



HERMES

AIR TRANSPORT ORGANISATION

THE MAGAZINE

11 | JULY - SEPTEMBER 2020



**PIETER
ELBERS**

President & CEO
KLM



INDEX

4

Editorial

Dr Kostas Iatrou

Director General,
Hermes - Air Transport Organisation



5

Top News

July - September 2020

Latest Industry News and Updates



Copyright © 2020:

HERMES | Air Transport Organisation

Material (either in whole or in part) from this publication may not be published, photocopied, rewritten, transferred through any electronic or other means, without prior permission by the publisher.

17

Hermes News

- Hermes present the book entitled: "The History of Air Transport" 17



- Pieter Elbers, CEO of KLM, receives the 2020 Hermes Award 18



- Salvatore Sciacchitano, President of ICAO Council named honorary member of Hermes 19



- The Director General of Hermes met with the President of ICAO Council... 20



- 2020 Summer Aviation Forum: "Recovery and the flightpath to new aviation" 21



- ICAO Informal briefing – Opportunity for consultation and discussion on the consideration of the establishment of a High-Level Body with the Industry 24



HERMES

AIR TRANSPORT ORGANISATION

THE MAGAZINE

11 | JULY-SEPTEMBER 2020

INDEX

25 Events

- Global sustainable aviation forum Tuesday September 29, 2020.....25



- 2020 Summer Aviation Forum | Recovery and the flightpath to new aviation August.....28



42

Interview

Pieter Elbers

President & CEO, KLM



47 Statistics



JUN-AUG 2020:
Air Passenger Market
Analysis.....47



MAY-JUN

Worldwide Traffic Results.....50

**Top 10 rankings for 2019
(Passenger/Cargo Traffic)**
with the effect of the
pandemic the first half
of 2020.....54

Key Statistics 2020.....56



| ICAO

APRIL-JULY

Economic Development58



EDITORIAL



Dr Kostas Iatrou
Director General
Hermes - Air Transport Organisation

Dear Hermes member,

First of all I do hope that you and your family are healthy and safe in these challenging times. Hermes continues to actively work for the future of air transport despite the difficulties.

During the last trimester Hermes co-hosted the 2020 Summer Aviation Forum, the only major physical event since the start of the pandemic attended by many air transport leaders and Hermes members.

At the event Salvatore Sciacchitano, President of ICAO Council, was named Honorary Member of Hermes and Pieter Elbers, CEO of KLM was awarded the 2020 Hermes award. During the visit of Mr Sciacchitano in Athens I had the opportunity to present to him an overview of Hermes latest developments.

Hermes participated in September, after the invitation from ICAO, in the two Informal briefings – Opportunity for consultation and discussion on the consideration of the establishment of a High-Level Body with the Industry- held online.

Finally, during the 2020 Summer Aviation Forum, Hermes presented its new publication entitled: "The History of Air Transport".

Enjoy reading

Kostas Iatrou

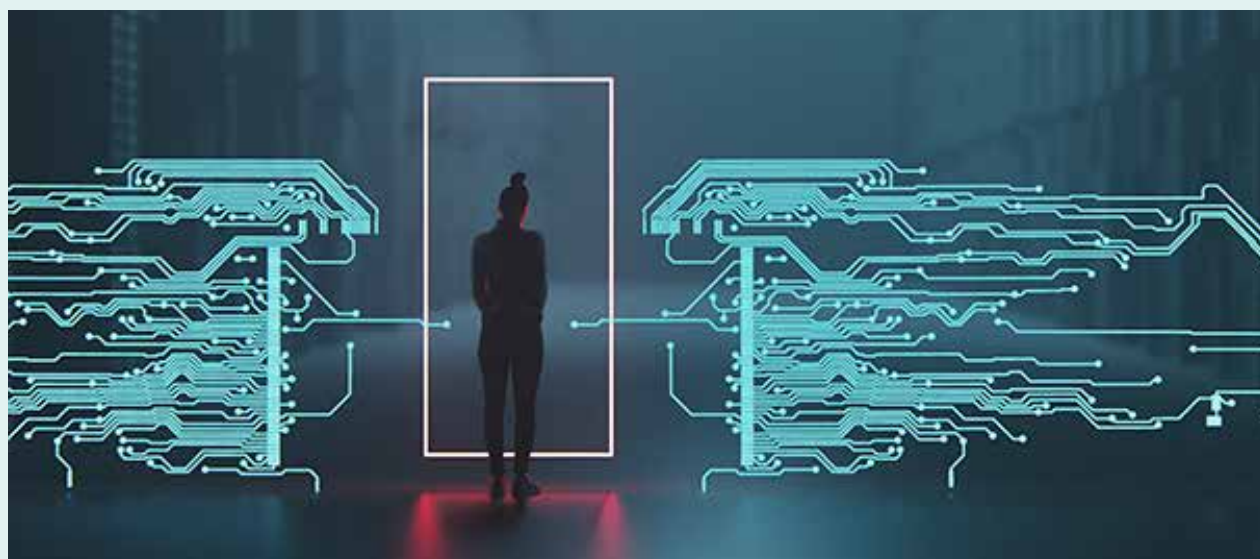
3/7/2020

NEW PNR DATA STANDARDS AMENDMENT TO IMPROVE GLOBAL COUNTER-TERRORISM EFFORTS

A detailed set of international Standards and Recommended Practices (SARPs) to assist States in establishing their capabilities to collect, use, process and protect Passenger Name Record (PNR) data to help detect and counter terrorist offenses and mobility was endorsed recently by the ICAO governing body.

United Nations Security Council (UNSC) Resolution 2396 prescribed that countries should develop the capability to collect, process and analyse, in furtherance of ICAO SARPs, airline PNR data for the purpose of countering, detecting and investigating terrorist offenses and related travel.

The resolution also “urges ICAO to work with its Member States to establish a standard for the collection, use, processing and protection of PNR data.”



8/7/2020

CABIN CREW TO BE BETTER EQUIPPED TO PREVENT HUMAN TRAFFICKING

United Nations efforts to prevent trafficking in persons took an important step forward today, with the launch of the new online training to support the implementation of the ICAO-OHCHR Guidelines for Training Cabin Crew on Identifying and Responding to Trafficking in Persons. Developed in cooperation with the Office of the United Nations (UN)

High Commissioner for Human Rights (OHCHR), the free e-learning course explores the unique opportunities cabin crew have to observe passengers over the duration of their flights and potentially identify and assist human trafficking victims. Additional course elements will also be of value to airport and other aviation industry professionals.

9/7/2020

IATA: POST-COVID-19 GREEN RECOVERY MUST EMBRACE SUSTAINABLE AVIATION FUELS

The International Air Transport Association (IATA) emphasized the aviation industry's commitment to its emissions reduction goals and called for the International Energy Agency (IEA) to prioritize investment in sustainable aviation fuel (SAF) to help power aviation's contribution to the post-COVID-19 recovery. IATA's call comes on the eve of the IEA Clean Energy Transitions Summit which will meet virtually to debate moves toward a low-carbon future. The IEA is well placed to promote SAF production with its stakeholders both in government and in the fuel industry. The world must "build back better" from the COVID-19 crisis with attention focused on investment in carbon reduction technolo-



gies and in SAF, which will create jobs at this critical time and boost aviation's progress towards its goal to cut aviation emissions to half 2005 levels by 2050.

14/7/2020

ACI INTRODUCES NEW AIRPORT SERVICE QUALITY QUESTIONS RELATED TO COVID-19

Airports Council International (ACI) World has introduced new assessments on health and safety into its world-renowned Airport Service Quality Departures Survey in the wake of COVID-19. ACI's Airport Service Quality (ASQ) programme is a global benchmarking programme measuring passengers' satisfaction whilst they are travelling through an airport. ASQ works with 400 airports worldwide to help them manage and deliver the best experience for customers.

The impact and effects of the COVID-19 pandemic have brought the global airport industry to a standstill with an estimated reduction in passenger traffic of 4.6 billion by year's end. As the industry begins to restart and plan for recovery, it will be crucial for airports to understand the changing needs and expectations of passengers and to reassure them that their health and safety remain the priority. To provide airports with a true 360-degree view of customer experience management in the new COVID-19 reality, ACI has adapted its current Departures survey.

While the key steps of the passenger journey remain the same, passengers have a new set of expectations in regards of their own health and safety.

By adding questions to the version of the survey that is delivered by tablet, these new and important considerations can be added to the benchmarking history for participating airports.

20/7/2020

ACI'S WORLD RELEASES MOST COMPREHENSIVE AIRPORT TRAFFIC DATASET

Airports Council International (ACI) World has today published its World Airport Traffic Report Dataset covering passenger traffic, cargo volumes, and aircraft movements for the full year 2019.

The dataset provides an illustration of a healthy aviation industry in 2019. In 2019, the world's airports accommodated 9.1 billion passengers, 120 million metric tonnes of cargo, and more than 102 million aircraft movements.

This year's WATR dataset contains the most comprehensive data coverage ever collected by ACI World. It includes coverage of 2,565 airports in 180 countries worldwide.



23/7/2020

EUROPEAN AVIATION ASSOCIATIONS AND EASA JOIN TO PROMOTE HARMONISED SAFE AIR TRAVEL DURING COVID-19

European Aviation Associations and the European Union Aviation Safety Agency (EASA) agreed to strengthen efforts to ensure a consistent and safe travel experience for passengers during the COVID-19 pandemic.

The COVID-19 pandemic and the associated travel restrictions have had a devastating impact on air traffic and put at risk millions of jobs that rely on air connectivity. As Europe seeks to reopen, it is essential that operations are marked by consistent implementation of passenger safety procedures across the continent.

EASA and the European Centre for Disease Prevention and Control (ECDC) have developed protocols for the measures airports, airlines and operators should adopt to ensure a safe return to normal operations.

The guidelines address the entire journey from the passenger's perspective, at the departure airport, on board of the aircraft and at arrival. They contain specific, complementary measures devised to ensure the protection of passengers and crews against the transmission of the COVID-19 virus. Passengers are required to take personal responsibility, for example by not even coming to the airport if they are experiencing COVID-19 symptoms.



24/7/2020

ACI LAUNCHES ACCREDITATION PROGRAMME TO ASSESS AIRPORT HEALTH MEASURES

Airports Council International (ACI) World has today launched the Airport Health Accreditation programme to assist airports by assessing new health measures and procedures introduced as a result of the COVID-19 pandemic against global standards. As airports around the world begin to restart and then prepare to sustain continuing operations they are focused on the health and welfare of travellers, staff, and the public. The ACI Airport Health Accreditation programme provides airports with an assessment of how aligned their health measures are with the ICAO Council Aviation Recovery Task Force (CART) Recommendations along with industry best practices.

27/7/2020

ICAO IMPLEMENTATION ROADMAP TO PROVIDE IMPORTANT SUPPORT AND RESOURCES TO HELP ALIGN NATIONAL AND REGIONAL COVID-19 RESPONSES IN CIVIL AVIATION

ICAO began the global roll-out of

a civil aviation recovery Global Implementation Roadmap (GIR), providing an important enabling framework for countries as they begin to apply the COVID-19 pandemic restart and recovery measures in the ICAO Council's Aviation Recovery Task Force (CART) recommendations and annexed "Take-off" guidance document. The UN specialized agency for civil aviation began conducting a series of GIR preview webinars this week with Directors General of Civil Aviation (DGCA's) from all world regions, explaining its priorities and describing the important monitoring and reporting platform, and 'Implementation Packages' (iPack) resources, which ICAO has established to support it.



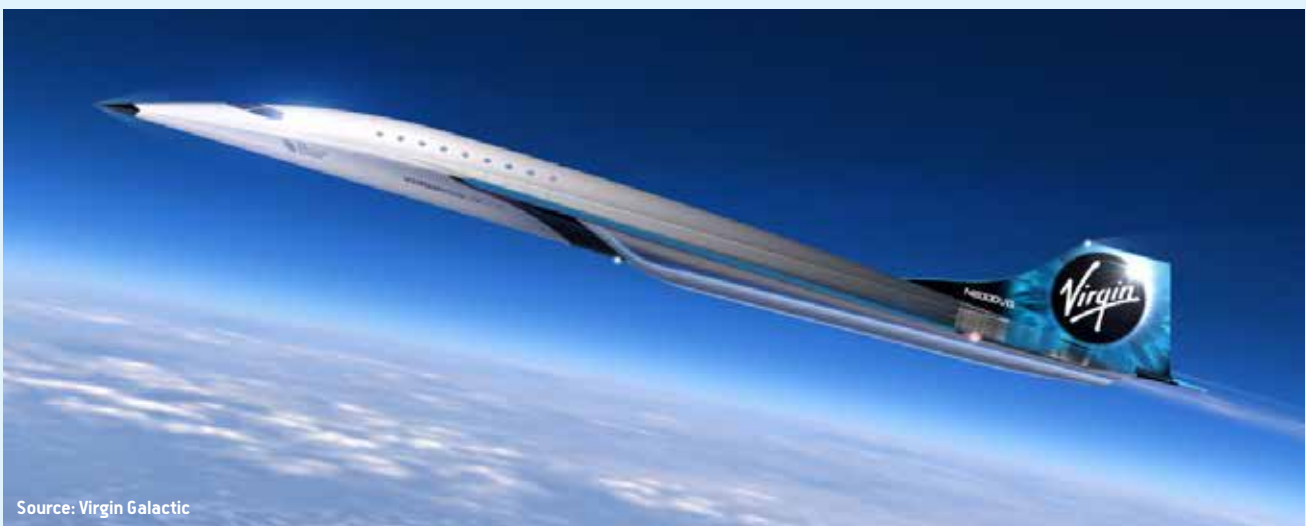
3/8/2020

VIRGIN GALACTIC UNVEILS MACH 3 AIRCRAFT DESIGN FOR HIGH SPEED TRAVEL AND SIGNS MEMORANDUM OF UNDERSTANDING WITH ROLLS-ROYCE

Virgin Galactic Holdings, Inc, a vertically integrated aerospace and space travel company, which includes its manufacturer of advanced air and space vehicles, The Spaceship Company (“TSC”), announced today the first stage design scope for the build of its high speed aircraft design, and the signing of a non-binding Memorandum of Understanding (MOU) with Rolls-Royce to collaborate in designing and developing engine propulsion technology for high speed commercial aircraft. This follows the successful completion of its Mission Concept Review (“MCR”) program milestone and authorization from the Federal Aviation Administration’s (“FAA”) Center for Emerg-

ing Concepts and Innovation to work with Virgin Galactic to outline a certification framework. This marks an exciting step forward in Virgin Galactic’s development of a new generation of high speed aircraft, in partnership with industry and government leaders, with a focus on customer experience and environmental sustainability.

Rolls-Royce is a leader in the cutting-edge technologies that deliver clean, safe and competitive solutions to the planet’s vital power needs. Rolls-Royce has a proven record of delivering high Mach propulsion, powering the only civil-certified commercial aircraft (Concorde) capable of supersonic flight.



Source: Virgin Galactic

12/8/2020

ACCREDITATION RECOGNIZES COMMITMENT TO HEALTH AND WELFARE OF TRAVELLERS, AND THE PUBLIC

Airports Council International (ACI) World and ACI EUROPE have today announced that Istanbul Airport is the first airport to be accredited through its new Airport Health Accreditation programme.

ACI’s Airport Health Accreditation programme assists airports by assessing new health measures and procedures introduced as a result of the COVID-19 pandemic in accordance with ICAO Council

Aviation Recovery Task Force recommendations and in alignment with the joint EASA and ECDC Aviation Health Safety Protocol and ACI EUROPE’s Guidelines for a Healthy Passenger Experience at Airports.

Topics covered by the accreditation include cleaning and disinfection, physical distancing (where feasible and practical), staff protection, physical layout, passenger communications and passenger facilities.



13/8/2020**ACI WORLD ISSUES NEW GUIDANCE FOR AIRPORT INDUSTRY RESTART AND RECOVERY**

Airports Council International (ACI) World has today published comprehensive guidance for airports as they prepare to restart operations to assist them in sustaining a business recovery in the midst of the COVID-19 pandemic.

The publication issued today, Aviation Operations

during COVID-19 – Business Restart and Recovery, provides best practice examples and guidance for both the initial phases of this business restart, as well as the longer-term recovery process, as the industry prepares for the “new normal” post-COVID-19.

13/8/2020**ACI WORLD ISSUES NEW GUIDANCE FOR AIRPORT INDUSTRY RESTART AND RECOVERY**

Airports Council International (ACI) World has today published comprehensive guidance for airports as they prepare to restart operations to assist them in sustaining a business recovery in the midst of the COVID-19 pandemic.

The publication issued today, Aviation Operations during COVID-19 – Business Restart and Recovery, provides best practice examples and guidance for both the initial phases of this business restart, as well as the longer-term recovery process, as the industry prepares for the “new normal” post-COVID-19.

17/8/2020**IMPLEMENTATION OF ICAO COUNCIL AVIATION RECOVERY TASKFORCE RECOMMENDATIONS SUPPORTED BY NEW ACI AND IATA INITIATIVES**

The implementation of globally harmonized recommendations developed by the ICAO Council Aviation Recovery Taskforce (CART) took a step forward this week through the launch of supporting initiatives for airlines and airports by IATA and ACI, respectively. IATA has launched a checklist that aims to support airlines who want to implement the ICAO CART guidelines through self-assessments, while ACI has launched its “Airport Health Accreditation programme,” which assesses airports’ health measures and procedures against the CART recommendations. Both initiatives have been officially supported by ICAO.

28/8/2020**ICAO COUNCIL PRESIDENT CALLS FOR INNOVATION AND SOLIDARITY AT ATN SUMMER AVIATION FORUM**

Stressing that we are living through an important turning point for aviation today, the Council President of the International Civil Aviation Organization (ICAO), Mr. Salvatore Sciacchitano, told the gathered aviation leaders at the Air Transport News (ATN) 2020 Summer Aviation Forum in Athens, Greece, today that innovation and continued partnership will be critical to aviation’s greener and more sustainable recovery from COVID-19. “COVID-19 has wreaked havoc on local and global air connectivity, and on the many countries and operators who made that connectivity possible,” Mr. Sciacchitano commented. “It has also tragically impacted the lives of the hundreds of millions of economically vulnerable men and women around the world, many of them people who depend on aviation and tourism for their very livelihoods.”

“This is a time not only for great leadership, but also deeper collaboration, and I can think of no other sector more capable in those capacities than our own.”

28/8/2020

2020 AIR TRANSPORT AWARDS – HENRIK HOLOLEI, PIETER ELBERS, KLM, GENEVE AÉROPORT & EUROCONTROL AMONG THE WINNERS

In particular, the winners by category are as follows:

- ATN Individual Award: Abderahmane Berthe, Secretary General, AFRAA
- ATN Corporate Award: Genève Aéroport
- ATN International Organisation Award: EUROCONTROL
- Airport of the Year: Genève Aéroport

-Airline of the Year: KLM

-Hermes Award: Pieter Elbers, CEO, KLM

-“Katerina & George Iatrou” Lifetime Achievement Award: Anastasios Kokkinos, Director General of Air Transport, Hellenic Civil Aviation Authority

-Leader of the Year: Henrik Hololei, Director-General for Mobility and Transport, European Commission



31/8/2020

ICAO, UNOCT, CONCLUDE IMPORTANT AGREEMENT TO CURB TERRORIST MOBILITY THROUGH THE GLOBAL EXCHANGE OF API-PNR DATA

ICAO Secretary General Dr. Fang Liu joined UN Office of Counter-Terrorism (UNOCT) Under-Secretary-General Mr. Vladimir Voronkov in formalizing an important new Memorandum of Agreement (MoA) today, aimed at building member state capacity to prevent, detect and investigate terrorist offenses and other serious crimes through the collection and analysing of Advance Passenger Information (API) and Passenger Name Record (PNR)

data.

The new programme importantly follows an ‘All-of-UN’ approach, jointly led by UNOCT and implemented in partnership with ICAO, the Counter Terrorism Committee Executive Directorate (CTED), the United Nations Office on Drugs and Crime (UNODC), the United Nations Office of Information and Communication Technology (OICT), and INTERPOL.

1/9/2020

KLM AND TU DELFT PRESENT SUCCESSFUL FIRST FLIGHT FLYING-V

The scale model of the Flying-V - the energy-efficient aircraft of the future - has flown for the first time. A year and a half ago TU Delft and KLM announced the start of the design of the Flying-V during IATA 2019 and after extensive wind tunnel tests and ground tests it was finally ready. The first successful test flight is a fact. The Flying-V is a design for a very energy-efficient long-haul aircraft. The design of the aircraft integrates the passenger cabin, cargo hold and fuel tanks in the wings, creating a spectacular V-shape. Computer calculations have predicted that the improved aerodynamic shape and reduced weight of the aircraft will reduce fuel consumption by 20% compared to today's most advanced aircraft.



1/9/2020

ICAO, UPU, URGE NATIONAL COMMITMENTS AND SUPPORT FOR POSTAL, AIR CARGO, AND EXPRESS MAIL OPERATORS

The International Civil Aviation Organization (ICAO) and the Universal Postal Union (UPU) released a joint statement today encouraging national governments to support their designated postal operators, air cargo carriers, and express mail operators through financial aid and operational flexibility. Signed by Dr. Liu and the Director General of the UPU, Mr. Bishar A. Hussein, the statement also reaffirms their commitment as UN specialized agencies to foster greater international cooperation to help contain the virus and to protect the health of essential workers.

The joint ICAO/UPU statement highlights the recommendations and associated global roadmap of the ICAO Council Aviation Recovery Task Force (CART), which includes the need to Ensure Essential Connectivity as one of its ten Key Principles. Importantly, this principle puts air cargo, a key contributor to the global supply chain, in clear focus.

3/9/2020

AIRLINES AND AIRPORTS AGREE CONDITIONS FOR EUROPEAN WINTER SLOTS WAIVER

Facing the most difficult winter season in aviation's history, airlines and airports have agreed to abide by a set of conditions together with slot coordinators under which an extension of the waiver of the "use-it-or-lose-it" rule could be applied for the entire 2020-2021 winter season. Continued uncertainty about a second wave of the pandemic and haphazard travel restrictions have caused passenger demand to plummet, leading to a slower recovery in European air transport and making the need for an extended slots waiver more urgent than ever.

