, airlines' websites)

Note: Total scheduled and non-scheduled services

CAPACITY BY REGION (ICAO Statistical Regions)

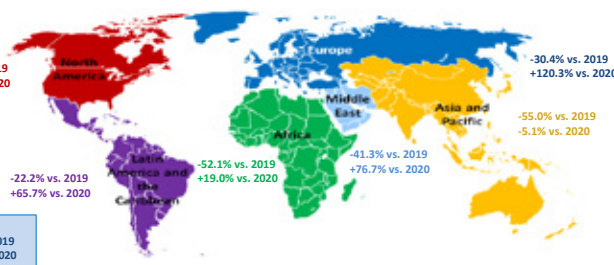
DEC 2021: -37.6% (vs. 2019) in terms of World ASK

% Share of Capacity by Region



(Source: ICAO, IATA, OAG)

Note: Total scheduled services



Worldwide capacity contracted by -37.6% in December 2021, compared to 2019, smaller than the -39.7% fall in November. All regions saw improvements, except for Africa, which was impacted by the travel bans amid the Omicron outbreak.

Overall for 2022, global capacity recovered to around half of the pre-pandemic levels, with North America restoring the most capacity, ahead of other regions.

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

ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; FTK: Freight 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.