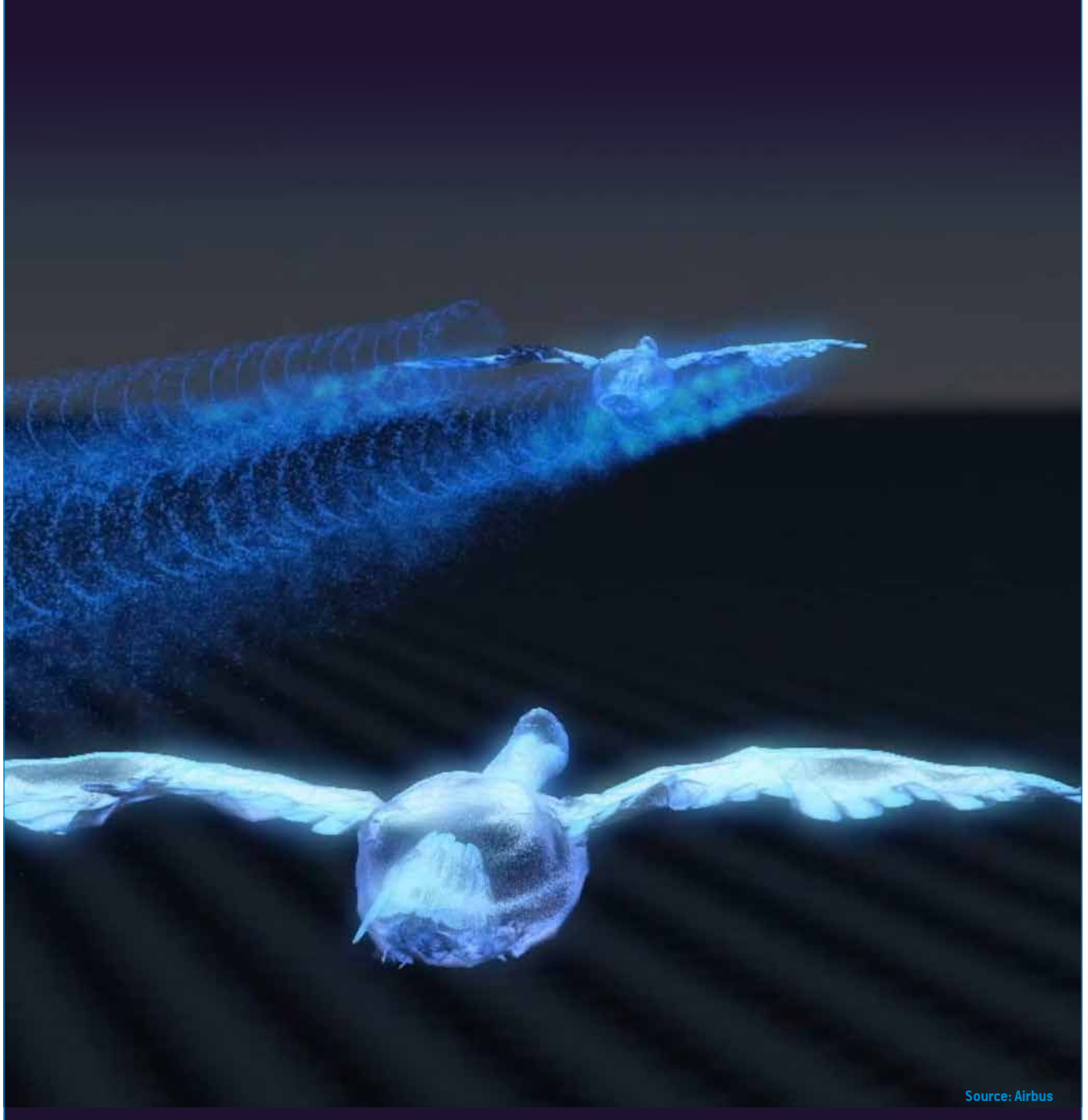
To facilitate a prompt decision by the European Commission, ACI EUROPE, Airlines for Europe (A4E), Airlines International Representation in Europe (AIRE), the International Air Transport Association (IATA) and the European Association of Slot Coordinators (EUACA) have agreed on specific conditions to ensure a timely return of slots not planned for use this winter. This represents a significant achievement given the extraordinary circumstances airports and airlines find themselves in.

9/9/2020

AIRBUS JOINED BY EUROPEAN PARTNERS TO DEMONSTRATE REDUCED EMISSION FELLO'FLY OPERATIONS

Airbus has signed agreements with two airline customers; Frenchbee and SAS Scandinavian Airlines, as well as three Air Navigation Service Providers (ANSP); France's DSNA (Direction des Services de la Navigation Aérienne), the UK's NATS and EUROCONTROL to demonstrate the operational feasibility of Airbus' demonstrator project, fello'fly, for reducing aviation emissions.

Inspired by biomimicry, fello'fly is based on Wake Energy Retrieval (WER) to reduce aviation emissions. WER replicates the behaviour of birds, which fly together to reduce their energy consumption. The technique of a follower aircraft retrieving energy lost by a leader, by flying in the smooth updraft of air the wake creates, reduces fuel consumption in the range of 5-10% per trip.



Source: Airbus

10/9/2020

HELPING AIRPORTS PLAN THEIR RECOVERY: STUDY BY EUROCONTROL AND PARTNERS HIGHLIGHTS ACTIONS TO IMPROVE PERFORMANCE WHEN IMPLEMENTING COVID-19 MEASURES

The study, commissioned from the Airport Research Center (ARC), aims to help airports understand the impact of implementing COVID-19 measures on airport performance.

In collaboration with ACI EUROPE and other industry partners, the study assessed the impact of these measures on terminal operations, in particular passenger journey time, terminal throughput and boarding gate processing capacity. The results show that, for the same passenger numbers in a pre-COVID queue:

- 50% more space is required at check-in;
- 100% more space at security control;
- 35-50% more space at boarding gates;
- Up to 10 minutes additional time to the departing passenger journey;
- 100% more space at immigration;
- 30-50% more space for baggage reclaim;
- 5-20 minutes additional time to the arriving passenger journey;
- Additional measures are needed to mitigate impact if health checks are required for arrivals/transfers.

The main conclusions of the study are:

- Airports need to focus on key limiting components – security control/immigration in terms of throughput challenges, and boarding gates and

**EUROCONTROL**

baggage reclaim in terms of space constraints.

- Airports already congested before the COVID crisis can expect to reach their maximum saturation capacity at just 60-75% of their peak 2019 traffic.
- To avoid further delays and conflicting requests to passengers, greater harmonisation in terms of COVID measures supporting passenger safety and re-building trust is essential across EU Member States.

11/9/2020

ONEWORLD MEMBER AIRLINES COMMIT TO NET ZERO CARBON EMISSIONS BY 2050

oneworld member airlines have committed to net zero carbon emissions by 2050, becoming the first global airline alliance to unite behind a common target to achieve carbon neutrality.

The alliance's 13 member airlines plan to achieve this target within the existing environmental framework previously agreed to by governments, including through the



International Civil Aviation Organisation (ICAO). The airlines will develop their individual approaches to reach the target of net zero carbon emissions by 2050, through various initiatives such as efficiency measures, investments in sustainable aviation fuels and more fuel-efficient aircraft, reduction of waste and single-use plastics, and carbon offsets among other measures.

15/9/2020**NEW CANSO REPORT DEMONSTRATES STRENGTH OF ATM PERFORMANCE**

A new report released by the Civil Air Navigation Services Organisation (CANSO) clearly shows the strength of air navigation service provider (ANSP) performance as reflected in productivity gains that extended for much of a decade.

CANSO published its tenth Glob-

al Air Navigation Services Performance Report. The annual report uses key performance metrics to measure the cost-efficiency and productivity of air navigation service providers (ANSP). The latest report includes data from 57 ANSPs responsible for the management of 65% of the

world's air traffic. It covers data between 2014 and 2018, 2018 being the latest year for which financial data is available, based on information submitted in 2019. The report includes data from EUROCONTROL's ATM Cost-Effectiveness (ACE) Benchmarking Report.

16/9/2020**FIRST EVER PURPOSE-BUILT REGIONAL FREIGHTER TAKES FLIGHT**

ATR today announces the successful first flight of its new purpose-built regional freighter aircraft. The flight took off at 14:00 from its Saint-Martin site and lasted two hours. During the flight, crew onboard performed a number of tests to measure the new aircraft's flight envelope and flight performance.

16/9/2020**AFTER 18-MONTH INVESTIGATION, CHAIRS DEFAZIO AND LARSEN RELEASE FINAL COMMITTEE REPORT ON BOEING 737 MAX**

The Committee's 238-page report, which points to repeated and serious failures by both The Boeing Company (Boeing) and the Federal Aviation Administration (FAA), contains five central themes and includes more than six dozen investigative findings. These themes include:

- Production pressures that jeopardized the safety of the flying public. There was tremendous financial pressure on Boeing and the 737 MAX program to compete with Airbus' new A320neo aircraft. Among other things, this pressure resulted in extensive efforts to cut costs, maintain the 737 MAX program schedule, and avoid slowing the 737 MAX production line.
- Faulty Design and Performance Assumptions. Boeing made fundamentally faulty assumptions about critical technologies on the 737

MAX, most notably with MCAS, the software designed to automatically push the airplane's nose down in certain conditions. Boeing also expected that pilots, who were largely unaware that MCAS existed, would be able to mitigate any potential malfunction.

- Culture of Concealment. Boeing withheld crucial information from the FAA, its customers, and 737 MAX pilots, including internal test data that revealed it took a Boeing test pilot more than 10 seconds to diagnose and respond to uncommanded MCAS activation in a flight simulator, a condition the pilot described as "catastrophic."
- Federal guidelines assume pilots will respond to this condition within four seconds.
- Conflicted Representation. The FAA's current oversight structure with respect to Boeing creates inherent conflicts of interest that have jeopardized the safety of the flying public. The report documents multiple instances in which Boeing employees who have been authorized to perform work on behalf of the FAA failed to alert the FAA to potential safety and/or certification issues.
- Boeing's Influence Over the FAA's Oversight Structure. Multiple career FAA officials have documented examples where FAA management overruled a determination of the FAA's own technical experts at the behest of Boeing. These examples are consistent with results of a recent draft FAA employee "safety culture" survey that showed many FAA employees believed its senior leaders are more concerned with helping industry achieve its goals and are not held accountable for safety-related decisions.

17/9/2020

SUSTAINABLE AND RESILIENT SUPPLY CHAINS CRUCIAL TO COVID-19 RECOVERY

Through a joint statement on the crucial importance of resilient and sustainable integrated supply chains to the global recovery from COVID-19, ICAO and seven other UN bodies have encouraged States to realize more effective coordination and co-operation between the transport modes, and across borders.

The statement was signed by Dr. Liu and the heads of the United Nations Conference on Trade and Development (UNCTAD), the International Maritime Organization (IMO), the United Nations Economic Commission for Africa (UNECA), the United Nations Economic Commission for Europe (UNECE), the United

Nations Economic Commission for Latin America and Caribbean (UNECLAC), the United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP), and the United Nations Economic and Social Commission for Western Asia (UNESCWA).

21/9/2020

AIRBUS REVEALS NEW ZERO-EMISSION CONCEPT AIRCRAFT

Airbus has revealed three concepts for the world's first zero-emission commercial aircraft which could enter service by 2035. These concepts each represent a different approach to achieving zero-emission flight, exploring various technology pathways and aerodynamic configurations in order to support the company's ambition of leading the way in the decarbonisation of the entire aviation industry.

All of these concepts rely on hydrogen as a primary power source – an option which Airbus believes holds exceptional promise as a clean aviation fuel and is likely to be a solution for aerospace and many other industries to meet their climate-neutral targets.



© AIRBUS. 2020 - All rights reserved - IIVS

22/9/2020**IATA CALLS FOR SYSTEMATIC COVID-19 TESTING BEFORE DEPARTURE**

The International Air Transport Association (IATA) called for the development and deployment of rapid, accurate, affordable, easy-to-operate, scalable and systematic COVID-19 testing for all passengers before departure as an alternative to quarantine measures in order to re-establish global air connectivity. IATA will work through the International Civil Aviation Organization (ICAO) and with health authorities to implement this solution quickly.

**24/9/2020****EUROPEAN AVIATION LEADERS DISCUSS IMPACT OF COVID-19, SYSTEM FINANCING AND VISION FOR FUTURE EUROPEAN ATM**

In a virtual meeting, Europe's air traffic management (ATM) leaders have today addressed the key issues facing the aviation industry in the context of the COVID-19 crisis and in particular how to manage the expected massive €140 billion in lost revenue in 2020.

The meeting, bringing together the Europe CANSO CEO Committee (EC3) members and the Director General of EUROCONTROL, Eamonn Brennan, jointly assessed options for managing the financial crisis caused by the huge and ongoing decrease in the number of flights. They also discussed how best to support the implementation of the newly published Single European Sky proposal (SES2+) with the aim of ensuring that the European ATM system will be in a position to manage the recovery and future demand while taking into account environmental concerns.

24/9/2020**IATA AND UNOCT TO COOPERATE ON COUNTERING TERRORIST TRAVEL**

The International Air Transport Association (IATA) and The United Nations Office of Counter-Terrorism (UNOCT) signed a memorandum of understanding to strengthen cooperation with the United Nations Countering Terrorist Travel Programme (CT Travel Programme). The memorandum was signed by UNOCT Under-Secretary-General Mr. Vladimir Voronkov and Director General and CEO of IATA, Mr. Alexandre de Juniac during a virtual ceremony.

The CT Travel Programme, a flagship global initiative of UNOCT, assists Member States in building their capabilities to detect and counter terrorists and serious criminals by using advance passenger information (API), passenger name record (PNR), and other passenger data, in accordance with Security Council resolutions 2178 (2014), 2396 (2017), and 2482 (2019) and relevant privacy laws. IATA will join the CT Travel Programme as the first non-government partner of the initiative.

30/9/2020**GREEN RECOVERY OF AIR TRANSPORT A PRIORITY FOR INDUSTRY LEADERS**

Despite the current crisis facing the global aviation industry, its commitment to pursuing sustainability remains strong, particularly as the sector starts to recover. Speaking at the Global Sustainable Aviation Forum, industry leaders reiterated that long-term climate action should be a priority alongside economic recovery in the coming years.





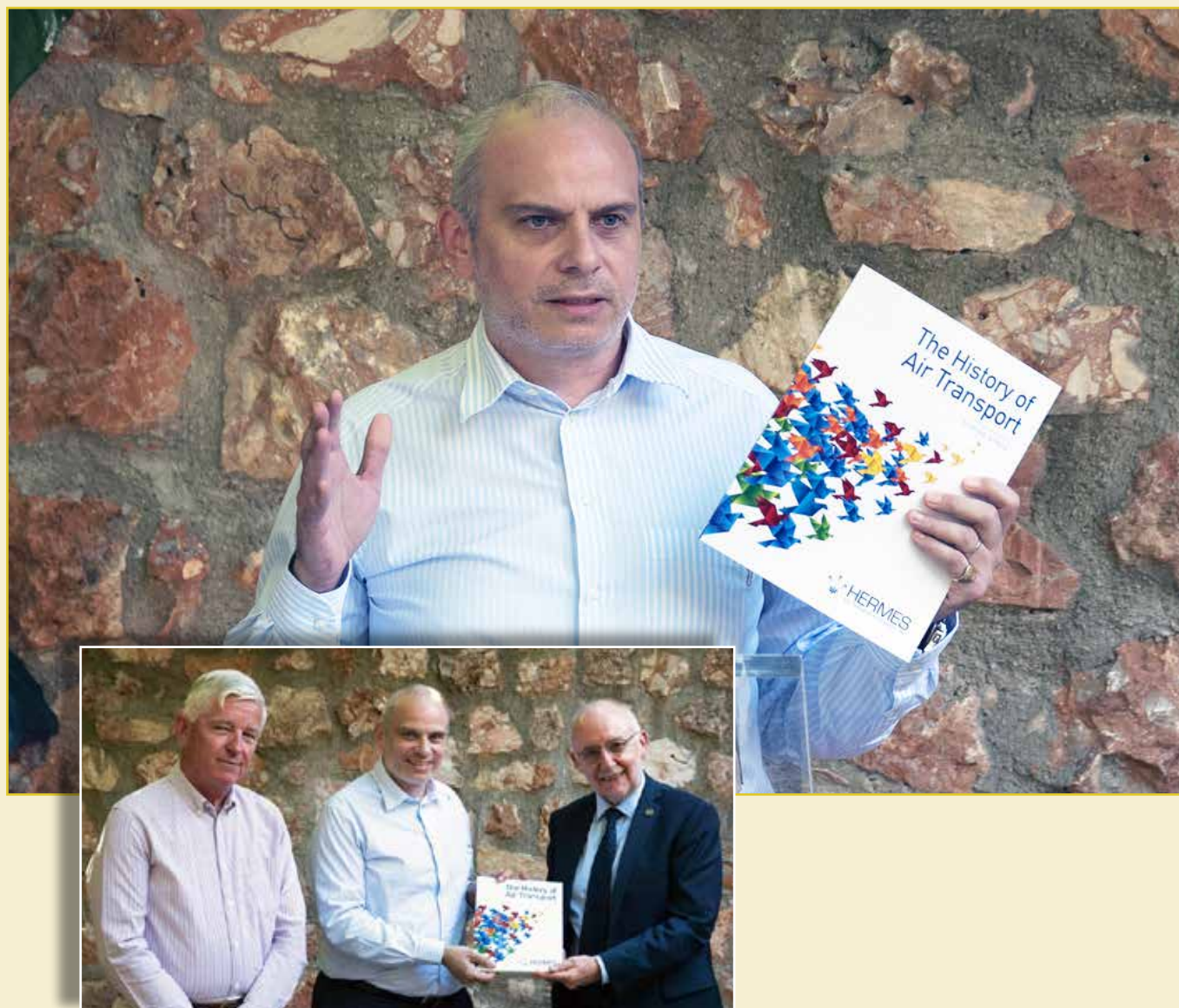
Hermes present the book entitled: "The History of Air Transport"

During the 2020 Summer Aviation Forum held in the presence of leaders of air transport on Friday 28 August, Hermes presented its new publication entitled: "The History of Air Transport". The first copy of the book was presented to the President of ICAO Council, Salvatore Sciacchitano.

This book provides an updated timeline of the key moments of air transport. It is based on the first aviation history book Hermes published in 2014 in partnership with ICAO, ACI, CANSO & IATA.

Director General of Hermes, Dr Kostas Iatrou and author of the book said: "Commercial aviation recently celebrated its first centennial. For more than 100 years since the first take off, aviation has witnessed challenges and changes that have made it a critical component of modern societies.

Most importantly, air transport brings humans closer together, promoting peace and harmony through connectivity and social exchange. A key role for Hermes Air Transport Organisation is to contribute to the development, progress and promotion of air transport at a global level. This is and will not be possible without knowing the history and evolution of the industry."



Pieter Elbers, CEO of KLM, receives the 2020 Hermes Award"

The Board of Hermes selected unanimously Pieter Elbers, CEO of KLM Royal Dutch for the 2020 Hermes Award for his significant contributions to aviation.

Jeff Poole in presenting the award said: "As you know Hermes is an organization of people, of the leaders of Aviation and we are very proud of that. So, it is really appropriate that this year's award goes to an outstanding leader in aviation. I am delighted to invite Pieter Elbers to accept the Hermes Award. As the CEO of KLM, he inherited a very difficult job, not just running an airline in these challenging times but also managing through the considerable politics and other difficulties surrounding it in an absolutely exemplary way. KLM is very lucky to have Pieter at the helm".

"What a great surprise and recognition this is. I am truly humbled to receive the 2020 Hermes Award and very grateful to the Hermes – Air Transport Organisation Board of Directors for this honorable recognition. I'd like to take this opportunity to dedicate this award to my all colleagues without whom it would have been impossible to achieve this today." added Pieter Elbers, President and CEO of KLM Royal Dutch Airlines.



Salvatore Sciacchitano, President of ICAO Council named honorary member of Hermes

In accordance with the unanimous decision of the Board of Hermes and the decision of the 2020 Hermes AGM held virtually on 30 April, Salvatore Sciacchitano, President of ICAO Council was named honorary member of Hermes, in a ceremony held during the 2020 Summer Aviation Forum.

Jeff Poole in presenting the award said: "Salvatore Sciacchitano has had a distinguished career with the Italian government and Civil Aviation and stepped up recently to become President of the ICAO Council. That in itself is a measure of the man and his achievements. It is particularly important right now since under his leadership ICAO has initiated the successful CART process to help aviation address the COVID-19 issues. I am delighted on behalf of Hermes to award honorary membership to Salvatore".

Salvatore Sciacchitano in accepting the award thanked Hermes, Jeff and Kostas Iatrou. He said that he has been "participating in Hermes events since the very beginning and that he had been one of those who have facilitated Hermes to be an observer in ICAO and to participate in last year's ICAO Assembly. This is just the beginning since Hermes's contribution will be valuable for ICAO. Now as an honorary member I am proud and more committed to work closer with Hermes".



The Director General of Hermes met with the President of ICAO Council

On the occasion of the 2020 Summer Aviation Forum the Director General of Hermes, Dr Kostas Iatrou (organiser of the Forum) met with the President of ICAO Council, Salvatore Sciacchitano. Dr Iatrou made an overview of Hermes latest developments including Hermes participation in last year's ICAO Assembly. They both agreed on a closer collaboration on key topics on aviation.



2020 Summer Aviation Forum: "Recovery and the flightpath to new aviation"

The 2020 Summer Aviation Forum entitled "Recovery and the flightpath to new aviation" was organized by ATN – Air Transport News in association with Hermes – Air Transport Organisation, with Aegean Airlines being the Official Air Carrier Sponsor and easy power the Sponsor. It was held in Ekali, Greece on Friday 28 August. The Forum is the new initiative of ATN and it is at the same time the first major air industry event, since the start of COVID-19 pandemic.

Major leaders of the industry participated and addressed the Forum, **Salvatore Sciacchitano**, *President of the ICAO Council*, **Luis Felipe de Oliveira**, *Director General, ACI* and **Henrik Hololei**, *Director-General for Mobility and Transport, European Commission*.

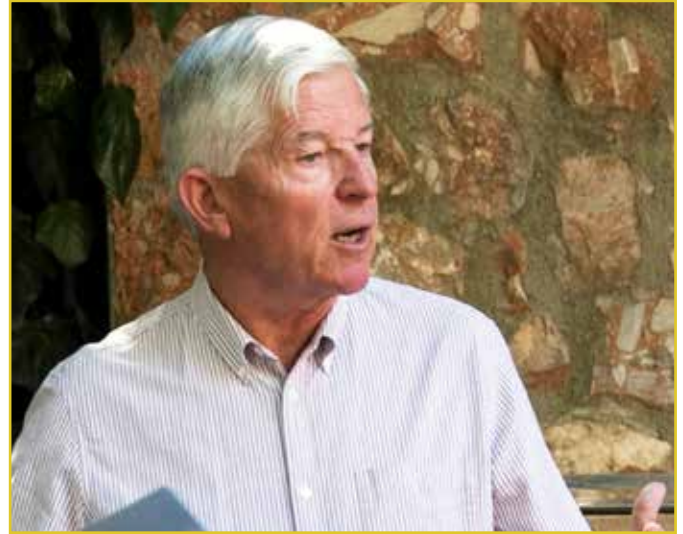
The two panels boasted a wide global representation of leaders of the air transport chain moderated by Eamonn Brennan, *Director General, EUROCONTROL* and Professor Andreas Papatheodorou, *University of Aegean*.

SUMMER AVIATION FORUM 2020



- **David Ciceo**, *CEO, Cluj Airport & President, Romanian Airports Association*
- **Abderahmane Berthe**, *Secretary General, AFRAA*
- **Pieter Elbers**, *President & CEO, KLM*
- **Ioanna Papadopoulou**, *Director, Communications & Marketing, Athens International Airport*
- **Rafael Echevarne**, *Director General ACI-LAC*
- **Ilias Maragakis**, *COO, Fraport Greece*
- **Andre Schneider**, *CEO, Geneva Airport*
- **Tassos Raftopoulos**, *Director Alliances & Aeropolitical Affairs, Aegean Airlines*





Stressing that we are living through an important turning point for aviation today, the President of Council of the International Civil Aviation Organization (ICAO), Mr. Salvatore Sciacchitano, told the aviation leaders attending the Forum that innovation and continued partnership will be critical to aviation's greener and more sustainable recovery from COVID-19.

"COVID-19 has wreaked havoc on local and global air

connectivity, and on the many countries and operators who made that connectivity possible," Mr. Sciacchitano commented. "It has also tragically impacted the lives of the hundreds of millions of economically vulnerable men and women around the world, many of whom depend on aviation and tourism for their very livelihoods."

Jeff Poole, President of Hermes – Air Transport Organisation & VP Advocacy WTTA and Chair of the Forum concluded by thanking the participants for their



personal investment and commitment to the 2020 Summer Aviation Forum and proceeded to summarize the Forum's main points. He pointed out that although the industry and the industry leaders are good at articulating the problem – as there has been good exposure and analysis from the key note speakers and the panelists on their own experiences and their feelings – expressing what they would like to see in the industry, no specific solutions were proposed. He stressed that the industry has been devastated and said that although last year the global travel and tourism industry provided over 300 million jobs globally, according to WTTC research, almost 200 million jobs could be lost unless something changes very quickly. He detected that there is still optimism amongst everyone present that a “new normal” will be achieved even if it will take some time. He also sensed a lot of frustration for things that are beyond the industry's control.

Although the industry has achieved a lot by putting in place quite quickly new COVID-19 related processes and procedures, proving once more its agility, more international cooperation between governments is needed urgently. There needs to be consistency of criteria, measurements and measures. At present each government has different set of rules which, for example, cabin staff need to know and apply. All the different announcements on new restrictions, new travel bans, new quarantine procedures, etc have a damaging effect. The travel experience is confusing

and poor but it is fundamental to rebuild traveller confidence. It is up to the governments to put in place international frameworks that would allow the industry to have consistency of processing and testing as people move and travel around the world.

He continued to say the very purpose of the Forum is to do something to change this. The very clear suggestion that came out of the Forum is that the industry should communicate more actively to travellers and governments of everything that has been done and that aviation is safe in the COVID-19 context. It is a compelling fact that no-one has caught COVID-19 through international travel and this has to counter the previous accusations that aviation was part of spreading COVID-19 around the world. The real problem for the industry is the complete and utter lack of leadership and cooperation within and between governments at the international level. WTTC has been challenging individual governments and governments collectively on that issue: “Are health ministers running aviation now?”, “Who is running the world today in the COVID-19 era?”.

In conclusion, the industry needs to be even more proactive in its messages and advocacy but it also needs to find its champion, a way of instilling leadership and backing to governments and that is a big challenge. Governments need a real sense of urgency to cooperate internationally on new global frameworks, standards and processes.



ICAO Informal briefing – Opportunity for consultation and discussion on the consideration of the establishment of a High–Level Body with the Industry

The Director General of Hermes, Dr Kostas Iatrou, after the invitation from ICAO participated to the two Informal briefings – Opportunity for consultation and discussion on the consideration of the establishment of a High–Level Body with the Industry- held online (16 & 23 September). More than 185 participants and 100 observers participated in the briefings.

In the second briefing, Dr Iatrou intervened and after thanking ICAO for inviting Hermes, the organization that represents the leaders and decision makers of the air industry, said that innovation as the success of CART proves, is essential. “We need to have collaboration and cooperation all along the air transport chain and a very close collaboration between the industry and international organizations such as ICAO Council”. He added that Hermes by its nature as it represents people can help in that direction and is looking forward to be invited to the next events too.





Despite the current crisis facing the global aviation industry, its commitment to pursuing sustainability remains strong, particularly as the sector starts to recover. Speaking at the Global Sustainable Aviation Forum, industry leaders reiterated that long-term climate action should be a priority alongside economic recovery in the coming years.

In his virtual remarks **ICAO Council President Salvatore Sciacchitano** drew attention to how COVID-19's impacts on global mobility had tragically impacted the lives of the hundreds of millions of economically vulnerable men and women around the world, with further negative effects on intercultural exchange and the peace and economic prosperity of many developing and developed societies.

"Given the importance of air travel to so many of our fundamental collective aspirations, and to every global citizen's quality of life, aviation leaders have a great responsibility upon them today as we confront the existential threats of the ongoing pandemic," he emphasized.

"Health and safety, and the fundamental economic viability of operators must be assured, and as medical conditions permit we must also work better together to see that traffic recovery proceeds on the basis of continuously improving international alignment," he continued. "But we must also recognize the opportunity this crisis provides to build back commercial aviation greener, and more sustainably, including in terms of its overall role in the social and climate impacts of international travel and tourism."



COUNCIL PRESIDENT. SALVATORE SCIACCHITANO

The ICAO Council President also drew the leaders' attention to the fact that, to achieve this higher degree of sustainability, it would require *"the vision and strong commitment of everyone attending this summit today, and a heavy reliance on innovation going forward."*

He underscored that ICAO is placing a strong focus on innovation Organization-wide, and noted the green aviation innovations recently explored at the CO₂ Emissions Stocktaking event ICAO conducted earlier this month.

"I was very much encouraged to see the level of excitement on hand there for what could be possible for our sector going forward," Sciacchitano noted, *"and particularly so by the announcement there by the oneworld alliance on its new commitment to net-zero aviation emissions by 2050."*



Alongside the upcoming ICAO Seminar on Aviation Green Recovery this November, Mr. Sciacchitano drew attention to how these latest events were providing an important platform for exchanging ideas, and that the insights and perspectives emerging from the ATAG forum would be appreciated by ICAO's global audience.

He also noted, where aviation and the UN Sustainable Development Goals are concerned, that the inter-relationships between aviation, tourism, and the natural environment and civil societies are complex and symbiotic, and *"not simply a matter of carbon emissions from commercial jets."*

In concluding, Mr. Sciacchitano assured his audience that the ICAO Council and Secretariat will continued to move forward on the key objectives of the Environmental work programme States have assigned them, and on *"tackling even the most challenging diplomatic aspects of the pandemic's impacts on that programme – as the Council recently achieved with the CORSIA baseline adjustments."*

"All of us must recognize today that this is a time not only for strong leadership and commitment, but also deeper collaboration and progress founded in the solidarity called for in the Council's CART Report," he said. *"Fortunately, there is no other global community more capable in those capacities than our own."*

Executive Director of the cross-industry Air Transport Action Group, Michael Gill said: *"Air transport is in the midst of the deepest shock in its history. We expect a reduction of up to 4.8 million jobs in the sector by the end of the year and a massive hit to our ability to connect the world. However, as we plan for the recovery of air connectivity, we also must prioritize our environmental progress. Our sector has a long-term climate change goal to cut CO₂ emissions in half by 2050. With the right help from governments, the energy sector and technologists, we expect that global aviation will be able to hit net zero emissions a decade or so later. Some parts of the world will be able to meet this point earlier and a number of individual companies have already set goals along these lines. To achieve this will require a transition in our energy source from fossil fuel to sustainable aviation fuel, the acceleration of research and development of electric, hybrid and potentially hydrogen aircraft. It will also require a commitment to*



collaboration going even beyond our current levels. We have the next decade to set the scene for sustainable global connectivity for the next 30-40 years."

Speaking about the need to focus on sustainability as part of the industry's long-term recovery from Covid-19, the **Director General of Airports Council International, Luis Felipe de Oliveira**, said: *"The recovery of the aviation industry will be a key driver of the global economic recovery. To ensure that aviation can continue to provide the economic and social benefits, it is crucial that we pursue a green recovery and lay the foundation for a prosperous and sustainable industry for the long term. Airports are central to the interconnected and interdependent aviation ecosystem. Airports and their partners in the aviation industry need the support of appropriate regulation and government policies to facilitate a green recovery and push for real change."*

Civil Air Navigation Services Organization Director General Simon Hocquard said: *"Meeting our ambitious sustainability goals continues to be of paramount importance and will only happen if everyone in the aviation system plays their part. From implementing new operational procedures to adopting the latest technologies, the ATM industry has an important role to play in improving the efficiency of aviation in the near term, before new electric aircraft technologies or zero-carbon fuels come on stream."*

Alexandre de Juniac, Director General and CEO of the International Air Transport Association, said: *"COVID-19 has*

devastated the aviation industry. But we are working hard to re-connect the world safely and sustainably. We're committed to pushing ourselves, our partners, and governments to achieve our carbon targets in a green recovery. But this is not the time for more environmental taxes that punish people for reconnecting with family or who contribute to economic recovery with business travel. For aviation, the keys to combatting climate change remain investments in carbon offsetting, sustainable fuels, and radical green technologies."

Chair of the International Coordinating Council of Aerospace Industries Associations, Eric Fanning, said: "Manufacturers invest billions of dollars a year to make the next generation of airplanes even more fuel-efficient, but disruption from COVID-19 will make it difficult to maintain this level of investment in research and development. Moving forward, government and industry leaders must find new ways to collaborate on funding and developing innovative technologies that will address climate change."

THE WAYPOINT 2050 REPORT

In new analysis released, the aviation sector details how it can meet its climate goal of cutting CO₂ emissions in half by 2050, compared with 2005. It also highlights that net-zero emissions from air transport across the global sector could be achieved a decade or so afterwards. The plan will rely on a significant shift away from fossil fuels, the introduction of radical new technology and continued improvements in operations by the sector.

The prospect of new technologies such as radical aircraft designs, electric and hydrogen powered aircraft is factored into the analysis and these are expected to be able to enter the fleet from around 2035-2040 for short-haul flights. Operational improvements such as more efficient air traffic management and better use of existing aircraft play a fundamental early role and help reduce emissions further. Most importantly, the nearly complete shift to sustainable aviation fuels – up to 450-500 million tonnes of this low-carbon energy source – will be required to meet the industry's climate goal.

The analysis released by the industry, alongside work by governments and researchers, will be used to inform United Nations negotiations towards a long-term climate goal for air transport. The aviation industry has encouraged this process, anticipated to be finalised at the next International Civil Aviation Organization Assembly in 2022.

The industry believes that with the right support from governments, net-zero CO₂ emissions from global air transport may be achievable by around 2060-2065, but it is likely that some regions will be able to meet this goal earlier with work underway in some parts of the world to identify those roadmaps. A number of individual airlines and companies in the industry have already set themselves net zero targets.

The Waypoint 2050 analysis does not rely primarily on market-based measures such as offsets to pursue pathways to decarbonisation. However, it is likely market-based measures will be needed in the long term to deal with any remaining CO₂ emissions or as sustainable aviation fuels ramp-up.





SUMMER AVIATION FORUM 2020



**RECOVERY AND THE FLIGHTPATH
TO NEW AVIATION**

Friday 28 August



Welcome

Dr Kostas Iatrou, Director General of Hermes - Air Transport Organisation welcomed the participants to the 2020 Summer Aviation Forum and stressed that it is the very first international event held with the physical attendance of the participants since the Covid 19 outbreak. He continued by saying that the air transport industry is the industry of connectivity and needs to give to the customers the message that it is safe to fly. "If we do not give the example people will simply not fly" and for countries such as Greece which are dependent on tourism, this is extremely important. He thanked all the participants for the brave decision to fly and attend in person the Forum with Covid 19 still around. He said that the purpose of the meeting "Recovery and the flight path to new aviation" is to find ways to move forward and to give the message to governments, politicians and all stakeholders that simple procedures easily understandable are necessary to encourage people to fly.

Introduction from the Chair

Jeff Poole, President of Hermes and Vice President of WTTC, said that when they were discussing the theme of the Forum early in the Covid era they thought that by August 2020 they would be well in the recovery path but the Covid 19 situation continues pushing back the time for recovery and having tremendous impact on all businesses related to aviation, travel and tourism. He said that when he took over his post in WTTC the focus was on overtourism and sustainable tourism but



and now in the face of the new situation "we all need to evolve and adapt our thinking". When the crisis started WTTC was pushing governments to work closely with the private sector, to provide financial liquidity to keep businesses operating and employees receiving their salaries and convince people about the importance of wearing masks and keeping health protocols. A few months later on, "we need so much more collaboration and cooperation in particular at the government level as governments are acting in very isolated way, each country looking after itself, introducing new travel restraints in a completely uncoordinated way having dramatic impact on airline bookings for ex. The UK sudden decision to put in quarantine travellers returning from France and Spain." He expressed the hope that the Forum and the panels will come out with ideas about tangible actions the industry can take to work in a much more coordinated and focused way on the aviation messages and what the industry wants from governments for aviation to become again the great industry and to bring the great benefits it brings in terms of employment and social benefits.

Keynote Addresses

The Council President of the International Civil Aviation Organization (ICAO), Mr. Salvatore Sciacchitano, told the gathered aviation leaders that innovation and continued partnership will be critical to aviation's greener and more sustainable recovery from COVID-19.

"COVID-19 has wreaked havoc on local and global air connectivity, and on the many countries and operators who made that connectivity possible," Mr. Sciacchitano commented. "It has also tragically impacted the lives of the hundreds of millions of economically vulnerable men and women around the world, many of them people who depend on aviation and tourism for their very livelihoods."

Referencing the UN policy brief on Transforming Tourism released earlier this week, the ICAO Council President noted its points on how the relationship between tourism, natural ecosystems, and the populations which maintain them is complex and symbiotic, and that UN Secretary General Guterres was apt in describing our ability to travel and share the world as a "wonder of the world" in and of itself.

"Given the importance of air travel to such fundamental collective aspirations, and to every individual's quality of life, aviation leaders have a great responsibility upon them today as we confront the existential threats of this pandemic," Sciacchitano said.

"In the first place we have a duty to keep current passengers and crew protected from COVID-19 health risks through every stage of the air travel experience. Secondly, we need to keep commercial civil aviation viable from the most basic of economic standpoints. Thirdly, we must ensure that it restarts and recovers with due consideration of all associated safety, security, and other traditional aviation performance metrics. And lastly, we need to rebuild it on a solid foundation of sustainability – both in terms of the network's ability to better withstand future pandemics, and its overall role in the



social and environmental impacts of travel and tourism."

The first and third of these priorities were why the ICAO Council produced its CART Report and Take-off Guidelines earlier this year. They were also the driver for the many other activities undertaken at the Secretariat level in ICAO, notably with respect to the special guidance, monitoring platforms, and resources it has made available while keeping supply chains and humanitarian corridors functioning. Addressing the penultimate priorities in terms of how air transport 'builds back better' and more sustainably, Sciacchitano noted it will require "the vision and leadership of all us in this forum today, and a heavy reliance on innovation going forward."

"Whether we are talking entirely new technologies, or new applications of existing technologies, solutions are now at

hand to permit us to pre-screen passengers more extensively than ever before, for both health and security risks, and in a manner less disruptive than today. We are also presented with a reality whereby many older and more emissions-intensive aircraft are being pulled from the skies, and in significant numbers. This presents opportunities to assure a much greener post-COVID fleet, and in light of recent targets which were announced even the age of electric commercial aircraft could be upon us by the next decade."

Sciacchitano also emphasised that most of the onus toward addressing these priorities and enabling innovation also falls to air transport operators, manufacturers and others, even as they now face incredible challenges to the fundamentals of their businesses and operations.

"As the Council Task Force underscored in its CART Report, it is therefore of the utmost importance that all aviation stakeholders continue to show solidarity with one another, and to "work as one aviation team" toward our shared goal of safely and sustainably reconnecting the world," he said.

"This is a time not only for great leadership, but also deeper collaboration, and I can think of no other sector more capable in those capacities than our own."

Luis Felipe de Oliveira, *Director General of ACI*, in his keynote address he said that he would provide the airport perspective on what recovery and the new normal will look like.

Some positive and encouraging developments all over the world with more countries opening up their borders and some international flights are scheduled while passenger numbers are far below of what we saw in the beginning of 2019. Cooperation between airlines, airports and governments is needed promising to pave the way to continuing recovery, the health and safety of staff and passengers is at the front and center of the recovery collaboration, cooperation and consistency are the key for a successful restart sustainable unprecedented Covid 19 threat. ACI confirms a reduction by 200 million passengers only in the second quarter of 2020 and we expect more than 5 billion passengers in all 2020. In terms of revenue we estimate 60% loss of the airport revenue. Airports maintain their important economic role in creation of employment as airports employ more than 60% of the direct employment of the aviation sector, they facilitate world trade helping countries to contribute to the global economy by increasing the access to international markets, providing societal and economic benefits to the local, regional and national communities we serve. Airports can and will drive the recovery but they cannot do it alone. Recovery will be directly related to the lifting of the travel restrictions and indirectly to the projection of the duration of the economic recession. Our data show increase in the domestic market in China, domestic US, Brazil and parts of Europe. ACI predicts that it will take at least three years for global traffic to return to the 2019 levels but this also on non controllable by the industry

variables. To help restore public confidence ACI has launched the Airport Accreditation, a program to help assist airports by assessing measures and procedures. Accreditation is based on ICAO Restart Task Force recommendations in alignment with EASA ECDC Covid 19 Aviation Health Safety Protocol. The program recognizes airports that Prioritize cleanliness and safety at their facilities to minimize coronavirus and other infection risks in accordance with industry guidance. ACI has published detailed guidance on a global level on the measures airport should take to protect the safety and security of employees and flying public in accordance with IATA, WTCC, UN, WTO to align the effort to produce a consistent guidance. To encourage collaboration among governments, between governments and the industry which is vital to ensure the essential synergy to restore connectivity and passenger confidence. The industry and government regulators should ensure that the new procedures taken at airports are adapted to the changing data and medical evidence and ensure that they remain aligned with those deployed through other modes of transport and wider society. As the industry takes its path and plan to recovery it becomes even more important for airports to listen, understand and respond the changing needs and expectations of their customers. Automation and technology will play a key role as Artificial Intelligence offers an opportunity to upstage tasks, increasing efficiency while allowing for stronger security and lower margin for error if implemented correctly. The crisis and its impact on aviation activity has brought into sharp focus the need for systems and processes that are really ready to cope with the challenges. The industry has already taken the lead into many areas than can assist help addressing the public health related issues managing queues and crowds, optimizing the use of resources by adopting automation advanced technologies, facilitating data, exchanging and embracing digital solutions such as biometric recognition technology. There areas where significant opportunities exist within the control of national authorities to encourage innovation, such as enabling faster clearance of passengers, promoting adoption of automated electronic processing for customs and border control, processing and simplifying inspections throughout the passenger journey. The coronavirus may actually offer an impetus for change to foster greater innovation and the authorization needed to support it. Governments, airports, airlines and suppliers will need to work together to speed up the necessary changes. The world is changing fast and while the Covid 19 impact on the industry has been far greater than all previous experiences recovery requires greater levels of collaboration and partnership among the industry stakeholders. Airports cannot be alone "we all in this together".

Henrik Hololei, *Director General for Mobility and Transport in the European Commission*, started off his keynote address by

saying that the problem aviation is now facing will continue to affect the whole travel industry for some time to come. Six months back things looked different, there was a lot of optimism as there had been the best years ever in civil aviation in terms of number of passengers and in terms of the revenues not only airlines but all components of aviation value network were able to generate. He highlighted that this crisis shows how vulnerable the industry is, this virus has been a game changer and the aviation had not been prepared for something in such a magnitude. There have been local and regional viruses but they had been tackled. He stressed that this time it is not only the virus the industry has to deal with but also the "stupidity" of governments and especially "what we see in Europe is unforgivable and understandable" for a community that is supposed to be working on the basis of civil rules based on trust and appreciation among the different members when almost every country wants to go on its own without taking into consideration the advice cleared by the medical professionals, which would allow Europe to act far more as one and not as 27. He continued by referring to the crises aviation has faced the past 20 years which they have all been different in nature: September 11 was related to security and aviation security has never been the same, the financial and economic crisis ten years ago which shaped the way demand developed and how people were able to spend their disposable income, then the ash cloud left a world slightly different and added some new elements to civil aviation and now the pandemic which will mean in the future the health protocols will be far more embedded.

He stressed that the consumer confidence is low not because of aviation but because of the fear. People do not simply want to fly, they want to obtain new experiences and aviation has been the one that has given that opportunity and people are not ready to let it go. He complained that fear is constantly being cultivated unfortunately by the political elites which are painting a gloomier picture than the real one. The consumer confidence has to get back, campaigns are needed for that purpose and make clear that it is safe to fly.

The million dollar question is "what will happen next?" but none really knows but data show that in June when flying in Europe became possible again, traffic picked up faster than pessimists anticipated but it stopped again in the end of July when with the next wave travelling became again an issue. "We have above half of the flights but much less passengers than last year, this is a setback and makes the crisis longer". He referred to some interesting development of the industry: business aviation is up from last year -a trend already observed- cargo is more or less stable or slightly up so it is clear that it is the commercial civil aviation is the one that has been most severely hit. As no one knows how soon the vaccine will be available, the uncertainty continues and "every chain of the aviation value network has to understand that they are interdependent and they cannot be any winner, it is

either all or none" and this will make the different players to get closer together despite their differences in the past and try to overcome that and to push for that common course which is to help, facilitate the recovery of the whole aviation sector. He is very satisfied by the fact that there has to be sensible behaviour: he has been impressed by the way airports and airlines have been handling passengers, there has to be a high degree of care, acknowledgement and commitment and this needs to be underlined and amplified.

He added that people and Member States should understand that flying is safe, not a single confirmed case that transmission of the virus has taken place onboard an aircraft. But this is not understood by the member states or the politicians who believe that flight bans are an effective policy and they seem not to understand that if people are flying anyway that want to return to their home countries will have to go through a bigger ordeal, through more airports which makes it much more difficult for the health authorities to follow them. "We should get rid of flight bans" and he had been pushing this idea through the Commission perspective but it is difficult to get it through". Another point he raised was the lack of coordination and he lamented that fact there is no encouragement to fly although "we are not where we were six months ago when we did not know what this virus was, how it was behaving and did not know how to deal with it". He reminded that tourism gives 10% of the European GDP with aviation playing a key role, it is connecting people, and it has to be given a chance to connect people, it has to be the airline that decides where to fly not the governments. Aviation has established its own rules and has adhered to the rules. ICAO health protocol was an important step forward outcome as it allowed aviation to restart when restart was possible, it was proportionate taking into account the scientific advice, guaranteeing the highest level of health safety without putting planes on the ground without putting limits to the loads but it should also give the necessary guarantees and protection to the passengers. This protocol has inspired the rail and maritime business which shows "that if we all behave responsibly from the operators, throughout the whole value chain, the passengers and the governments then we will be able to restore the movements and the connectivity to an acceptable level. But we are still facing the uncoordinated complicated system in place as we are unable to function as one". He said that it is a global problem, that is why intercontinental travel has not taken off and if European countries do not trust each other, do not have even a common system it is even more difficult to do it on a global level. This is why ICAO CART has been a good baseline to restore international civil aviation. The key is to maintain the whole infrastructure-the aircraft manufacturers, the airlines, the airports, the travel retailers, the ground handlers -so that the industry will be able to take off when there will be the opportunity to do so, "one problem in the link can have a devastating effect on the whole value chain."

He went on to say that there are challenges that have been there before the crisis and they will continue to be there in the future. The sustainability issue is one of them, making aviation greener is a must and it is license to grow so more investments, cooperation on developing sustainable aviation fuel and implementing CORSIA are needed. The other issue is the lack of capacity, there are limitations on the ground and in the air and the industry has to address that now, a reform will "reform make sure in the end we will get better, fly fast with more capacity".

Saving the Single Aviation Market is essential, it is based on the three pillars: open markets, competition, connectivity - today the market is distorted by the different state packages which are unavoidable under the circumstances, and the industry needs to make sure that after the crisis there will be that the competitive market which has made flying possible

for every segment of society in Europe. And this situation makes international cooperation even more important not only with ICAO but with other organisations with ACI world, with the airlines to tackle the challenges the industry is facing.

He is certain that change will happen in the future but it will be an evolutionary not a revolutionary change and the current situation is accelerating the change and everyone should be ready for that, "there is no going back to exactly what it was before and those who do not realise may not survive in the market". The industry and regulators need to follow closely the developments in the distribution market and make sure that airlines and the aviation industry prevails and the market is be taken over by those who are not interested in flying but are more interested in getting the data about the customer and try to use that to get a bigger share than that they necessarily deserve.

Session 1

Eamonn Brennan, Director General, EUROCONTROL, moderated the First Session to the panel of which participated **David Ciceo**, CEO, Cluj Airport & President of Romanian Airports Association, **Abderahmane Berthe**, Secretary General, AFRAA, **Pieter Elbers**, President & CEO, KLM, **Ioanna Papadopoulou**, Direc-

tor, Communications & Marketing, Athens International Airport.

Eamonn Brennan launched the First Session referring to 2020 as a disaster year adding though that this year has been significant for other reasons too since KLM's retiring B-747s - an aircraft having served the industry since 1969 and A380 withdrawal from production after a very short period of service show

how much the market is changing. He stressed that had it not been for Covid 19 the industry would be talking about the lack of capacity and the 737 MAX grounding but on the other hand who is now who will buy 737 MAX or any kind of aircraft since there is already over-capacity in the system? This crisis is so serious that for the first time the industry has to restart from such a low basis.



So his first question addressed to *Pieter Elbers* was when long haul service will get back in operation, what KLM are going to do about it, how they are going to do it and what aircraft are going to make it happen on.



Pieter Elbers answered that they never stopped flying long haul, they are flying 50% of their long haul network in terms of coverage to the countries they can fly, with terrible load factors though. They have 30 long haul departures every day, half of them are cargo only, which shows the ability of the industry to be creative. Aviation in the middle of the crisis is providing health care to the public and making sure that medical equipment, medicines, masks are shipped to and from different parts of the world. The industry should have been more vocal on its contribution. KLM decided in March to ground its 787 fleet but they introduced them to service to create an air bridge between Amsterdam and China to transport medical equipment needed for hospitals. KLM's ambition is to fly as much as possible to any place they are safe and they are allowed to fly although the pattern is very erratic f.ex. flights to Mumbai go out empty and come back full. He urged ICAO to come with a standard set of rules and regulations because "It is absolutely appalling that we oper-

ate to 80 different countries with each one measures or sudden announcements like the UK that force passengers that from Amsterdam into quarantine. It is disastrous for our business even people that transfer to our airport have to go into quarantine". He commented that the industry should have been more active since the start making mask mandatory and not just rely on the filters we had on board were enough. He lamented that aviation tends to believe that it is special and can take care of its own rule and regulations. KLM did not have any 737 MAX orders so they can few 787s on order and as no board would agree to fleet orders now they will wait first to go out of this situation.

When asked how KLM will be profitable again he answered that in the next two or three years he is optimistic that the airline industry will rebound and KLM will be able to make the margins it did before. They were operating at a 7-10% margin, a margin that allowed them to return loans and now it is the time to speed up the steps digitisation, optimization of processes. He estimated that as with all previous crises, the industry will proceed to some consolidation, not in the next 12 months as airlines are supported by state aid but eventually it will drive further consolidation in the industry even in Europe and consolidation will lead to better margins.



Ioanna Papadopoulou stated that Athens Airport has lost 2/3 of its traffic

and 41-43% in terms of capacity which shows that airlines are doing the best they can to limit capacity in the market but there is a perfect non balance between supply and demand, Athens Airport had had spectacular growth for the last 6 years and a very balanced market between supply and demand, while now the imbalance is in the 15% region. When asked what it can be done to make the passenger feel more confident to fly again, she answered that there are two lines of action, tactical actions and strategic actions and these actions do not involve only Athens Airport but the global aviation community. In terms of practical actions, all airlines and all airports have adopted health safety measures- the Greek government and Greek Civil Protection has imposed random testing free of charge. Now that after some months of flying and testing the industry can say that aircraft and airports are safe, there is no danger of contacting the virus the industry should proceed to a global campaign to promote this data results but this campaign should not have aviation people talking about aviation but health experts talking about aviation. The industry needs to coordinate itself on this front. Strategic actions require the three "Cs", collaboration, cooperation and consistency in policy proposals and implementation. Marketing surveys show that travelers are afraid of getting stuck because measures can be changed during their travel, they want a stable status. The industry should convince governments that there should not be all these different uncoordinated measures but coordinated, uniform policies and understandable measures.

Abderahmane Berthe said that harmonisation in Africa is very difficult, the ICAO CART has been helpful but each country has adopted different measures, some countries impose fees of 50 dollars for the Covid test, some others 150 dollars asking the airline to pay for that. He referred to his own experience to illustrate his point: before leaving



Kenya he had a test for 100 dollars but did not have the test results before getting to Athens, he got them by e-mail but in Athens he got the Covid 19 test but this time for free. The industry needs to harmonize the measures and procedures so that the passengers is aware of what has to do and what to expect before flying. AFRAA has organised meeting with the ICAO regional office and other meetings with the African Ministries of Health and Transport but these meetings were held only for one country to tell the others what they are doing. One problem is that the ministries of Health are now taking control of what has to be done without consultation of the ministries of Transport. He called international aviation organisations such as IATA and ICAO to set up common protocols. He stated that African airlines have lost 8,8 billion dollars compared to 2019 and although airlines started operating in August traffic is extremely low. He is worried about Covid 19 trend in Africa since african citizens are not allowed to fly to the EU, except those from Rwanda and Tunisia. European airlines such as British Airways and KLM are now operating in Africa but African airlines have difficulties to start flying to Europe.

David Ciceo, CEO when asked how a small regional airport copes with Covid-19 as the problems he is facing are

common all over the small airports in Europe that cannot afford testing all passengers etc he answered they are expecting 30% of 2019 traffic.



He added that recovery will take much time for regional airport traffic compared to main airports as regional airports are mainly feeders for the larger airports. They have had many measures to cut costs, to postpone investments, to renegotiate their contracts. He said that he would like the EU to harmonist state aid given for small airports and although the Romanian government has approved state aid, this was planned until the end of June but the crisis continues. Another problem they are facing is capacity terminal because of the need for social distancing, they had to use two tents to increase capacity but it is a short term solution. He added that LCCs put a lot of pressure to small airports as they want to fly to the airport but pay nothing.

Eamonn Brennan changed focus and asked the participants about sustainability in the post Covid 19 era. Focus on sustainability and environmental conditions, especially the EU green deal not only affect operations but can make growth difficult. He referred to the five operational runways of Amsterdam airport that are not used to full capacity to reduce noise.



Pieter Elbers when asked about the delicate balance between environmental growth and profitability he answered that aviation has failed to display what it has achieved so far, as it has done far more than the car industry. KLM for example has achieved 17% reduction in CO2 emissions per passenger, and this has been driven by new investments in technology. It has invested a lot in biofuels but as their availability is limited they will build their own factory. Last year they announced the "fly responsibly" initiative through which the airline embraces collaboration with all the parties in the chain ready to make the next step to innovation. He said that they are designed with the University of Delft University some aerodynamic features in aircraft design.. Aviation should use the momentum to address the long lasting problems, the Single European Sky could help European aviation achieve 10% CO2 reductions and more efficiency. The combination of continued investment in alternative biofuels, collective action in using new aerodynamic elements, initiatives on the Single European Sky can help in this direction. He added that the development of other modes of transport such as the development of a paneuropean railway system would take some of the capacity pressure and airports and airlines could use the sparse capacity for long haul flights.

He estimates that in 2023-2024 long haul flights will be back to "normal".

Ioanna Papadopoulou was asked what can be done to attract investors said that at this moment things are very difficult with famous investors publicizing the withdrawing of their money from airlines and airports. She said that if there is a vaccine or an effective treatment soon things will get back in course although it will take years to get back to where the industry was. But if there is no vaccine or effective treatment, the landscape will change dramatically. Investors will monitor the situation make their decisions accordingly. If there is no vaccine or effective treatment, as airports have aeronautical and non-aeronautical revenues, with the latter being linked to the passengers, airports will have to find other sources of revenue and a different financing model.

Pieter Elbers was asked whether he believes that consumer behaviour will change he answered "no". He continued by saying that there are two driv-

ers behind consumer decision to fly: safety and available income. People will go back travelling but they will want to do it in a better sustainable way. After 9/11 security at airports was the number one issue, the industry has created security checks and now all passengers know the security procedures. He is certain that before a vaccine is found, the industry will have found a way airport processes to adapt and travellers will know that the person sitting next to him has been checked.

Abderahmane Berthe when asked why aviation is doing a "lousy job" at promoting that it is doing everything correctly from the health point of view and aviation is blamed for bringing the disease to Europe he answered that although Covid 19 came to Africa through aviation but at the same time cargo flights have been critical to transport protective equipment aviation industry. Aviation has to convince politicians and governments that aviation is extremely important especially in Africa where they 54 countries in Africa and there is no com-

petitive mode of transport such as high speed trains highways like in Europe. African airlines have been registering losses for 10-15 consecutive years, only 3 or 4 are making profit but he believes that with good governance and good leadership the future will bring sustainable growth. On the issue of the leadership Single African Sky, he said that there are still various restrictions, visas and stamps but although implementation is slow already 33 countries have adhered it and things are because some countries want to protect their national carriers.

David Ciceo said that the service by Ryanair and Wizz that offers no profit for the airport is maintained because local communities want traffic to survive. The Future of small regional airport will be very difficult for the next three years and is largely dependent on local communities but as Tarom, Blue Air will receive state aid, they will probably survive.

Presentation on Net Zero Energy

Nikolaos Savouris, Vice President, Easypower SA, presented how airport's primary system architecture towards Net Zero Energy and 2030 and 2050 Carbon Emissions Goals, which can help airports reduce operating costs, increase profitability and energy supply resiliency. He said that they are creating the first military airport certified as a Net Zero Energy and Carbon Footprint in the world on the island of Crete. Part of its infrastructure is used by Chania Airport, the fifth airport in Greece. He stressed that the most appropriate solution for airports is a combination of solar energy and battery storage system. A tailor-made scheme based on this combination is both easily and efficiently adaptable as both are by now mature technologies and stable and affordable products. On top of that, these solutions entail zero or minimum costs for the airport owner and operator as they are effected on pay-as-you save or lease. With airports producing energy internally and becoming energy self-sufficient, the power not used by the airport will be redirected to satisfy the needs of the nearby communities



Session 2

Professor Andreas Papatheodorou, University of Aegean, moderated the Second Session to the panel of which participated **Rafael Echevarne**, Director General ACI-LAC **Ilias Maragakis**, COO, Fraport Greece **Andre Schneider**, CEO, Geneva Airport and **Tassos Raftopoulos**, Director Alliances & Aeropolitical Affairs, Aegean Airlines.

Prof. Papatheodorou started off the session saying that in the last two months the entire aviation tourism ecosystem -people fly to go somewhere and this is related to tourism, in the wider context not only leisure but also for visiting friends and relatives- has suffered a lot, from airlines, airports, hotel accommodations to ground handlers even car rental companies. His first question was about the opinion of the participants on the evolution of the entire aviation ecosystem and how they see the evolution from both a holistic point of view but also from the perspective of their own sub-sector.

Rafael Echevarne was the first to answer and he said that the situation at his part of the world, Latin America and Caribbean, is dire. It was the last area to be hit by Covid-19 crisis but from then on the activity has practically been zero and in a number of countries such as Columbia, Argentina and Panama the number of commercial both domestic and international flights is zero. In Argentina and Chile, ski tourism, which provides a lot of jobs, has been zero with all ski resorts closed. Airports and airlines have done everything they could-pilot programmes, cleaning of the terminals have to convince the authorities about the need to restart flights and even today no one really knows what it will be done, they are talking about tests but tests about what. They are trying to convince governments to restart the industry with whatever testing they want to introduce but without quarantines. "We want to restart flying"



even more since there are regions such as all the islands in the Caribbean which depend on aviation "We hope that some sense will prevail by introducing checks before flying etc."



Andre Schneider said that in Europe air traffic started to take up in June but now in August challenges have started again and reservations are dropping and one of the reasons is the totally uncoordinated approach to measures. Experience shows that industry takes a long time to recover, even if you let it go, it will not happen immediately. The number one challenge is that people do not understand what is going on and this under-

mines confidence "there are so many not understandable rules that people are not going to follow them any more", measures need to put in perspective in relation to the risk. No one wants to relive the March situation with so many people in intensive care but now although we see a raise in cases there is not rise in intensive care patients. It has to be made clear, to give a better feeling of "what are we going to do? How it is going to help and what it is going to cost"? The second challenge that the industry needs to recreate confidence as we have all been suffering from the fake news culture, it is all about having the right level of measures and standing up for them and second to communicate about them: Geneva Airport has held multiple news conferences with airlines, explaining what, why and how we are doing, it has had teams at the entry of terminals explaining at the customers to explain to people this new normal otherwise they will be frightened because they do not understand it, they do not know what to do and why to do it. The third point he raised was agility. He used the example of Serbia: there is a high level of passengers under the label visiting friends and relatives from Switzerland. This country has been declared as a country of risk thus you lose 80% of the passengers and then you start to stop flying and

when Serbia got out of the risk country list the airport did not recover most of the flights so the industry needs to be agile to live with these everyday changing situation and maintain a minimum of demand and keep flying and get out of the Catch-22 situation "we want to fly but the situation is so unclear so we do not fly". He continued by saying that the whole industry is losing money but as airports do not get state support, they cut costs massively. But "although we must limit our bleeding, we will not be able to recover when there is new traffic again because there will be no people, especially in our domain where there is a lot of education to be done, security validation and so on", "you cannot lay off staff and then get them back". He stressed that the industry needs to remind itself and governments that this is not about winning the next election about decide something because they get pressure to do so. Decision must be fact-based and not emotion based decisions. It makes sense to keep some capacity even if it is not fulfilled because it will the industry to capacity to recover more quickly. He said that the management of airports with the least passengers ever has been very complicated and his biggest challenge is the burnt out of his team. The sanitary plans airports have to make raise a lot of questions that perhaps they should have thought before. This crazy belief that globalisation is bad and that aviation is the vector of this illness must be fought as "we live in a globalised world, there will be infections of every kind, if there is a crisis in one country it will affect other parts of the world and it would be a great mistake to say that we do not want to go anywhere. There is not a quick win, it is going to be a long haul, very painful but "the end game is that we will reach the level of 2019 perhaps in three or four years, we have to be able to do so we do not want to cripple ourselves".

Tassos Raftopoulos said his airline has adapted since March and it will adapt

further, it is difficult to talk about the future, the coming winter is going to be difficult for all of the industry.



Aegean achieved around 50% in relation to last year but future bookings are low. Aegean has applied EASA ECDC protocol and it has worked pretty well but they have to struggle with different countries and different jurisdictions applying their own rules and this has created volatility in the network, schedules and this trickles down to the passenger inconvenience: cancellations, overbookings but it is unavoidable. Aegean applies weekly tests of all flight crews, obligatory tests for anyone coming back from holidays and employees are not allowed to work without a negative test. The testing experience of the flight crew shows zero infection of the staff from flights which means that flying is safe, protocols are effective in avoiding dispersion of the virus at least onboard the aircraft. He stressed that the first thing the industry needs to do until a vaccine is available is to regain travelers' confidence hoping that next year the medical situation will normalise so the industry will have to deal only with the economic repercussions of the recession and unemployment. Aegean is optimistic that things will gradually get better. He added that this experience proves that all stakeholders of the industry are in the same boat so the whole value chain

needs to cooperate very closely as without passengers- who which are directly airlines' customers and indirectly airport's customers, there is no industry. So this crisis is an opportunity to work closely and cooperate even more since the industry has been let down to a great extent by regulators. An obvious example he mentioned that there is still no slot waiver for the coming months, his airline has expending energy and effort on securing slot waiver for the Covid winter instead of dealing with more productive issues and real problems. He went on to discuss the state aid given to airlines all over Europe and in the US and he stressed that this is patchwork since not all airlines such as Aegean Airlines have received direct state aid and this causes problems to the competitive environment and creates distortion since there will be at least in Europe airlines that will survive because of the state aid. He admitted though that under the circumstances state aid is inevitable but he thinks that it should have been managed in a different way.

Ilias Maragakis of Fraport Greece which has invested heavily in infrastructure in fourteen airports in Greece that are greatly dependent on leisure tourism when asked how they are coping with this situation he pointed out that Fraport Greece in 2019 had 30 million passengers and in 2020 they were the busiest airport operators in Europe surpassing by far the mother ship airport of Frankfurt and many others of the usual top 5 list. This is something that characterises the European aviation market and it shows where the dynamism is the market today. He then presented the operational reality and said that they have been more than 85 Notams since June 1st, each one affecting the way they had to operate and graphs show that traffic was depending on these notifications: eg if a country started requiring a medical test, traffic went down as it happened with the Netherlands which was one of the best

performing markets this summer and when a rule was introduced requesting medical tests the market literally disappeared. Thus, traffic depends on decisions that were not considered possible a few months ago. More important for him is the future. All the players around the table want to see traffic materialising but what is really missing are measures facilitating travelling in 2021. It is not known when there will be vaccine, whether it will work for a few months, whether it will be a requirement within the EU and/or outside the EU so what is needed is a common platform where the standards demanded are easy to access: for example if Dutch passengers require a medical test, the platform will state how it can be established that the medical exam has been performed, it would be fantastic if it could be through something like a boarding pass. He personally believes that the virus problem will remain for the next 5 years, it will be part of the passenger experience therefore steps should be taken to facilitate travel.



Prof. Papatheodorou referred to lessons learnt from history and how after 9/11 terrorist attacks security measures and related have become embedded to airlines and airports and now are part of normality. So with today's situ-

ation there industry specific measures, certain countries have subsidized airlines providing state aid but what about the other costs that are incurred by airports, how can these be embedded in the cost infrastructure, what is the role of the state.

Tassos Raftopoulos answered that it is not such much a cost problem as it is a revenue problem, hygiene measures will be dealt the same way security measures in the past and in part the industry is dealing with this, the problem is that there is no demand. His airline's cost base is designed for a certain level of demand and it cannot reduce its cost base easily and quickly. He does not support the idea of different seat configuration inside the aircraft because the experience with flight crew testing has shown that there has not been not even a single case of infection onboard aircrafts. What is needed is more stability in relation to the destinations and their quarantines, more predictability, more homogeneity.

Andre Schneider answered that one part of cost is related to passenger numbers because the cost airlines have to face is infrastructural adaptation (f.ex. putting Plexiglas on desks, putting special indications so to have a minimum of distance). Luckily for airlines and airports is an on-off cost and do not have to do that every time but all these costs had to be done at a time when there were no passengers. All these costs had to be done at a time when there were no passengers but it was to show to the passengers that airports do all it is needed to do.

Then is all the extra cleaning needed, providing antiseptic liquids even masks to the passengers, even masks. But it is becoming like a new normal but it would be helpful to have a common way and he used the example of masks: France has decided on not allowing on flights within or to France textile masks requiring passengers to wear the paper medical masks while in Switzerland the

health organisation called people to use textile masks are they more ecological. For the passenger is a nightmare.

Aviation in Switzerland advocates for more testing instead of quarantines but who is going to pay for testing? In Switzerland the average cost of a test is about 100 CHF when the price of an average European destination is 50 to 100 francs, which means that testing doubles the price of the ticket. Airlines cannot pay for that, airports cannot pay for that because it would increase airport taxes. In Germany initially testing was covered by the state but a few days they decided to stop it because cost had gone by the roof. There is going to be a debate on what will be the price of travelling if there are these extra costs. Who is going to pick up this cost. But a common approach should be adopted to create more stability, the problem should be dealt with the same way all over Europe: if you want to travel and to avoid quarantine, you should pay this extra cost then it is OK but if one country is free and in another the traveler pays for it, it will not work. On the long run there are though bigger cost items and it will become even more important for intercontinental flights. For many airlines the biggest problem is to what rules cabin crews and pilots have to follow according to which country they fly to and these rules change all the time.

Ilias Maragakis said that nother element of airports that does not affect airlines is concessionary agreements, so any future investment and risk assessment for airports will have to take into account a pandemic possibility. And this will be the negative legacy of the pandemic in relation to investments, concessionary agreements how you make concessionary agreements being workable. So there is the issue of costs which is here today and all these changes such as flight prohibitions etc and the way to manage them but in the long term the most important cost will be in terms of investment as airports are a long term investments, projects

requiring plans looking ten, twenty years ahead.



Rafael Echevarne, in his capacity as a representative of a supranational organisation was asked to comment on the fragmented approach, he started off by saying that the testing costs should not be incurred by airports or by airlines, the best solution would be to be undertaken by the state. For him the biggest disappointment in all this situation have the different approach each single country adopted. He remembers clearly that the first conversations with ICAO and other organisations was "let's try to avoid what happened with 9/11, let's not go each in different directions", but what happened is even worse. The big positive at least for Latin America that this is a big opportunity for technology, until now most countries have been extremely hesitant in introducing technology such as facial recognition for passport control on arrival in an effort to protect jobs and to respond to the pressure from the unions. If there is a time for technology it is now and that will not only have a positive impact on the passenger experience at arrival but it will reduce operating costs. His organisation has launched health measures in a way of ensuring or demonstrating to the governments that indeed the airports have done their bit, have applied the recommendations, official recommendations clearly. Both CART recommen-

dations and EASA recommendations are straightforward, there is nothing extraordinary about them, the problem is the governments that start building on them.

The last question focused on any opportunities arising, on potential new ancillary non-aeronautical revenue for airports.



Ilias Maragakis answered that if one wants opportunities he has to learn how to cut costs. Regional airports are close to the heart of regional communities so sometimes closing down an airport gives the wrong message to the local communities that it is the infrastructure being shut down. If the operating hours of the airport were restricted BC (before Covid) in winter, they would be accused of undermining the future of the island etc, but now it is a very well accepted fact. This a great opportunity of really looking at the airports as they are: there is infrastructure, there is an environmental aspect, airports should not consume a lot of energy, things that were politically sensitive when they should not have been. Now it is a business with very clear instruction to serve the local community in the best way possible. The amount of money airports have lost from non ancillary like fruit and bever-

ages is so immense that no antiseptic or mask could compensate for that.

Rafael Echevarne answered "we are realists we know there is no money" so we are asking to extend the concessions if it is possible to make up for the loss in passengers, for the possibility to lay infrastructure, to lowering service level standard these can have an important impact only Brazil has done something along these lines "we will allow you to pay the concession fees".

Tassos Raftopoulos said that bundle testing can help to establish confidence but it is not applicable or practical to all kinds of flights, for ex. not on domestic flights within Greece but perhaps it makes sense for long haul flights or business class tickets where revenues are different.

Andre Schneider that there is no way for airports to recover, airports have to deal with the loss and hope that in 2021 they will be able to reduce the loss. "We can win not in a monetary way but in a positioning way" showing that airports have standards to deal with such a situation that they are actually at the forefront having measures that others do not have nor in the public transport system. This will give another push to what the industry offers as a positive experience and show that it is doing it best to protecting passengers. Building on top of that will create confidence that will create demand over time. The only thing that can help the industry win is actually facilitating the regain of demand and for that the most important is to create confidence and that can be done through a certification program and through the airports publicising about these measures taken to show how they have worked on the passenger experience, on protecting the passengers, for ex how airports have put filters to clear the air just as airlines have done. But this can be done provided that countries stop approaching air transport in such a fragmented way, "We need to get government to get together".

Conclusion

Jeff Poole, President of Hermes – Air Transport Organisation & VP Advocacy WTTC and Chair of the Forum concluded by thanking the participants for their personal investment and commitment to the 2020 Summer Aviation Forum and proceeded to summarise the Forum's main points. He pointed out that although the industry and the industry leaders are good at articulating the problem – as there has been good exposure and analysis from the key note speakers and the panelists on their own experiences and their feelings – expressing what they would like to see in the industry, no specific solutions were proposed. He stressed that the industry has been devastated and said that although last year the global travel and tourism industry provided over 300 million jobs globally, according to WTCC research, almost 200 million jobs could be lost unless something changes very quickly. He detected that there is still optimism amongst everyone present that a "new normal" will be achieved even if it will take some time. He also sensed a lot of frustration for things that are beyond the industry's control. Although the industry has achieved a lot by putting in place quite quickly new COVID-19 related processes and procedures, proving once more its agility, more international cooperation between governments is needed urgently. There needs to be consistency of criteria, measurements and measures. At present each government has different set of rules which, for example, cabin staff need to know and apply. All the different announcements on new restrictions, new travel bans, new quarantine procedures, etc have a damaging effect. The travel experience is confusing and poor but it is fundamental to rebuild traveller confidence. It is up to the governments to put in place international frameworks that would allow the industry to have consistency of processing and testing as people move and travel around the world.

He continued to say the very purpose of the Forum is to do something to change this. The very clear suggestion that came out of the Forum is that the industry should communicate more actively to travellers and governments of everything that has been done and that aviation is safe in the COVID-19 context. It is a compelling fact that no-one has caught COVID-19 through international travel and this has to counter the previous accusations that aviation was part of spreading COVID-19 around the world. The real problem for the industry is the complete and utter lack of leadership and cooperation within and between governments at the international level. WTTC has been challenging individual governments and governments collectively on that issue: "Are health ministers running aviation now?", "Who is running the world today in the COVID-19 era?"

In conclusion, the industry needs to be even more proactive in its messages and advocacy but it also needs to find its champion, a way of instilling leadership and backing to governments and that is a big challenge. Governments need a real sense of urgency to cooperate internationally on new global frameworks, standards and processes.





Italian Hipster smiles
at Athens International Airport
Ceramic, 2019 A.D.

THE AUTHENTIC SMILES



PIETER ELBERS

President & CEO, KLM



KLM is the oldest airline in the world. Last year it was the first airline to record 100 years of continuous existence. What are the key points of this success?

More than 100 years ago, Albert

Plesman founded KLM based on a pioneering spirit. Mr. Plesman had a dream to create "the ocean of the air that unites all people". I believe that this dream is very much alive today.

Maybe even more so!

By seizing opportunities, taking up challenges and continuously embracing new technologies, KLM has been able to not only face up to but also leverage change to its advantage. During our 100 year journey



KLM has represented entrepreneurship, connection and hospitality. Right from the start we have always put our customers at the center of our products and services. Thanks to our passionate and professional staff we have been able to build a strong brand that touches the hearts of our passengers time and again. And I'm convinced that what sets us truly apart is the fact that we are able to connect these two elements, loyal customers and great staff, in a unique and authentic way.

Hermes awarded you the 2020 Hermes Award for your contribution to aviation. What does this mean to you?

Firstly, I would like to mention that I am both humbled and honored to receive this 2020 Hermes Award. I see it as a recognition and appreciation for the relentless efforts of all my KLM colleagues. In addition, it is important to recognize that at KLM, we all stand on the shoulders of the great pioneers who built this great company before us. Building on that foundation, I am also contributing my part to the best of my ability like all my KLM colleagues.

I have always tried to balance my management orientation between people, planet and prosperity. Striking the optimal balance between

these three aspects that we take into account currently as we are navigating the present crisis and are defining the future priorities of our company.

How important is the team work? What do you do to make the most of it?

For me personally, I strongly believe I that at KLM our employees are our most valuable asset and they are the key factor that set us apart. Alternatively, as I like to say: our people are our brand.

TEAMWORK is a key element in this.



That implies, among other things, a smaller KLM in which unfortunately we have to let go talented and loyal people whom have played a key role for the company over the years.

*What are the key points of a leader?
Are there any special features a leader in aviation needs?*

It is my conviction that leadership key points are a sort of toolbox towards a certain goal. For me that toolbox should have a combination of vision, inspiration and execution. That is generic, thereafter it should be 1) authentic (matching your own profile/your best self) and 2) adapted to the context and situation (country, culture, company, environment, etc).

In the current context of Covid19 the goal is to regain the trust of the customer. At KLM we are working on that by putting an increased focus on hygiene, safety and customer flexibility. By having a strong customer focus we are able to regain their trust, which is key in rebuilding our company for it to be healthy and thrive again. Another aspect that is important in the current environment is that a leader should be someone that connects and promotes unity within the employee base, which is particularly important at an airline due to the diversity of employment domains.

Together with the Executive team we are working on the vision and we lay the groundwork for the success and results. However, it is our pilots, flight attendants and ground staff who actually go out there, execute and get it done. From that perspective leadership is a process which maximizes the efforts of our employees to reach

On all levels of the company; on board of the aircraft, on the ground, in all divisions. For me personally, I work on a daily basis together with my colleagues of the Executive Team, to whom I am very grateful. At the start of our journey we defined our ambition to become Europe's most customer centric, innovative and efficient network carrier. Thanks to the efforts of all KLM employees we were able to execute our strategy through

our annual Flight Plan from 2015 until 2019. I remain confident that we have the right people in the right place to tackle the unprecedented global crisis caused by COVID-19. It requires a lot of dedication, as the path to recovery is not a given and it won't be straightforward. The ambitions and objectives we had formulated needed to be refocused with the utmost urgency to overcome the crisis.



our targets. I believe that one of the methods to get this done is through the strong emphasis we put on internal communication. In the current environment this ensures that all across the business our employees are engaged and acknowledge the social, operational and financial impacts of COVID-19. With this understanding all of our colleagues can contribute to managing this unprecedented crisis and navigating the new reality.

Despite KLM being a legacy airline you invest a lot on innovation. Why is it important? Can you present your latest initiatives?

In the past century, the world has changed drastically. I believe that the only certainty we have going forward is that change will remain a constant factor. In my view we as KLM have been able to turn 100 years old by seizing opportunities, taking up challenges and embracing new tech-

nologies. Ground braking JV's or social media frontrunner position have been proof points of this.

It is clear that the world has changed beyond anyone's expectation since the beginning of the year. From my perspective the best way to deal with these ever changing circumstances is through continuous innovation. A good example of our innovative and pioneering spirit is the Flying-V project that we have been working on.



The Flying-V is a design for a very energy-efficient long-haul aircraft. The design of the aircraft integrates the passenger cabin, cargo hold and fuel tanks in the wings, creating a spectacular V-shape. Computer calculations have predicted that the improved aerodynamic shape and reduced weight of the aircraft will reduce fuel consumption by 20% compared to today's most advanced aircraft. A second example is that we are partnering to develop a sustainable aviation fuel plant in the Netherlands, which has the potential to reduce carbon dioxide emissions by 85%. Furthermore, we have taken ground-breaking steps in terms of electrifying our ground services operations, which is both innovative and sustainable. In the customer journey we are focusing on innovations related to biometrics, which offer a smooth and touchless experience.

It is these types of innovations that make KLM a future proof airline in the fields of sustainability, efficiency and customer centricity.

COVID-19 has an unprecedented impact on air transport. How has it impacted KLM? How do you view the air transport in the coming years?

The COVID-19 pandemic is the single greatest crisis that our industry has faced. The impact has been enormous for every airline, including for us at KLM. Due to COVID-19 our ambitions and objectives needed to be refocused with the utmost urgency to overcome the crisis. An example of this can be taken from our cargo business, which is much less impacted than our passenger business. If we look within the area of pharmaceuticals we have transported significant amounts of medical supplies since the start of the pandemic. This has enabled frontline medical workers to have the necessary Personal Protective Equipment (PPE). In my view the air transport industry will take a significant amount of time to recover.

It could take 3 to 4 years to be back at the amount of customers we served in 2019. An additional impact of the

crisis could be that we see a global wave of consolidation across the industry with the aim to become more efficient and further capitalize on economies of scale.

Finally how will the aviation landscape be in 2050?

2050 is a long period from now, but there will definitely be a large focus on sustainability going forward. Ideally, the aviation sector will be a carbon free sector. However, it is hard to determine in advance exactly how quickly technological advancements will occur. At KLM it is our aim to push for these advancements and as a result we have been a leader in the field of aviation sustainability for many years. This year, together we Air France, we took the top spot on the Dow Jones Sustainability Index (DSJI) within the airline category. A recognition of our continuous efforts is that we have been among the top-3 finalists on the DSJI for the last 15 years. Over the last year we further strengthened our commitment to sustainability with our Fly Responsibly initiative. As mentioned earlier, a great example of our pioneering spirit is our involvement with the Flying-V; a design for a highly energy-efficient long-distance airplane. We have a focus on biofuels and we already took important breaking steps to electrify our ground services operations. It is my belief that going towards 2050 you will see the entire aviation sector put an increased emphasis on the necessity to become fully sustainable and carbon neutral.



JUN 2020: Air Passenger Market Analysis

Chart 1 – Air passenger volumes

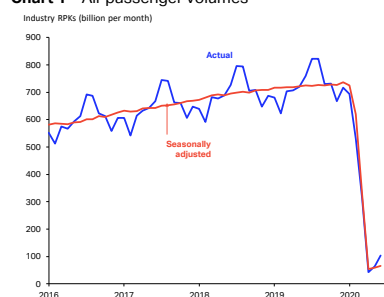


Chart 2 – Worldwide flights per week

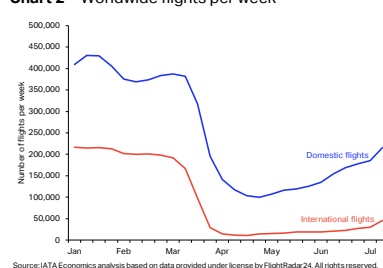


Chart 3: Economic conditions (monthly data from composite PMIs, selected markets)

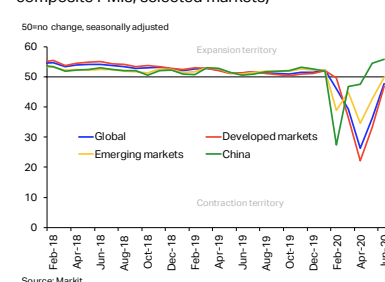


Chart 6 – Passenger load factors by region



Chart 7 – International RPK growth, yearly (airline region of registration basis)

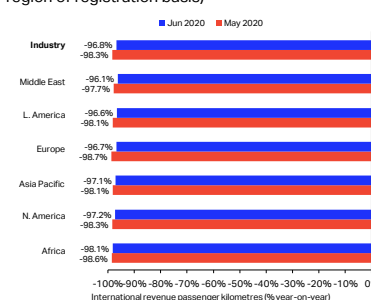


Chart 8 – Domestic RPK growth by market

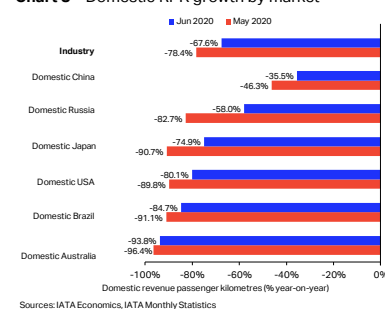
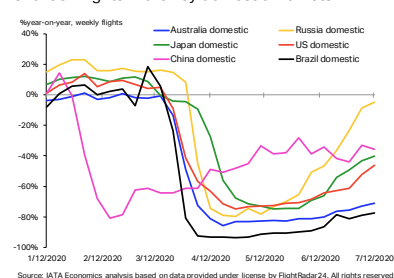


Chart 9: Flights in the key domestic markets



Air passenger market detail - June 2020

	World share ¹	June 2020 (% 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%	-86.5%	-80.1%	-26.8%	57.6%	-58.4%	-51.0%	-12.4%	69.6%
Africa	2.1%	-96.5%	-84.5%	-54.9%	16.2%	-57.1%	-47.3%	-13.2%	57.9%
Asia Pacific	34.6%	-76.4%	-69.6%	-18.5%	63.8%	-58.6%	-50.6%	-13.2%	68.5%
Europe	26.8%	-93.7%	-90.0%	-31.9%	55.5%	-61.6%	-57.6%	-8.1%	75.8%
Latin America	5.1%	-91.2%	-89.0%	-16.7%	66.6%	-52.0%	-48.8%	-5.1%	77.3%
Middle East	9.1%	-95.5%	-90.4%	-40.7%	35.7%	-56.0%	-51.6%	-6.8%	68.3%
North America	22.3%	-86.3%	-76.9%	-36.5%	52.4%	-56.9%	-44.4%	-18.9%	65.5%
International	63.8%	-96.8%	-93.2%	-44.7%	38.9%	-62.2%	-57.3%	-9.3%	71.9%
Africa	1.8%	-98.1%	-84.5%	-62.1%	8.9%	-57.6%	-46.9%	-14.2%	56.3%
Asia Pacific	19.1%	-97.1%	-93.4%	-45.8%	35.6%	-65.1%	-59.1%	-11.8%	69.0%
Europe	24.0%	-96.7%	-94.4%	-35.7%	52.0%	-63.2%	-60.0%	-6.7%	77.6%
Latin America	2.7%	-96.6%	-95.7%	-17.7%	66.2%	-56.4%	-53.4%	-5.4%	77.3%
Middle East	8.7%	-96.1%	-91.1%	-43.1%	33.3%	-56.2%	-51.7%	-6.9%	68.3%
North America	7.6%	-97.2%	-92.8%	-53.8%	34.1%	-61.9%	-55.9%	-11.4%	71.7%
Domestic	36.2%	-67.6%	-55.9%	-22.8%	62.9%	-51.6%	-39.5%	-16.8%	66.6%
Dom. Australia ⁴	0.8%	-93.8%	-89.1%	-33.8%	44.4%	-55.2%	-50.1%	-8.0%	70.5%
Domestic Brazil ⁴	1.1%	-84.7%	-83.3%	-7.1%	74.7%	-46.0%	-44.5%	-2.2%	80.0%
Dom. China P.R. ⁴	9.8%	-35.5%	-21.3%	-15.2%	69.5%	-51.1%	-39.3%	-16.5%	68.3%
Domestic Japan ⁴	1.1%	-74.9%	-63.4%	-22.4%	48.8%	-52.3%	-33.5%	-20.2%	51.1%
Dom. Russian Fed. ⁴	1.5%	-58.0%	-36.4%	-28.9%	56.4%	-41.9%	-26.3%	-16.9%	63.2%
Domestic US ⁴	14.0%	-80.1%	-67.4%	-34.9%	54.7%	-54.1%	-37.9%	-22.3%	63.0%

¹% of industry RPKs in 2019

²Year-on-year change in load factor

³Load factor level

⁴Note: The six domestic passenger markets for which broken-down data are available accounted for 28% of global total RPKs and approximately 78% of total domestic RPKs in 2019

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.



JUL 2020: Air Passenger Market Analysis

Chart 1 – Air passenger volumes

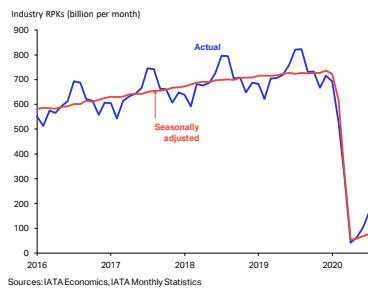


Chart 2 – Domestic and international weekly flights

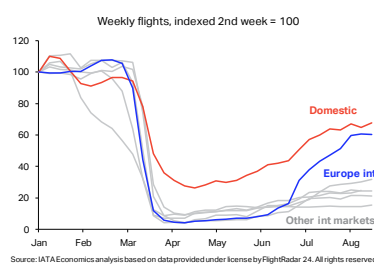


Chart 3: Economic conditions (monthly data from composite PMIs, selected markets)

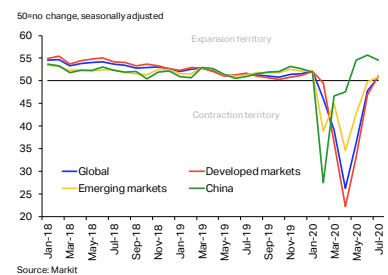


Chart 4: Consumer confidence

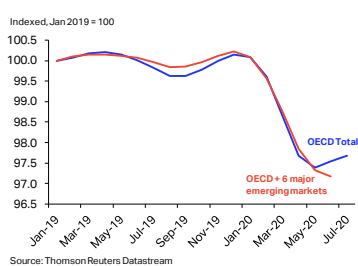


Chart 5 – Passenger load factors by region

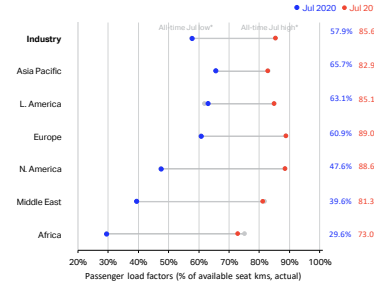


Chart 6 – International RPK growth, yearly (airline region of registration basis)

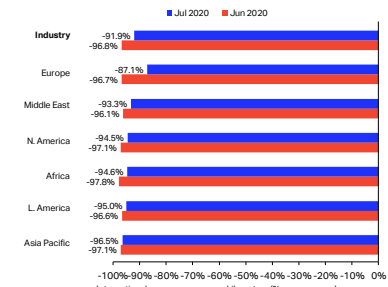


Chart 7 – Domestic RPK growth by market

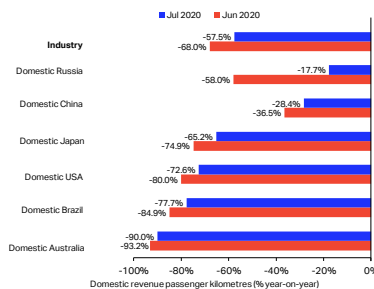
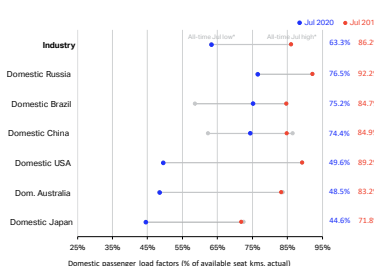


Chart 8: Domestic passenger load factor by key domestic market



Air passenger market detail - July 2020

	World share ¹	July 2020 (% year-on-year)	ASK	PLF (%-pt) ²	PLF (level) ³	ASK	PLF (%-pt) ²	PLF (level) ³
TOTAL MARKET	100.0%	-79.8%	-70.1%	-27.7%	57.9%	-61.9%	-54.1%	68.4%
Africa	2.1%	-93.7%	-84.3%	-43.4%	29.6%	-63.2%	-57.4%	61.7%
Asia Pacific	34.6%	-72.2%	-64.9%	-17.2%	65.7%	-60.7%	-52.9%	68.3%
Europe	26.8%	-81.3%	-72.7%	-28.1%	60.9%	-65.2%	-59.9%	73.6%
Latin America	5.1%	-87.5%	-83.2%	-22.0%	63.1%	-57.7%	-54.0%	76.2%
Middle East	9.1%	-92.5%	-84.7%	-41.7%	39.6%	-62.0%	-56.7%	66.7%
North America	22.3%	-80.6%	-63.9%	-41.0%	47.6%	-60.8%	-47.5%	63.6%
International	63.8%	-91.9%	-85.2%	-38.9%	46.4%	-67.2%	-61.9%	70.5%
Africa	1.8%	-94.6%	-84.6%	-47.1%	25.4%	-63.7%	-57.7%	60.8%
Asia Pacific	19.1%	-96.5%	-91.7%	-47.3%	35.3%	-69.9%	-64.0%	68.0%
Europe	24.0%	-87.1%	-79.2%	-33.8%	55.1%	-67.5%	-63.1%	75.0%
Latin America	2.7%	-95.0%	-92.6%	-27.1%	58.4%	-62.4%	-59.3%	76.8%
Middle East	8.7%	-93.3%	-85.6%	-43.4%	38.0%	-62.3%	-57.0%	66.7%
North America	7.6%	-94.5%	-86.1%	-53.0%	35.0%	-67.5%	-60.8%	69.6%
Domestic	36.2%	-57.5%	-42.2%	-22.9%	63.3%	-52.6%	-39.9%	68.1%
Dom. Australia ⁴	0.8%	-90.0%	-82.8%	-34.7%	48.5%	-60.7%	-55.1%	69.3%
Domestic Brazil ⁴	1.1%	-77.7%	-74.9%	-9.5%	75.2%	-50.9%	-49.1%	79.6%
Dom. China P.R. ⁴	9.8%	-28.4%	-18.3%	-10.5%	74.4%	-47.7%	-36.2%	69.5%
Domestic Japan ⁴	1.1%	-65.2%	-44.0%	-27.2%	44.6%	-54.3%	-35.1%	50.3%
Dom. Russian Fed. ⁴	1.5%	-17.7%	-0.8%	-15.7%	76.5%	-37.0%	-21.7%	66.2%
Domestic US ⁴	14.0%	-72.6%	-50.7%	-39.7%	49.6%	-57.0%	-39.8%	61.3%

¹% of industry RPKs in 2019

²Year-on-year change in load factor

³Load factor level

⁴Note: the six domestic passenger markets for which broken-down data are available accounted for 28% of global total RPKs and approximately 78% of total domestic RPKs in 2019

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.



AUG 2020: Air Passenger Market Analysis

Chart 1 – Air passenger volumes

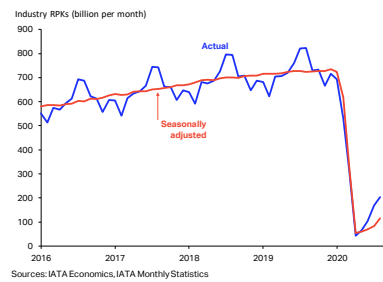
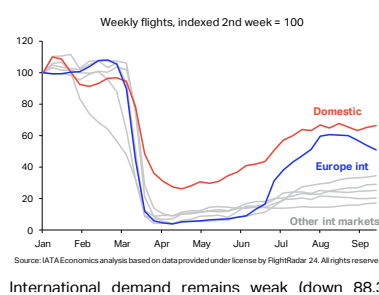


Chart 2 – Domestic and international weekly flights



International demand remains weak (down 88.3%)

Chart 3: Business confidence (monthly data from composite PMIs) and consumer confidence

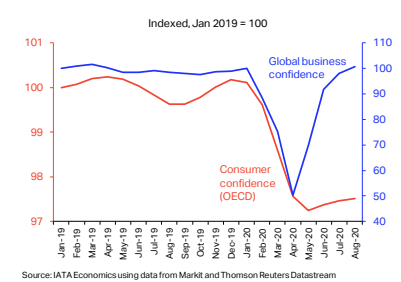


Chart 4: – Survey data of air traveler confidence

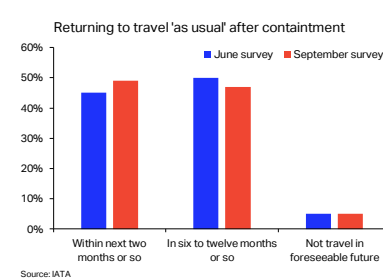


Chart 5 – Passenger load factors by region

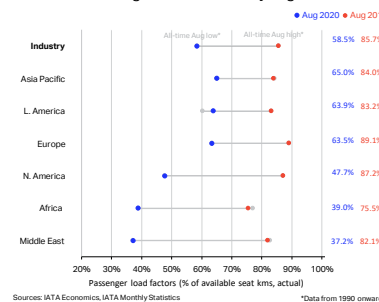


Chart 6 – International RPK growth, yearly (airline region of registration basis)

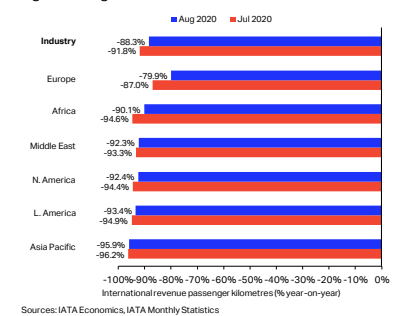


Chart 7 – Domestic RPK growth by market

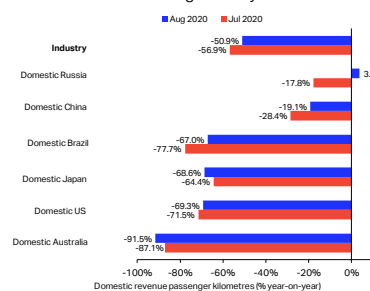
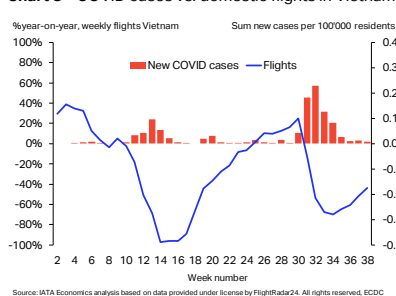


Chart 8 – COVID cases vs. domestic flights in Vietnam



Air passenger market detail - August 2020

	World share ¹	August 2020 (% 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%	-75.3%	-63.8%	-27.2%	58.5%	-63.7%	-55.3%	-15.6%	67.4%
Africa	2.1%	-87.4%	-75.5%	-36.6%	39.0%	-66.7%	-59.9%	-12.2%	59.7%
Asia Pacific	34.6%	-69.2%	-60.3%	-19.0%	65.0%	-61.8%	-53.7%	-14.3%	67.9%
Europe	26.0%	-73.0%	-62.1%	-25.5%	63.5%	-66.3%	-60.3%	-13.0%	72.3%
Latin America	5.1%	-82.8%	-77.5%	-19.3%	63.9%	-60.9%	-57.0%	-7.4%	75.4%
Middle East	8.1%	-91.3%	-80.8%	-44.9%	37.2%	-66.2%	-60.0%	-12.0%	64.8%
North America	22.3%	-77.8%	-59.4%	-39.5%	47.7%	-63.0%	-48.9%	-23.4%	62.0%
International	63.8%	-88.3%	-79.5%	-37.0%	48.7%	-70.2%	-64.3%	-13.6%	68.8%
Africa	1.6%	-90.1%	-78.4%	-41.0%	34.6%	-67.7%	-60.7%	-12.8%	58.7%
Asia Pacific	19.1%	-95.9%	-90.4%	-48.0%	34.6%	-73.2%	-67.4%	-14.7%	66.6%
Europe	24.0%	-79.9%	-68.7%	-32.1%	57.1%	-69.4%	-63.9%	-13.0%	72.7%
Latin America	2.7%	-93.4%	-90.1%	-27.8%	56.1%	-66.4%	-63.2%	-7.2%	76.0%
Middle East	8.7%	-92.3%	-81.9%	-47.1%	35.3%	-66.6%	-60.3%	-12.2%	64.6%
North America	7.6%	-92.4%	-82.6%	-49.9%	38.5%	-71.0%	-63.8%	-16.9%	67.6%
Domestic	36.2%	-50.9%	-34.5%	-21.5%	64.2%	-52.3%	-39.1%	-18.1%	65.9%
Dom. Australia ⁴	0.6%	-91.5%	-81.2%	-44.9%	37.1%	-64.3%	-58.3%	-11.4%	68.1%
Domestic Brazil ⁴	1.1%	-67.0%	-64.3%	-6.4%	76.1%	-53.0%	-51.0%	-3.3%	79.3%
Dom. China P.R. ⁴	9.6%	-19.1%	-5.9%	-12.3%	75.3%	-43.8%	-32.1%	-14.6%	70.6%
Domestic Japan ⁴	1.1%	-68.6%	-28.4%	-45.6%	35.6%	-56.3%	-34.1%	-24.6%	48.1%
Dom. Russian Fed. ⁴	1.5%	3.8%	9.3%	-4.6%	86.4%	-30.2%	-17.0%	-13.3%	70.3%
Domestic US ⁴	14.0%	-69.3%	-45.7%	-37.7%	48.9%	-58.4%	-40.3%	-26.1%	59.9%

¹% of industry RPKs in 2019 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 30% of global total RPKs and approximately 83% 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.

MAY 2020: Worldwide Traffic Results

Passenger traffic/Freight volumes
(Summary)

Table 1: Summary Worldwide Traffic Results, May 2020 (% change)			
	May 2020 over May 2019	Year to date 2020	12-month rolling year
PaxFlash			
International passenger	(98.6)	(56.9)	(20.2)
Domestic passenger	(85.3)	(48.7)	(18.5)
Total passenger	(91.3)	(52.5)	(19.3)
FreightFlash			
International freight	(19.6)	(13.7)	(7.9)
Domestic freight	(13.6)	(9.1)	(3.7)
Total freight	(17.9)	(12.3)	(6.7)

TABLE 2: PaxFlash summary – May 2020			
Regions	May 2020 % YOY	YTD May 2020 % YOY	YE thru May 2020 % YOY
International passengers			
Africa	(98.6)	(49.0)	(15.2)
Asia-Pacific	(98.9)	(62.6)	(24.7)
Europe	(98.7)	(57.5)	(18.9)
Latin America-Caribbean	(98.1)	(47.3)	(19.8)
Middle East	(98.1)	(49.7)	(17.5)
North America	(98.1)	(52.5)	(20.1)
World	(98.6)	(56.9)	(20.2)
Domestic passengers			
Africa	(96.2)	(43.3)	(13.3)
Asia-Pacific	(73.2)	(49.7)	(19.8)
Europe	(94.7)	(52.7)	(21.1)
Latin America-Caribbean	(94.0)	(43.0)	(15.1)
Middle East	...	...	...
North America	(88.8)	(48.3)	(17.5)
World	(85.3)	(48.7)	(18.5)
Total passengers			
Africa	(97.8)	(47.1)	(14.6)
Asia-Pacific	(82.5)	(54.7)	(21.8)
Europe	(97.8)	(56.4)	(19.4)
Latin America-Caribbean	(95.3)	(44.5)	(16.6)
Middle East	(98.0)	(49.7)	(17.6)
North America	(90.3)	(49.0)	(18.0)
World	(91.3)	(52.5)	(19.3)

TRAFFIC TABLE DEFINITIONS:

PASSENGER TRAFFIC: departing + arriving passengers

INTERNATIONAL: traffic performed between the designated airport and an airport in another country/territory

DOMESTIC: traffic performed between two airports located in the same country/territory

TOTAL: international + domestic passengers + direct transit passengers counted once (when breakdown is available)

Year-over-year percentage changes (% YOY) are calculated from a representative sample.

YOY Year-over-year same month comparison

YTD Year to date, starting Jan 2019, compared to same period in previous year

YE Year end, based on a rolling 12-month period, compared to the same prior 12-month period

► CONTINUED FROM PAGE 50



MAY 2020: Worldwide Traffic Results

Passenger traffic/Freight volumes
(Summary)

TABLE 3: FreightFlash summary – May 2020			
Regions	May 2020 % YOY	YTD May 2020 % YOY	YE thru May 20 2020 % YOY
International freight			
Africa	(36.4)	(21.0)	(10.2)
Asia-Pacific	(17.7)	(12.9)	(7.9)
Europe	(17.3)	(13.0)	(6.7)
Latin America-Caribbean	(27.0)	(17.4)	(10.4)
Middle East	(38.1)	(19.8)	(10.0)
North America	(11.0)	(10.3)	(7.4)
World	(19.6)	(13.7)	(7.9)
Domestic freight			
Africa	...	...	...
Asia-Pacific	(31.9)	(22.7)	(9.3)
Europe	(38.2)	(19.9)	(7.3)
Latin America-Caribbean	(52.6)	(29.2)	(14.1)
Middle East	...	...	...
North America	0.1	0.2	0.4
World	(13.6)	(9.1)	(3.7)
Total freight			
Africa	(38.3)	(21.3)	(10.1)
Asia-Pacific	(21.5)	(15.5)	(8.3)
Europe	(18.7)	(13.5)	(6.8)
Latin America-Caribbean	(34.6)	(20.8)	(11.5)
Middle East	(38.2)	(20.0)	(10.1)
North America	(4.6)	(4.0)	(2.7)
World	(17.9)	(12.3)	(6.7)

TRAFFIC TABLE DEFINITIONS:

FREIGHT TRAFFIC: loaded and unloaded freight; data in metric tonnes

INTERNATIONAL: traffic performed between the designated airport and an airport in another country/territory

DOMESTIC: traffic performed between two airports located in the same country/territory

TOTAL: international + domestic freight (when breakdown is available)

Note: No domestic freight traffic is reported by airports in the Middle East and Africa regions.

Year-over-year percentage changes (% YOY) are calculated from a representative sample.

YOY Year-over-year same month comparison

YTD Year to date, starting Jan 2019, compared to same period in previous year

YE Year end, based on a rolling 12-month period, compared to same prior 12-month period

JUN 2020: Worldwide Traffic Results

Passenger traffic/Freight volumes (Summary)

Table 1: Summary Worldwide Traffic Results, June 2020 (% change)			
	June 2020 over June 2019	Year to date 2020	12-month rolling year
PaxFlash			
International passenger	(96.7)	(64.5)	(29.6)
Domestic passenger	(75.1)	(53.3)	(25.2)
Total passenger	(85.6)	(58.5)	(27.3)
FreightFlash			
International freight	(15.2)	(13.9)	(8.6)
Domestic freight	(2.4)	(8.4)	(4.1)
Total freight	(11.4)	(12.3)	(7.3)

TABLE 2: PaxFlash summary – June 2020			
Regions	June 2020 % YOY	YTD June 2020 % YOY	YE thru June 2020 % YOY
International passengers			
Africa	(95.7)	(57.4)	(24.4)
Asia-Pacific	(98.1)	(68.5)	(33.2)
Europe	(96.4)	(65.8)	(28.9)
Latin America-Caribbean	(96.2)	(55.2)	(28.0)
Middle East	(96.1)	(57.4)	(25.9)
North America	(96.3)	(60.6)	(29.3)
World	(96.7)	(64.5)	(29.6)
Domestic passengers			
Africa	(94.3)	(51.8)	(21.7)
Asia-Pacific	(63.2)	(51.9)	(25.0)
Europe	(81.1)	(58.2)	(28.7)
Latin America-Caribbean	(88.3)	(50.3)	(22.7)
Middle East	...	...	...
North America	(78.1)	(53.7)	(24.8)
World	(75.1)	(53.3)	(25.2)
Total passengers			
Africa	(95.3)	(55.4)	(23.4)
Asia-Pacific	(76.9)	(58.5)	(28.3)
Europe	(92.9)	(64.0)	(28.9)
Latin America-Caribbean	(90.7)	(51.9)	(24.3)
Middle East	(95.0)	(56.8)	(25.9)
North America	(81.2)	(54.8)	(25.6)
World	(85.6)	(58.5)	(27.3)

TRAFFIC TABLE DEFINITIONS:

PASSENGER TRAFFIC: departing + arriving passengers

INTERNATIONAL: traffic performed between the designated airport and an airport in another country/territory

DOMESTIC: traffic performed between two airports located in the same country/territory

TOTAL: international + domestic passengers + direct transit passengers counted once (when breakdown is available)

Year-over-year percentage changes (% YOY) are calculated from a representative sample.

YOY Year-over-year same month comparison

YTD Year to date, starting Jan 2019, compared to same period in previous year

YE Year end, based on a rolling 12-month period, compared to the same prior 12-month period

► CONTINUED FROM PAGE 52



JUN 2020: Worldwide Traffic Results

Passenger traffic/Freight volumes
(Summary)

TABLE 3: FreightFlash summary – June 2020			
Regions	June 2020 % YOY	YTD June 2020 % YOY	YE thru June 20 2020 % YOY
International freight			
Africa	(26.1)	(22.0)	(12.7)
Asia-Pacific	(14.4)	(13.3)	(8.6)
Europe	(15.2)	(13.4)	(7.3)
Latin America-Caribbean	(23.0)	(18.3)	(11.7)
Middle East	(26.3)	(20.8)	(11.5)
North America	(6.4)	(8.6)	(7.3)
World	(15.2)	(13.9)	(8.6)
Domestic freight			
Africa	...	...	...
Asia-Pacific	(20.4)	(22.9)	(10.7)
Europe	(16.3)	(19.4)	(7.8)
Latin America-Caribbean	(41.9)	(31.3)	(17.0)
Middle East	...	...	...
North America	11.7	2.2	1.1
World	(2.4)	(8.4)	(4.1)
Total freight			
Africa	(27.0)	(22.4)	(12.8)
Asia-Pacific	(16.0)	(15.9)	(9.2)
Europe	(15.6)	(13.8)	(7.4)
Latin America-Caribbean	(28.6)	(22.2)	(13.3)
Middle East	(26.3)	(21.0)	(11.6)
North America	3.9	(2.4)	(2.5)
World	(11.4)	(12.3)	(7.3)

TRAFFIC TABLE DEFINITIONS:

FREIGHT TRAFFIC: loaded and unloaded freight; data in metric tonnes

INTERNATIONAL: traffic performed between the designated airport and an airport in another country/territory

DOMESTIC: traffic performed between two airports located in the same country/territory

TOTAL: international + domestic freight (when breakdown is available)

Note: No domestic freight traffic is reported by airports in the Middle East and Africa regions.

Year-over-year percentage changes (% YOY) are calculated from a representative sample.

YOY Year-over-year same month comparison

YTD Year to date, starting Jan 2019, compared to same period in previous year

YE Year end, based on a rolling 12-month period, compared to same prior 12-month period

Top 10 rankings for 2019 (**Passenger Traffic**) with the effect of the pandemic the first half of 2020

	Change from 2018 rank	City	Country	IATA code	Passenger 2019 total	2019 vs 2018 % change	H1 2020 vs H1 2019 % change
1		Atlanta		ATL	110,531,300	2.9	-56.6
2		Beijing		PEK	100,011,438	-1.0	-73.6
3		Los Angeles		LAX	88,068,013	0.6	-58.9
4		Dubai		DXB	86,396,757	-3.1	-56.4
5		Tokyo		HND	85,505,054	-1.7	-59.2
6		Chicago		ORD	84,649,115	1.7	-57.6
7		London		LHR	80,888,305	1.0	-60.2
8		Shanghai		PVG	76,153,455	2.9	-68.1
9		Paris		CDG	76,150,009	5.4	-61.4
10		Dallas/Fort Worth		DFW	75,066,956	8.6	-48.2
Aggregated top 10 airports					863,420,402	1.5	-60.2

Top ten rankings for 2019 (Cargo Traffic) with the effect of the pandemic in the first half of 2020

	Change from 2018 rank	City	Country	IATA code	Air cargo 2019 total	2019 vs 2018 % change	H1 2020 vs H1 2019 % change
1		Hong Kong		HKG	4,809,485	-6.1	-10.2
2		Memphis		MEM	4,322,740	-3.3	0.8
3		Shanghai		PVG	3,634,230	-3.6	0.4
4	 3	Louisville		SDF	2,790,109	6.4	1.9
5	 1	Incheon		ICN	2,764,369	-6.4	-1.4
6	 1	Anchorage		ANC*	2,745,348	-2.2	7.7
7	 1	Dubai		DXB	2,514,918	-4.8	-26.7
8	 3	Doha		DOH	2,215,804	0.8	-8.0
9	 1	Taipei		TPE	2,182,342	-6.1	0.0
10	 1	Tokyo		NRT	2,104,063	-6.9	-7.6
Aggregated top 10 airports					30,083,408	-3.5	-4.1

KEY STATISTICS

ACI World WATR 2020



Passenger traffic in 2019

- Worldwide airport passenger numbers increased by **3.5%** in 2019 to **9.1 billion**.
- Two countries consistently rank as the largest aviation markets in the world: the U.S. and China. Their combined passenger traffic represents **35.2%** of the global total.
- Worldwide domestic passenger traffic increased by **2.4%** while international passenger traffic jumped by **4.1%**.
- While Asia-Pacific led the way with **38.7%** of all domestic traffic, Europe accounted for almost half of the world's international traffic (**47.6%**).
- Of the top 20 markets, the U.K. has the largest number of international passengers, while the U.S. has the largest domestic market (**over 1.6 billion passengers, 33.4%** of the world's domestic passenger throughput).
- Africa (**76.0%**) and Latin America-Caribbean (**74.4%**) posted strong growth in passenger traffic.
- Airport traffic in emerging markets and developing economies grew slightly faster (**73.9%**) than in advanced economies (**73.1%**).
- Advanced economies held the largest proportion (**52.7%**) of global passenger traffic.
- During 2019, the highest number of passengers went through airports in the Asia-Pacific region:
 - Asia-Pacific (**3.4 billion, 73.3%** over 2018)
 - Europe (**2.4 billion, 73.1%** over 2018)
 - North America (**2 billion, 73.6%** over 2018)
 - Latin America-Caribbean (**683 million, 74.4%** over 2018)
 - Middle East (**405 million, 72.6%** over 2018)
 - Africa (**228 million, 76.0%** over 2018)

Air cargo traffic in 2019

- Total cargo volumes handled by airports decreased by **-2.2%**, representing **119.9 million tonnes**.
- Advanced economies held the largest proportion (**60.8%**) of global cargo traffic handling **73 million** metric tonnes.
- Airports in the Asia-Pacific region continued to handle the largest amount of global air cargo:
 - Asia-Pacific (**47.0 million** metric tonnes, **73.3%** over 2018)
 - North America (**34.4 million** metric tonnes, **70.8%** over 2018)
 - Europe (**21.5 million** metric tonnes, **71.9%** over 2018)
 - Middle East (**8.8 million** metric tonnes, **72.8%** over 2018)
 - Latin America-Caribbean (**5.7 million** metric tonnes, **73.9%** over 2018)
 - Africa (**2.5 million** metric tonnes, **70.2%** over 2018)

Aircraft movements in 2019

- Overall, aircraft movements increased by **1.7%** in 2019, totalling **102.3 million**.
- Airports in the North America region recorded the highest number of movements:
 - North America (**33.9 million, 72.0%** over 2018)
 - Asia-Pacific (**27.4 million, 72.7%** over 2018)
 - Europe (**25.8 million, 71.1%** over 2018)
 - Latin America-Caribbean (**8.8 million, 70.3%** over 2018)
 - Africa (**3.3 million, 72.2%** over 2018)
 - Middle East (**3.1 million, 70.6%** over 2018)

The
voice of the
world's airports

KEY STATISTICS

ACI World WATR 2020



Passenger traffic in the first half of 2020

- Worldwide airport passenger numbers decreased by **-58.4%** in the first half of 2020
- Worldwide domestic passenger traffic decreased by **-53.3%** while international passenger traffic dropped by **-64.5%**.
- By regions for the first half of 2020:
 - Latin America-Caribbean **↘ 51.9%**
 - North America **↘ 54.9%**
 - Africa **↘ 55.4%**
 - Middle East **↘ 56.9%**
 - Asia-Pacific **↘ 58.1%**
 - Europe **↘ 64.1%**

Aircraft movements in the first half of 2020

- Worldwide domestic passenger traffic decreased by **-53.3%** while international passenger traffic dropped by **-64.5%**.
- By regions for the first half of 2020:
 - Latin America-Caribbean **↘ 51.9%**
 - North America **↘ 54.9%**
 - Africa **↘ 55.4%**
 - Middle East **↘ 56.9%**
 - Asia-Pacific **↘ 58.1%**
 - Europe **↘ 64.1%**

Air cargo traffic in the first half of 2020

- Total cargo volumes handled by airports decreased by **-12.4%**.
- Worldwide domestic freight volumes decreased by **-8.4%** while international freight volumes dropped by **-13.9%**.
- By regions for the first half of 2020:
 - North America **↘ 3.1%**
 - Europe **↘ 14.2%**
 - Asia-Pacific **↘ 15.6%**
 - Middle East **↘ 21.8%**
 - Latin America-Caribbean **↘ 22.1%**
 - Africa **↘ 22.4%**

The
voice of the
world's airports



ICAO

ECONOMIC DEVELOPMENT

APR 2020: Air Transport Monthly Monitor

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

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

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

GLOBAL KEY FIGURES

APR 2020
(versus APR 2019)

RPK ▼ -94.3% ASK ▼ -87.0% FTK ▼ -27.7% LF: 36.6% ▼ -24.0 pt

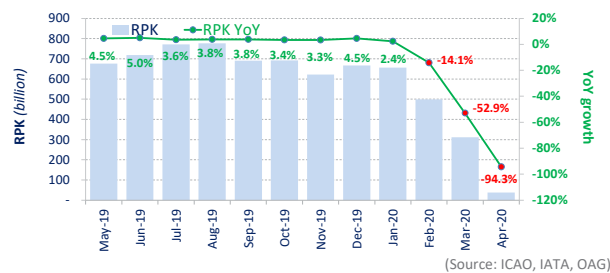
OUTLOOK* - MAY 2020
(versus MAY 2019)

ASK ▼ -85.6% * Source OAG

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

World passenger traffic fell by -94.3% YoY in April 2020, -41.4 percentage points lower than the decline in the previous month. This substantial contraction was unprecedented in the past decades with global aviation being virtually shut down in the course of the large scale of full-month lockdown across all regions. As some countries started to ease the lockdown and travel restrictions alongside positive announcements on resumption of domestic operations, it is likely to see traffic bottoming out in the coming month albeit at a slow pace.

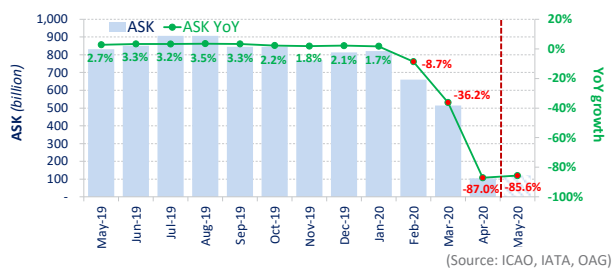


CAPACITY

Available Seat-Kilometres - ASK

Capacity worldwide fell by -87.0% YoY in April 2020, -50.8 percentage points lower than the decline in the previous month (-36.2%).

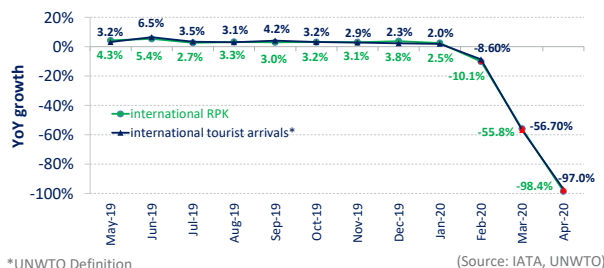
With insignificant signs of relaxation of lockdown restrictions, world capacity is expected to improve marginally in May 2020 to -85.6% down YoY.



International Traffic vs. Tourist Arrivals

International passenger traffic fell by -98.4% YoY in April 2020, -42.6 percentage points lower than the decline in the previous month. The deeper drop in international traffic than domestic traffic was due to border closures and quarantine enforced by governments to contain the global spread of the virus.

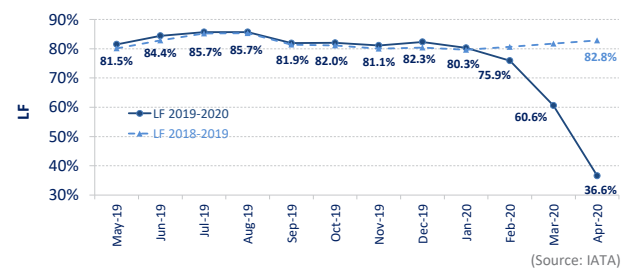
The international tourist arrivals followed a similar trend as international passenger traffic and came to a standstill.



Load Factor - LF

The passenger Load Factor fell to 36.6% in April 2020, -24.0 percentage points lower than the previous month.

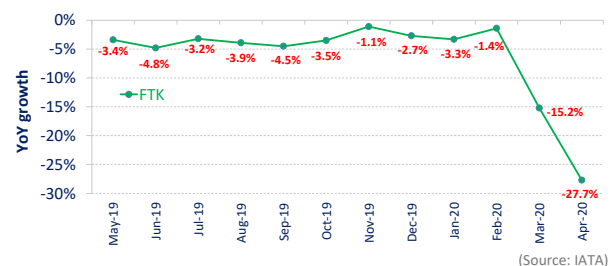
As decline in traffic was faster than capacity reduction, the April LF was -46.2 percentage points lower than the rate in the same period of 2019.



FREIGHT TRAFFIC

Freight Tonne-Kilometres - FTK

World freight traffic reported a decline of -27.7% YoY in April 2020, -12.5 percentage points lower than the fall in the previous month. Air cargo demand reached its historical low level suppressed by the subdued manufacturing activity and weakened goods consumption during the great lockdown. However, demand for medical supplies and other essential goods continued to increase and withheld air freight traffic from collapsing as passenger traffic. Although all regions suffered from a plunge in freight traffic, the scale of contractions varied by regions, driven by the different degree and phase of pandemic impact. North America registered the smallest decline while Latin America/Caribbean and the Middle East were hit the hardest with around 40% of the traffic evaporated.



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

APR 2020: 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)

APR 2020: -55.3%, -72.1%, and -5.7% YoY in terms of aircraft departures, passengers and freight for the Top 15

APR 20

Airports (ranking by number of departures)	Departures	YoY	Airports (ranking by number of passengers)	Passengers*	YoY	Airports (ranking by tonnes of freight)	Freight**	YoY
Phoenix AZ, US (DVT)	17,679	-12.5%	Chengdu, CN (CTU)	1,073,513	-51.8%	Memphis TN, US (MEM)	375,331	4.8%
Chicago IL, US (ORD)	12,164	-67.3%	Shenzhen, CN (SZX)	913,005	-56.2%	Hong Kong, CN (HKG)	335,000	-13.0%
Dallas/Fort Worth TX, US (DFW)	11,870	-57.4%	Guangzhou, CN (CAN)	822,667	-71.7%	Shanghai, CN (PVG)	321,572	11.5%
Atlanta GA, US (ATL)	10,203	-73.0%	Xi'an, CN (XIY)	687,489	-64.1%	Anchorage AK, US (ANC)	261,691	18.8%
Chengdu, CN (CTU)	9,598	-34.7%	Shanghai, CN (SHA)	678,793	-64.1%	Incheon, KR (ICN)	213,323	-2.8%
Charlotte NC, US (CLT)	9,595	-59.3%	Hangzhou, CN (HGH)	661,237	-59.5%	Louisville KY, US (SDF)	204,604	-0.9%
Denver CO, US (DEN)	9,405	-61.9%	Kunming, CN (KMG)	615,097	-68.7%	Taipei, CN (TPE)	166,237	-2.4%
Shenzhen, CN (SZX)	9,097	-37.5%	Jeju, KR (CJU)	522,892	-60.1%	Miami FL, US (MIA)	154,785	-15.0%
Guangzhou, CN (CAN)	9,049	-53.6%	Zhengzhou, CN (CGO)	510,494	-55.9%	Los Angeles CA, US (LAX)	148,993	-8.9%
Shanghai, CN (PVG)	8,621	-59.2%	Nanjing, CN (NKG)	448,354	-64.1%	Tokyo, JP (NRT)	144,765	-15.9%
Phoenix AZ, US (AZA)	8,388	-20.4%	Seoul, KR (GMP)	424,994	-60.3%	Frankfurt, DE (FRA)	135,135	-19.4%
Anchorage AK, US (ANC)	7,763	-20.5%	Shanghai, CN (PVG)	406,719	-87.2%	Chicago IL, US (ORD)	134,065	-5.8%
Los Angeles CA, US (LAX)	7,746	-72.8%	Xiamen, CN (XMN)	339,451	-69.8%	Doha, QA (DOH)	130,702	-25.7%
Phoenix AZ, US (PHX)	7,734	-58.9%	Beijing, CN (PEK)	282,666	-92.9%	Paris, FR (CDG)	129,858	-14.2%
Tokyo, JP (HND)	7,653	-59.3%	Tokyo, JP (HND)	254,108	-92.3%	Guangzhou, CN (CAN)	119,280	-20.7%

Note: Total scheduled and non-scheduled services

(Source: ACI)

In terms of **aircraft departures**, all the Top 15 airports reported declines with a combined fall of -55.3% YoY. Ten out of the Top 15 airports were in the US, and the remaining were in China and Japan. **Phoenix (Deer Valley)** ranked 1st with a relative small decrease of -12.5% owing to the general aviation operations. **Atlanta** recorded the most significant decline of -73.0%.

In terms of **passengers**, the Top 15 airports fell drastically by -72.1% YoY. All the Top 15 airports were in Asia/Pacific and mostly in China, as the country started to reopen the economy and domestic traffic gradually recovered. **Chengdu** ranked 1st being the only airport with over 1 million passengers, followed by **Shenzhen**. Beside Chinese airports, **Jeju, Seoul and Tokyo** also ranked within the Top 15.

In terms of **freight**, the Top 15 airports reported a decline of -5.7% YoY. Unlike the dreadful drop in passengers, decline in cargo is considerably moderate. Three airports recorded increases with **Shanghai** and **Anchorage** growing double-digitally. **Memphis** ranked 1st with a growth of +4.8%, followed by **Hong Kong** with a fall of -13.0%.

TOP 15 AIRLINE GROUPS (Ranked by RPK)

APR 2020: -88.6% YoY in terms of RPK for the Top 15

In terms of RPK, the Top 15 airline groups accounted for 76.2% of the world's total RPK in April 2020 and declined by -88.6% YoY. This decline was +5.7 percentage points less than the world's average on scheduled services, with contraction in traffic of all airlines in the Top 15. Ranking of the Top 15 airlines continued to be distorted due to the different degree and phase of pandemic impact by region and country.

More than half of the Top 15 airlines were Chinese airlines, as China gradually lifted lockdown restrictions ahead of other parts of the world and domestic air travel of the country slowly picked up. **China Southern**, **Air China**, **China Eastern** and **Hainan Airlines** became the Top 4 with traffic down ranging from -73% to -83%. Four others, **Spring Airlines**, **Sichuan Airlines**, **Shandong Airlines** and **Junyao Airlines** ranked 6th, 10th, 11th and 15th, respectively.

Four major US airlines remained in the Top 15 with merely less than 10% of the traffic performed compared to the previous year. **Southwest** ranked 5th with one quarter of the traffic level of China Southern, followed by **America**, **United** and **Delta** at 7th, 9th and 13th.

Qatar Airways made it to the 8th, being the only airline from the Middle East region in the Top 15.

Airlines in Europe also experienced radical demand fall, with only two airlines in the region, **IAG** and **AF-KLM** stayed in the Top 15, at 12th and 14th, respectively. Traffic of both airlines were estimated to be below 5% of the level in the previous year.

APR 20

	RPK (billion)	YoY	% Share of World Total	Cumulative % Share
China Southern	6.0	-73.2%	16.0%	16.0%
Air China	4.0	-79.2%	10.6%	26.6%
China Eastern	3.7	-79.1%	9.9%	36.4%
Hainan Airlines	2.1	-82.5%	5.6%	42.1%
Southwest	1.5	-91.8%	3.9%	46.0%
Spring Airlines	1.5	-53.4%	3.9%	49.9%
American	1.4	-94.7%	3.8%	53.7%
Qatar Airways	1.3	-91.1%	3.5%	57.2%
United	1.2	-95.8%	3.1%	60.3%
Sichuan Airlines	1.1	-75.4%	2.9%	63.2%
Shandong Airlines	1.1	-64.7%	2.8%	66.0%
IAG	1.0	-95.6%	2.8%	68.7%
Delta	1.0	-96.9%	2.6%	71.3%
AF-KLM	0.9	-96.2%	2.5%	73.8%
Junyao Airlines	0.9	-68.3%	2.4%	76.2%
Top 15 Total RPKs	29 billion	-88.6%	76.2%	
World Total RPKs	38 billion	-94.3%	100.0%	

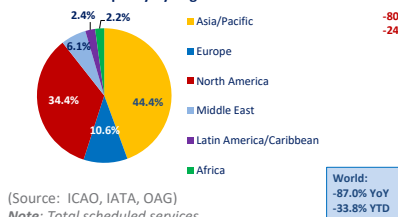
(Source: ICAO, airlines' websites)

Note: Total scheduled and non-scheduled services

CAPACITY BY REGION (ICAO Statistical Regions)

APR 2020: -87.0% YoY in terms of World ASK

% Share of Capacity by Region



* 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.

Worldwide capacity contracted by -87.0% YoY in April 2020. The wide-scale lockdowns have put the global aviation to a halt with air travel demand plummeted and airlines grounding their fleets to reduce capacity to the bare minimum.

The dramatic decline in capacity was broad-based across all regions, with the steepest fall seen in Europe and Latin America/Caribbean.



ICAO

ECONOMIC DEVELOPMENT

MAY 2020: Air Transport Monthly Monitor

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

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

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

GLOBAL KEY FIGURES

MAY 2020
(versus MAY 2019)

RPK ▼ -91.3% ASK ▼ -86.0% FTK ▼ -20.3% LF: 50.7% ▼ -30.80 pt

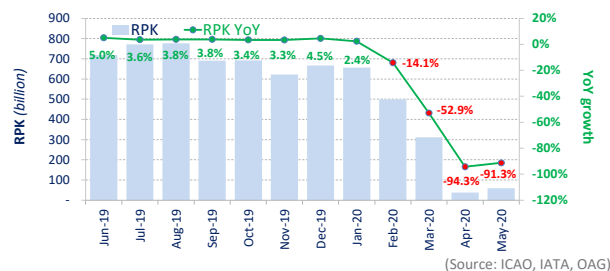
OUTLOOK* - JUN 2020
(versus JUN 2019)

ASK ▼ -78.7% * Source OAG

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

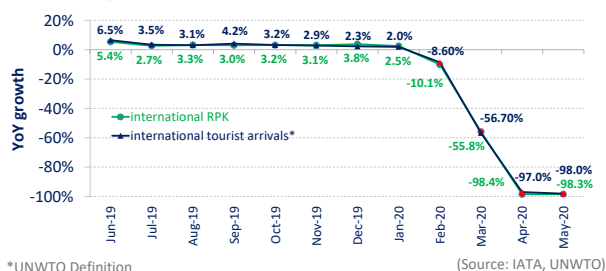
World passenger traffic fell by -91.3% YoY in May 2020, +3.0 percentage points up from the decline in the previous month. Traffic in May started to show marginal improvement after hitting rock bottom in April. However, demand remained to be remarkably low since infections from virus continued to surge and lockdowns and travel restrictions were broadly unchanged globally. The little uptick was primarily attributed to the restart of domestic operations in certain countries, specifically in China who already reopened economy with steady recovery in domestic travel.



International Traffic vs. Tourist Arrivals

International passenger traffic fell by -98.3% YoY in May 2020, almost the same as the previous month. International air travel demand remained at trough suppressed by border closures and stringent quarantine measures enforced in most parts of the world which restricted cross-border travel.

The international tourist arrivals followed a similar trend as international passenger traffic and stayed standstill.



FREIGHT TRAFFIC

Freight Tonne-Kilometres - FTK

World freight traffic reported a decline of -20.3% YoY in May 2020, +7.4 percentage points up from the fall in the previous month. This upturn was owing to the slower contraction in manufacturing activity and export orders. The resilience in freight traffic compared to passenger traffic was supported by the transportation of medical supplies and essential goods amidst the pandemic. Air cargo demand, however, remained weak, facing significant challenges in tandem with the fallen global trade volumes and weakened global economy. All regions showed rebound in freight traffic with the biggest returns in Africa and Latin America/Caribbean; whereas, Asia/Pacific and Europe saw the most modest improvements with the latter being the weakest performing region.

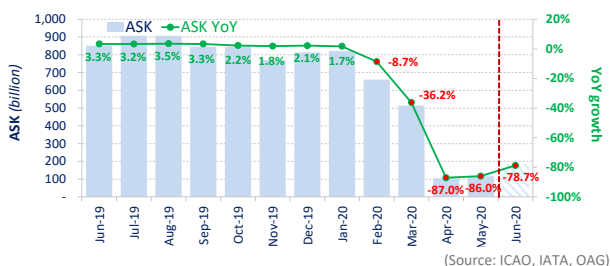
ACRONYMS: ACI: Airports Council International; ASK: Available Seat-Kilometres; IATA: International Air Transport Association; FTK: Freight Tonne-Kilometres; LF: Passenger Load Factor; OAG: Official Airline Guide; RPK: Revenue Passenger-Kilometres; UNWTO: World Tourism Organization; YoY: Year-on-year;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

CAPACITY

Available Seat-Kilometres - ASK

Capacity worldwide fell by -86.0% YoY in May 2020, +1.0 percentage point up from the decline in the previous month (-87.0%).

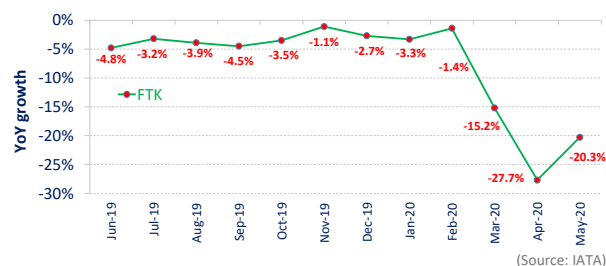
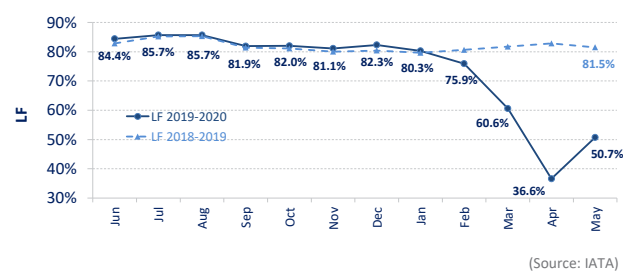
With gradual ease of lockdowns and airlines slowly resuming flights, world capacity is expected to lift slightly in June 2020 to -78.7% contraction YoY.



Load Factor - LF

The passenger Load Factor reached 50.7% in May 2020, +14.1 percentage points up from the previous month.

As a result of passenger traffic falling faster than capacity reduction, the May LF was -30.8 percentage points lower than the rate in the same period of 2019.



► CONTINUED FROM PAGE 60



ICAO

ECONOMIC DEVELOPMENT

MAY 2020: Air Transport Monthly Monitor

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

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

MAY 2020: -46.7%, -58.3%, and -2.2% YoY in terms of aircraft departures, passengers and freight for the Top 15

MAY 20

Airports (ranking by number of departures)	Departures	YoY	Airports (ranking by number of passengers)	Passengers*	YoY	Airports (ranking by tonnes of freight)	Freight**	YoY
Phoenix AZ, US (DVT)	17,811	-11.7%	Chengdu, CN (CTU)	1,471,917	-35.8%	Memphis TN, US (MEM)	409,310	7.9%
Dallas/Fort Worth TX, US (DFW)	13,615	-55.7%	Shenzhen, CN (SZX)	1,279,760	-41.1%	Hong Kong SAR, CN (HKG)	374,000	-5.5%
Chengdu, CN (CTU)	12,650	-17.9%	Guangzhou, CN (CAN)	1,241,874	-58.2%	Shanghai, CN (PVG)	333,538	11.3%
Guangzhou, CN (CAN)	12,582	-38.8%	Shanghai, CN (SHA)	1,068,278	-45.0%	Anchorage AK, US (ANC)	274,591	16.0%
Shenzhen, CN (SZX)	12,311	-19.9%	Hangzhou, CN (HGH)	965,025	-43.3%	Louisville KY, US (SDF)	224,188	-1.2%
Shanghai, CN (PVG)	12,042	-45.1%	Xi'an, CN (XIY)	820,118	-58.6%	Incheon, KR (ICN)	215,529	-2.4%
Chicago IL, US (ORD)	11,486	-71.2%	Jeju, KR (CJU)	808,499	-40.5%	Miami FL, US (MIA)	181,128	-4.8%
Anchorage AK, US (ANC)	11,356	-6.4%	Beijing, CN (PEK)	806,261	-80.4%	Los Angeles CA, US (LAX)	180,251	5.4%
Charlotte NC, US (CLT)	10,351	-57.9%	Kunming, CN (KMG)	801,727	-58.6%	Taipei, CN (TPE)	178,281	-2.5%
Long Beach CA, US (LGB)	10,260	-22.0%	Zhengzhou, CN (CGO)	786,635	-33.8%	Chicago IL, US (ORD)	155,591	4.0%
Denver CO, US (DEN)	9,829	-63.4%	Shanghai, CN (PVG)	700,650	-78.7%	Frankfurt, DE (FRA)	153,214	-12.4%
Phoenix AZ, US (AZA)	9,721	-25.0%	Dallas/Fort Worth TX, US (DFW)	676,828	-79.4%	Doha, QA (DOH)	151,214	-20.3%
Atlanta GA, US (ATL)	9,421	-76.1%	Nanjing, CN (NKG)	652,848	-49.3%	Guangzhou, CN (CAN)	138,243	-11.8%
Xi'an, CN (XIY)	9,310	-36.7%	Seoul, KR (GMP)	620,582	-44.2%	Tokyo, JP (NRT)	137,837	-16.0%
Kunming, CN (KMG)	9,285	-36.7%	Xiamen, CN (XMN)	558,392	-51.4%	Paris, FR (CDG)	130,100	-24.1%

Note: Total scheduled and non-scheduled services

(Source: ACI)

In terms of **aircraft departures**, all the Top 15 airports reported declines with a combined fall of **-46.7% YoY**. All the Top 15 airports were either US or Chinese airports. **Phoenix (Deer Valley)** ranked 1st, with a smaller decline of **-11.7%**, supported by general operations. **Atlanta**, once again, recorded the most significant fall of **-76.1%**, followed by **Chicago** (**-71.2%**).

In terms of **passengers**, the Top 15 airports slumped by **-58.3% YoY**. Twelve out of the Top 15 airports were Chinese airports, as the country's domestic travel was leading the recovery. **Chengdu** ranked 1st, followed by **Shenzhen** and **Guangzhou**. Two airports in Republic of Korea, **Jeju** and **Seoul**, were also in the Top 15. **Dallas/Fort Worth** was the only airport from North America ranked in the Top 15.

In terms of **freight**, the Top 15 airports reported a decline of **-2.2% YoY**. Majority of the Top 15 airports were in Asia/Pacific and US. Five airports recorded positive growth, with **Anchorage** and **Shanghai** growing double-digitally by **+16.0%** and **+11.3%**, respectively. **Memphis** ranked 1st up by **+7.9%**, followed by **Hong Kong** with a fall of **-5.5%**.

TOP 15 AIRLINE GROUPS (Ranked by RPK)

MAY 2020: -82.1% YoY in terms of RPK for the Top 15

In terms of RPK, the Top 15 airline groups accounted for 76.3% of the world's total RPK in May 2020 and declined by **-82.1% YoY**. This decline was +9.2 percentage points less than the world's average on scheduled services, with contraction in traffic of all airlines in the Top 15. Ranking of the Top 15 airlines continued to be distorted due to the different degree and phase of pandemic impact by region and country.

More than half of the Top 15 airlines were Chinese airlines, supported by the steady recovery in domestic air travel in the country. **China Southern**, **Air China**, and **China Eastern** remained the Top 3 with traffic down ranging from **-61.4%** to **-69.4%**, improved from the previous month. Five others, **Hainan Airlines**, **Spring Airlines**, **Sichuan Airlines**, **Shandong Airlines** and **Junyao Airlines** ranked 5th, 8th, 10th, 11th and 12th, respectively.

Five US airlines ranked in the Top 15 with small uptick from the bottom low in April, albeit mostly still below 10% of the traffic seen in last year. **American** and **Southwest** rebounded relatively faster, and ranked 4th and 6th, respectively. This was followed by **Delta** and **United** at a slower pace. **Alaska Airlines** made it to the Top 15 and ranked 15th.

Recovery of airlines in Europe remained subdued, with **AF-KLM** and **Aeroflot** being the only two airlines from the region within the Top 15, with merely 5% of traffic performed in last year and ranked 13th and 14th, respectively.

MAY 20

RPK (billion)	YoY	% Share of World Total	Cumulative % Share
China Southern	-61.4%	14.9%	14.9%
Air China	-69.1%	10.2%	25.1%
China Eastern	-69.4%	9.5%	34.7%
American	-88.0%	6.7%	41.4%
Hainan Airlines	-71.5%	6.1%	47.4%
Southwest	-82.5%	5.6%	53.0%
Delta	-93.5%	3.8%	56.8%
Spring Airlines	-37.1%	3.5%	60.3%
United	-93.7%	3.5%	63.8%
Sichuan Airlines	-48.9%	3.4%	67.2%
Shandong Airlines	-32.0%	2.9%	70.1%
Junyao Airlines	-55.9%	2.2%	72.3%
AF-KLM	-96.1%	1.7%	74.0%
Aeroflot	-94.2%	1.2%	75.3%
Alaska Airlines	-91.9%	1.1%	76.3%
Top 15 Total RPKs	-82.1%	76.3%	
World Total RPKs	-91.3%	100.0%	

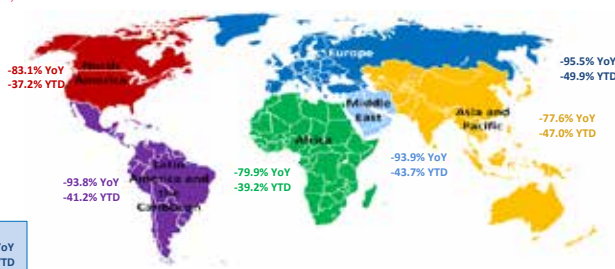
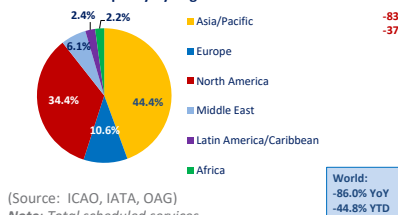
(Source: ICAO, airlines' websites)

Note: Total scheduled and non-scheduled services

CAPACITY BY REGION (ICAO Statistical Regions)

MAY 2020: -86.0% YoY in terms of World ASK

% Share of Capacity by Region



Worldwide capacity contracted by **-86.0% YoY** in May 2020. As many countries were still under lockdown and kept border closed, airlines continued to ground fleet and reduce capacity to cope with the drastic fall in air travel demand.

Capacity plunge was observed in all regions, with the steepest fall seen in Europe, the Middle East and Latin America/Caribbean, as was the case in April.

* 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

JUN 2020: 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

JUN 2020
(versus JUN 2019)

RPK ▼ -86.5% ASK ▼ -80.1% FTK ▼ -17.6% LF: 57.6% ▲ +6.9 pt

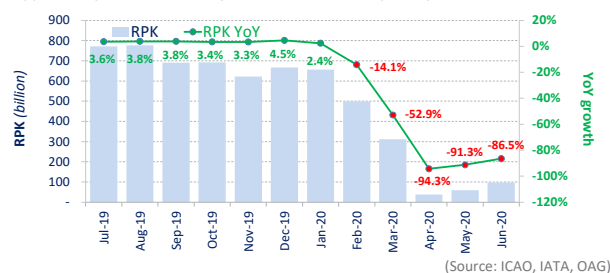
OUTLOOK* - JUL 2020
(versus JUL 2019)

ASK ▼ -66.1% * Source OAG

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

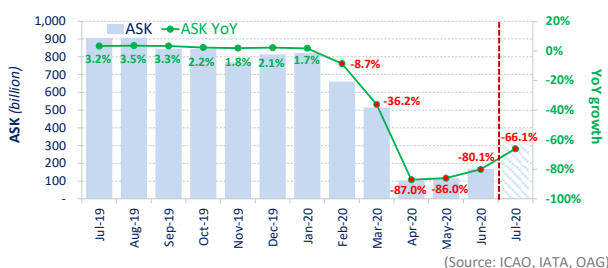
World passenger traffic fell by -86.5% YoY in June 2020, +4.8 percentage points up from the decline in the previous month. Air travel continued to show recovery from the trough in April, albeit with modest improvements. More countries started to relax lockdowns and travel restrictions, however limited to domestic open up. Consequently, the small upturn was mostly driven by domestic traffic. Speed of recovery varies across regions, with Asia/Pacific showing the most resilient rebound supported by the restart of key domestic markets, especially China.



CAPACITY

Available Seat-Kilometres - ASK

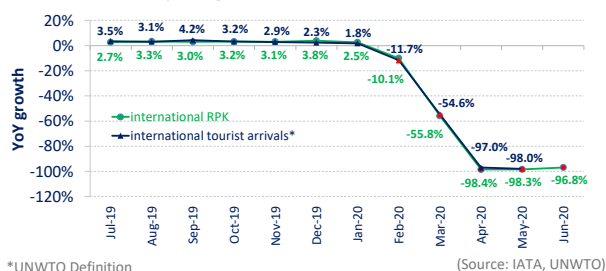
Capacity worldwide fell by -80.1% YoY in June 2020, +5.9 percentage points up from the decline in the previous month (-86.0%). With gradual opening of markets and rise in demand for domestic travel as well as the signs of pickup in international travel, world capacity is expected to increase in July to -66.1% down YoY.



International Traffic vs. Tourist Arrivals

International passenger traffic fell by -96.8% YoY in June 2020, +1.6 percentage points up from the decline in the previous month. International air travel remained to be tightly restricted and was virtually shutdown amid the strict border closures and quarantine enforcements broadly.

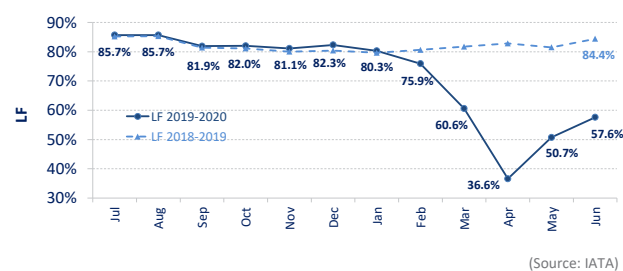
The international tourist arrivals remained at halt and is expected to follow a similar trend as international passenger traffic.



Load Factor - LF

The passenger Load Factor reached 57.6% in June 2020, +6.9 percentage points higher than the previous month.

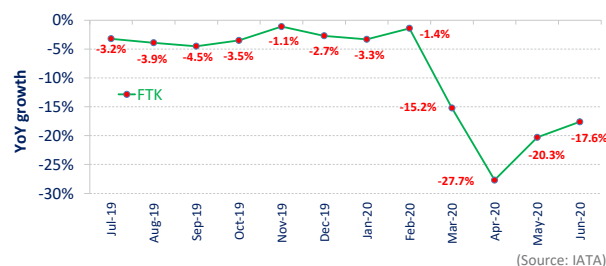
As decline in traffic was faster than capacity reduction, the June LF was -26.8 percentage points lower than the rate in the same period of 2019.



FREIGHT TRAFFIC

Freight Tonne-Kilometres - FTK

World freight traffic reported a decline of -17.6% YoY in June 2020, +2.7 percentage points up from the fall in the previous month. Improvements in air cargo demand continued into June, however, the pace of rebound unwound compared to May. The primary driver for sustaining air cargo resilience amid the most strict global lockdowns, i.e. urgent need of speedy transportation of medical supplies and PPE, has softened alongside the easing of wide-scale shortage. More demand including those of consumption goods began to shift to slower but cheaper means of transportation such as shipping by sea or rail. The performance of recovery by region was a mixed with slight upturn in North America, Europe and the Middle East, while deterioration in Asia/Pacific, Africa and Latin America/Caribbean.



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 PAG 62



ICAO

ECONOMIC DEVELOPMENT

JUN 2020: Air Transport Monthly Monitor

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

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

JUN 2020: -41.4%, -57.3%, and +1.8% YoY in terms of aircraft departures, passengers and freight for the Top 15

JUN 20

Airports (ranking by number of departures)	Departures	YoY	Airports (ranking by number of passengers)	Passengers*	YoY	Airports (ranking by tonnes of freight)	Freight**	YoY
Phoenix AZ, US (DVT)	16,021	-15.1%	Chengdu, CN (CTU)	1,618,588	-27.3%	Memphis TN, US (MEM)	393,994	13.3%
Dallas/Fort Worth TX, US (DFW)	15,226	-50.4%	Guangzhou, CN (CAN)	1,552,025	-46.0%	Hong Kong SAR, CN (HKG)	354,000	-6.6%
Guangzhou, CN (CAN)	14,595	-25.7%	Shenzhen, CN (SZX)	1,479,063	-28.5%	Shanghai, CN (PVG)	302,642	3.5%
Shenzhen, CN (SZX)	13,670	-6.5%	Xi'an, CN (XIY)	1,310,400	-31.7%	Anchorage AK, US (ANC)	280,870	17.9%
Chengdu, CN (CTU)	13,482	-9.8%	Shanghai, CN (SHA)	1,212,542	-35.2%	Louisville KY, US (SDF)	234,357	6.0%
Shanghai, CN (PVG)	12,374	-41.9%	Hangzhou, CN (HGH)	1,136,183	-30.6%	Incheon, KR (ICN)	209,542	-4.9%
Denver CO, US (DEN)	12,288	-55.8%	Dallas/Fort Worth TX, US (DFW)	1,106,722	-67.6%	Taipei, CN (TPE)	183,054	5.6%
Atlanta GA, US (ATL)	12,229	-68.8%	Shanghai, CN (PVG)	960,057	-70.4%	Los Angeles CA, US (LAX)	182,376	9.7%
Chicago IL, US (ORD)	12,184	-69.8%	Jeju, KR (CJU)	892,808	-33.5%	Miami FL, US (MIA)	166,441	-1.5%
Long Beach CA, US (LGB)	11,480	-16.5%	Denver CO, US (DEN)	875,184	-72.6%	Chicago IL, US (ORD)	157,229	3.6%
Charlotte NC, US (CLT)	11,395	-52.7%	Atlanta GA, US (ATL)	791,750	-84.1%	Doha, QA (DOH)	154,429	-10.9%
Anchorage AK, US (ANC)	11,356	-29.9%	Charlotte NC, US (CLT)	784,213	-63.7%	Cincinnati OH, USA (CVG)	145,163	60.6%
Xi'an, CN (XIY)	11,152	-20.8%	Beijing, CN (PEK)	752,902	-81.4%	Guangzhou, CN (CAN)	144,960	1.2%
Phoenix AZ, US (AZA)	10,080	-21.3%	Nanjing, CN (NKG)	744,733	-40.6%	Tokyo, JP (NRT)	140,640	-19.2%
Hangzhou, CN (HGH)	9,939	-16.2%	Seoul, KR (GMP)	722,242	-33.6%	Dubai, AE (DXB)	139,962	-27.2%

Note: Total scheduled and non-scheduled services

(Source: ACI)

In terms of **aircraft departures**, all the Top 15 airports reported declines with a combined fall of -41.4% YoY. The Top 15 list comprised of only US and Chinese airports with **Phoenix (Deer Valley)** continuing to be 1st. **Chicago** recorded the most significant decline of -69.8%, followed by **Atlanta**. Two Chinese airports posted the smallest declines with less than -10% YoY.

In terms of **passengers**, the Top 15 airports posted a staggering fall of -57.3% YoY. Eleven out of the Top 15 airports were in Asia/Pacific and mostly in China, owing to the gradual pickup of domestic traffic. **Chengdu** remained 1st with the smallest contraction of -27.3%, followed by **Guangzhou**. Beside Chinese airports, two Korean and US airports also ranked within the Top 15.

In terms of **freight**, the Top 15 airports reported a YoY increase of +1.8%. This was the first positive growth since March. Over half of the Top 15 posted YoY increase with the strongest growth being recorded by **Cincinnati** (+60.6%), owing to a surge in cargo loads into the DHL system. **Memphis** remained at 1st, followed by **Hong Kong** with a fall of -6.6%.

TOP 15 AIRLINE GROUPS (Ranked by RPK)

JUN 2020: -77.7% YoY in terms of RPK for the Top 15

In terms of RPK, the Top 15 airline groups accounted for 58.0% of the world's total RPK in June 2020 and declined by -77.7% YoY. This decline was 8.8 percentage points less than the world's average on scheduled services, with contraction in traffic of all airlines in the Top 15. Ranking of the Top 15 airlines continued to be distorted due to the different recovery pace by region and country, nonetheless the same airlines as in May maintained in the list.

Chinese airlines dominated the chart supported by the sturdy recovery of domestic traffic in the country. **China Southern**, **Air China**, and **China Eastern** remained the Top 3 with traffic down ranging from -53% to -65% YoY. **Hainan Airlines**, **Spring Airlines**, **Sichuan Airlines**, **Shandong Airlines** and **Junyao Airlines** ranked at similar positions as the previous month at 5th, 9th, 11th, 12th and 13th, respectively. **Spring Airlines** has recorded the fastest improvement with traffic rebounded to 73.7% of the 2019 level.

Among the US airlines in the Top 15, **American** and **Southwest** recovered slightly faster although the improvements were still modest, and ranked 4th and 6th, respectively. While traffic level of **Delta** and **United** remained relatively unchanged compared to May. **Alaska Airlines** maintained the position of 15th.

Performance of airlines in Europe stayed subdued. **Aeroflot** registered a faster recovery due to resumption of domestic flights, and ranked up to 8th. **AF-KLM** further moved down to 14th with marginal improvements.

JUN 20

	RPK (billion)	YoY	% Share of World Total	Cumulative % Share
China Southern	10.6	-53.3%	11.0%	11.0%
China Eastern	7.0	-61.5%	7.2%	18.2%
Air China	6.6	-64.7%	6.8%	25.0%
American	6.3	-80.3%	6.5%	31.5%
Hainan Airlines	4.3	-65.1%	4.5%	36.0%
Southwest	3.7	-80.2%	3.8%	39.8%
Delta	2.8	-92.3%	2.9%	42.7%
Aeroflot	2.4	-83.6%	2.5%	45.2%
Spring Airlines	2.4	-26.3%	2.5%	47.6%
United	2.1	-93.6%	2.1%	49.8%
Sichuan Airlines	1.9	-50.5%	2.0%	51.8%
Shandong Airlines	1.7	-30.0%	1.7%	53.5%
Junyao Airlines	1.6	-42.9%	1.7%	55.1%
AF-KLM	1.4	-94.6%	1.5%	56.6%
Alaska Airlines	1.3	-80.2%	1.4%	58.0%
Top 15 Total RPKs	56 billion	-77.7%	58.0%	
World Total RPKs	97 billion	-86.5%	100.0%	

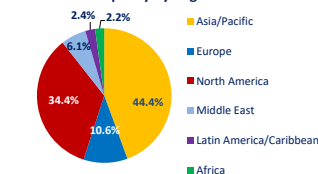
(Source: ICAO, airlines' websites)

Note: Total scheduled and non-scheduled services

CAPACITY BY REGION (ICAO Statistical Regions)

JUN 2020: -80.1% YoY in terms of World ASK

% Share of Capacity by Region



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



Worldwide capacity contracted by -80.1% YoY in June 2020. As more flights being resumed compared to May, capacity decline of all regions eased slightly with the exception of Africa.

The most resilient recovery was recorded by Asia/Pacific with capacity returned to 30% of the 2019 level. The slowest improvements were observed in Europe and the Middle East.

* 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

JUL 2020: Air Transport Monthly Monitor

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

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

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

GLOBAL KEY FIGURES

JUL 2020
(versus JUL 2019)

RPK ▼ -79.8% ASK ▼ -70.1% FTK ▼ -13.5% LF: 57.9% ▲ +0.3 pt

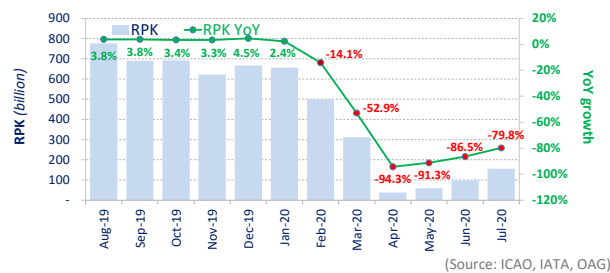
OUTLOOK* - AUG 2020
(versus AUG 2019)

ASK ▼ -62.0% * Source OAG

PASSENGER TRAFFIC

Revenue Passenger-Kilometres - RPK

World passenger traffic fell by -79.8% YoY in July 2020, +6.7 percentage points up from the decline in the previous month. All regions showed gradual recovery at varying paces, with more significant improvements in Asia/Pacific, Europe and North America. Domestic travel continued to be the main driver for air traffic recovery, with smaller contractions in major markets, noticeably in China and the Russian Federation. Globally, return of traffic is anticipated to remain slow due to the weak consumer confidence along with the unstable epidemic situation.

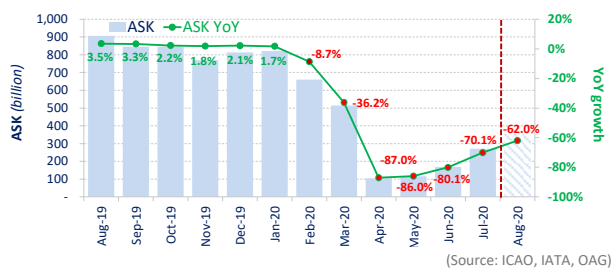


CAPACITY

Available Seat-Kilometres - ASK

Capacity worldwide fell by -70.1% YoY in July 2020, +10.0 percentage points up from the decline in the previous month (-80.1%).

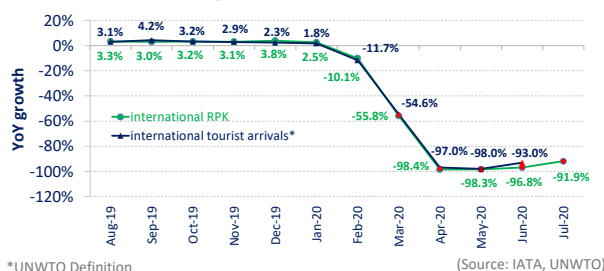
With more countries relaxing travel restrictions during the summer period and more airlines restarting operation, contraction in world capacity is expected to ease in August to -62.0% down YoY.



International Traffic vs. Tourist Arrivals

International passenger traffic fell by -91.9% YoY in July 2020, +4.9 percentage points up from the decline in the previous month. International air travel demand remained broadly sluggish for all regions, with the exception of Europe owing to the increasing intra-regional travel within the Schengen Area.

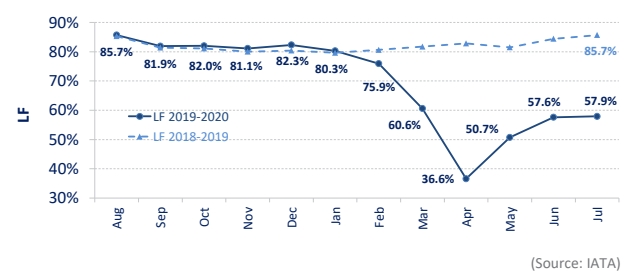
The international tourist arrivals remained stagnant and is expected to follow a similar trend as international passenger traffic.



Load Factor - LF

The passenger Load Factor reached 57.9% in July 2020, +0.3 percentage point higher than the previous month.

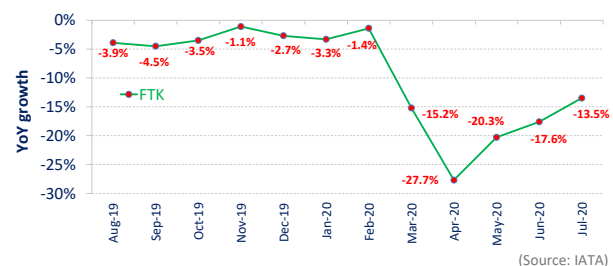
As rebound in capacity outpaced recovery in air travel demand, the July LF was -27.8 percentage points lower than the rate in the same period of 2019.



FREIGHT TRAFFIC

Freight Tonne-Kilometres - FTK

World freight traffic reported a decline of -13.5% YoY in July 2020, +4.1 percentage points up from the fall in the previous month. Recovery pace in air cargo continued to be steady since April, almost depicting a 'Nike swoosh'-shaped path. The recent signs of improving economic activities and consumption of goods provide some optimism for air cargo demand in the coming months. The current reduction in passenger flights and the consequential crunch in cargo capacity might lead to increased utilization of all-freighters and cargo-only operations. Wide disparity in recovery was observed amongst regions, with North America demonstrating the most resilience and being the only region recording a positive growth. Asia/Pacific, Europe and the Middle East posted modest upturn while deterioration was shown in Latin America/Caribbean.



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 64



ICAO

ECONOMIC DEVELOPMENT

JUL 2020: Air Transport Monthly Monitor

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

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

JUL 2020: -32.8%, -45.6%, and +2.8% YoY in terms of aircraft departures, passengers and freight for the Top 15

JUL 20

Airports (ranking by number of departures)	Departures	YoY	Airports (ranking by number of passengers)	Passengers*	YoY	Airports (ranking by tonnes of freight)	Freight**	YoY
Dallas/Fort Worth TX, US (DFW)	22,009	-32.3%	Guangzhou, CN (CAN)	2,047,960	-34.6%	Memphis TN, US (MEM)	411,066	18.5%
Chicago IL, US (ORD)	20,683	-49.5%	Chengdu, CN (CTU)	1,995,067	-17.7%	Hong Kong SAR, CN (HKG)	369,000	-5.9%
Atlanta GA, US (ATL)	20,068	-50.2%	Shenzhen, CN (SZX)	1,890,870	-15.6%	Shanghai, CN (PVG)	306,658	1.3%
Denver CO, US (DEN)	17,121	-41.9%	Dallas/Fort Worth TX, US (DFW)	1,617,774	-54.8%	Anchorage AK, US (ANC)	293,034	11.5%
Guangzhou, CN (CAN)	16,887	-19.2%	Xi'an, CN (XIY)	1,601,866	-25.4%	Louisville KY, US (SDF)	250,898	7.6%
Phoenix AZ, US (DVT)	15,404	-13.4%	Shanghai, CN (SHA)	1,599,998	-17.8%	Incheon, KR (ICN)	229,562	3.0%
Shenzhen, CN (SZX)	15,274	-2.7%	Kunming, CN (KMG)	1,557,490	-26.3%	Taipei, CN (TPE)	205,474	14.2%
Charlotte NC, US (CLT)	15,194	-38.1%	Shanghai, CN (PVG)	1,466,983	-57.0%	Los Angeles CA, US (LAX)	187,339	14.5%
Shanghai, CN (PVG)	14,737	-34.2%	Hangzhou, CN (HGH)	1,391,692	-21.3%	Miami FL, US (MIA)	182,309	12.2%
Chengdu, CN (CTU)	14,639	-7.9%	Denver CO, US (DEN)	1,296,139	-61.5%	Doha, QA (DOH)	181,011	-1.6%
Anchorage AK, US (ANC)	14,229	-16.1%	Atlanta GA, US (ATL)	1,266,568	-75.2%	Tokyo, JP (NRT)	153,812	-13.1%
Los Angeles CA, US (LAX)	13,527	-56.4%	Zhengzhou, CN (CGO)	1,087,131	-18.8%	Chicago IL, US (ORD)	152,523	9.2%
Long Beach CA, US (LGB)	13,020	-13.4%	Chicago IL, US (ORD)	1,027,985	-74.8%	Guangzhou, CN (CAN)	144,771	-2.7%
Xi'an, CN (XIY)	12,798	-17.3%	Jeju, KR (CJU)	1,001,376	-23.5%	Frankfurt, DE (FRA)	142,185	-15.8%
Kunming, CN (KMG)	12,667	-20.1%	Charlotte NC, US (CLT)	997,229	-54.9%	Paris, FR (CDG)	132,100	-20.4%

Note: Total scheduled and non-scheduled services

(Source: ACI)

In terms of **aircraft departures**, all the Top 15 airports reported declines with a total fall of **-32.8% YoY**. Nine US and six Chinese airports ranked in the Top 15. **Dallas/Fort Worth** ranked 1st for the first time of the year, followed by **Chicago** and **Atlanta**. Stronger recovery was observed in Chinese airports, with **Shenzhen** and **Chengdu** posting the smallest declines of less than -10% YoY.

In terms of **passengers**, the Top 15 airports posted a decline of **-45.6% YoY**. The Top 15 was dominated by airports in the two largest domestic markets, China and US. Top 3 remained as the Chinese airports, and **Guangzhou** overtook **Chengdu** becoming 1st. The most significant declines were reported by **Atlanta** (-75.2%) and **Chicago** (-74.8%). Similar to departures, Chinese airports posted smaller fall.

In terms of **freight**, the Top 15 airports reported a YoY increase of **+2.8%**. This was the second consecutive growth since June. Over half of the Top 15 posted YoY increase with the strongest growth recorded by **Memphis** (+18.5%), which also remained at 1st. **Hong Kong** continued to be 2nd albeit with a fall of -5.9%, followed by **Shanghai** (+1.3%).

TOP 15 AIRLINE GROUPS (Ranked by RPK)

JUL 2020: -73.7% YoY in terms of RPK for the Top 15

In terms of RPK, the Top 15 airline groups accounted for 57.5% of the world's total RPK in July 2020 and declined by -73.7% YoY. This decline was 6.1 percentage points smaller than the fall in world's average RPK, with all airlines in the Top 15 posting contractions.

Ranking of the Top 15 airlines were dominated by airlines in China, US and Europe, continued to be distorted due to the divergent recovery pace by region and country.

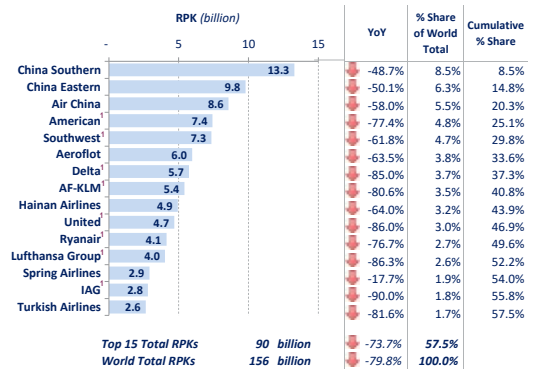
Chinese airlines remained as the Top 3, with **China Southern**, **China Eastern** and **Air China** posting traffic decline ranging from -49% to -58% YoY. **Hainan Airlines** and **Spring Airlines** ranked down to 9th and 13th, respectively, as more major airlines in other regions started to recover. The latter, however, recorded the swiftest recovery with traffic bouncing back to 72.3% of the 2019 level.

American remained at 4th with a decline of -77.4% while **Southwest** went up to 5th recording the fastest recovery among the US airlines in the Top 15. **Delta** and **United** showed relatively slower recovery with traffic down by over -80% YoY, and ranked 7th and 10th, respectively.

Compared to previous month, more noticeable improvements were recorded by airlines in Europe with an increasing number in the Top 15. Both **Aeroflot** and **AF-KLM** went up to 6th and 8th.

Ryanair, **Lufthansa**, **IAG** and **Turkish Airlines** reappeared in the Top 15 list and ranked 11th, 12th, 14th and 15th.

JUL 20



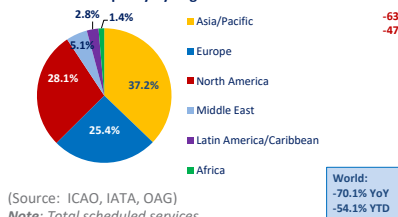
(Source: ICAO, airlines' websites)

Note: Total scheduled and non-scheduled services

CAPACITY BY REGION (ICAO Statistical Regions)

JUL 2020: -70.1% YoY in terms of World ASK

% Share of Capacity by Region



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

* 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.

Worldwide capacity contracted by -70.1% YoY in July 2020.

Contraction in world capacity eased as more airlines resumed operations especially amongst countries where lockdowns and travel restrictions were loosened for leisure travel during the summer season.

Europe led the race followed by North America, both of which recorded double-digit return.