Annual Review **2020**

IATA

Alexandre de Juniac
Director General & CEO
International Air Transport Association

Annual Review 2020
76th Annual General Meeting,
Amsterdam, November 2020

Note: Unless otherwise specified,
all dollar ($) figures refer to US dollars (US$).

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As at November 2020

Crises are not new — resilience is in our DNA

Alexandre de Juniac, Director General and CEO

The aviation industry is in crisis. Our business connects people. But owing to efforts to control the spread of the novel coronavirus (COVID-19), we have seen the greatest de-connecting of the world since the Second World War. Borders are effectively closed. Lockdowns have been imposed. Freedom of movement has been severely limited. The impact on aviation has been catastrophic. At the peak of the crisis in April 2020, 90% of our business disappeared.

Crises, though, are not new to aviation. We have proven our resilience many times. Today, resilience depends on

- maintaining our fundamental commitments to safety and sustainability,
- reopening borders, and
- repairing shattered finances.

Safety

Safety is always aviation's top priority. This commitment is unaltered by the crisis. But it has not been unchallenged. Travelers are rightly concerned about the risks of air travel. Yet the news is reassuring. The data and scientific research confirm that the risk of catching COVID-19 onboard an aircraft is low compared with other indoor environments. Measures such as wearing masks and cleaning and sanitizing the onboard environment more frequently reduce that risk further. These are just a few of the multiple layers of protections recommended in the *Take-off* guidance materials published by the International Civil Aviation Organization (ICAO) in cooperation with public health authorities and industry representatives, including IATA. And surveys tell us that 86% of people say that they continue to feel safe traveling by air.

Less outwardly visible, but just as important, is our work with regulators to safely ramp-up operations when it becomes possible. Reactivating thousands of grounded aircraft, managing the qualifications and readiness of millions of licensed personnel, and dealing with a major drain of experienced workers will be key to safe flying. From the earliest stages of the crisis, we have worked with ICAO and regulators on a framework to do this.

Sustainability

Aviation's commitment to environmental sustainability has only been strengthened in the face of the pandemic. As a result of the historic Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), aviation's carbon emissions from international operations will not grow beyond 2019 levels. Even amid the crisis, IATA worked with our industry partners to map the way to our 2050 goal of cutting the industry's net emissions to half of 2005 levels. And we have growing confidence that we can get to net zero as early as 2060. Both targets will need the support of governments, particularly in the area of sustainable aviation fuels (SAF).

Open borders

The biggest barrier to restarting aviation is the closure of borders caused by travel restrictions or quarantine measures. Governments, understandably, do not want to import COVID-19 via air travel. But the risk must and can be managed without measures that eliminate all but the most essential demand.

The solution is the systematic predeparture testing of travelers. Affordable, fast, accurate, easy-to-use, and scalable tests exist. And IATA is among several providers with solutions that governments can trust will provide reliable results from tests conducted in other jurisdictions. IATA continues to work with partners across the industry to give governments the confidence that testing is the way to restore connectivity during the pandemic.

Longer term, the solution is vaccines. IATA is collaborating with the global COVAX initiative to develop comprehensive guidance materials for the transport of vaccines. The airline industry, therefore, will be ready for its greatest-ever logistical challenge. But policy makers must not be distracted from the urgent need to reopen borders by the promise of eventual vaccines. Every day that borders remain closed does irreparable damage to economies and to peoples' lives and livelihoods.

Shattered finances

In the meantime, the industry is grateful to governments for the $173 billion of support provided to airlines. It avoided mass bankruptcies and job losses. Ensuring the industry's financial viability is a smart investment. Each aviation job supports 24 more.

Many government support programs, however, were not designed for a crisis of this duration. Airlines are expected to lose $118 billion in 2020 and a further $38 billion in 2021. So more government support—in forms that do not further inflate airline debt levels—is needed to help airlines survive. Without

viable airlines, the economic recovery from COVID-19 will be longer and more painful.

The business of freedom

The apex of the COVID-19 crisis coincided with IATA's 75th anniversary. IATA was founded by 57 visionary airline leaders in April 1945. Today, we boast 290 members comprising 82% of global air traffic. In place of celebrating IATA's milestone, airlines were proving once again the value of aviation connectivity. When the world cried out, aviation responded, with at least 46,000 special cargo flights delivering 1.5 million metric tons of medical equipment to fight the virus. Aviation likewise flew nearly 40,000 repatriation flights to bring some 5.4 million people home to their families and loved ones.

IATA, too, has felt the impact of the crisis. We have restructured in line with the smaller industry that is likely to emerge from COVID-19. Our slimmer form notwithstanding, members can continue to rely on IATA to be a strong voice for the industry, to provide the vital products and services that you depend on, and to set the global standards for efficient operations.

The months ahead will challenge all of us as never before. But resilience is in aviation's DNA. We will reconnect the world. Our mission is unchanged. We are the business of freedom. The pages that follow tell our story.

Meeting the COVID-19 challenge together

Carsten Spohr, Chair, IATA Board of Governors, Chairman and CEO Lufthansa Group

What is IATA's role helping the industry through the COVID-19 pandemic?

IATA has proven to be an essential and irreplaceable crisis manager for the global aviation industry in this pandemic. We act as consultants for both our industry and governments worldwide. And we advocate for relief measures like the slot waiver, generate support measures from suppliers, and vote for tests instead of quarantines. IATA is also offering a valuable communication platform for airline managers, as well as governments and public authorities. Not to forget, IATA plays an important role in ICAO's Council Aviation Recovery Task Force. Together, we safeguard airline's interests in cooperation with civil aviation authorities.

What sort of airline industry do you think will emerge once demand recovers?

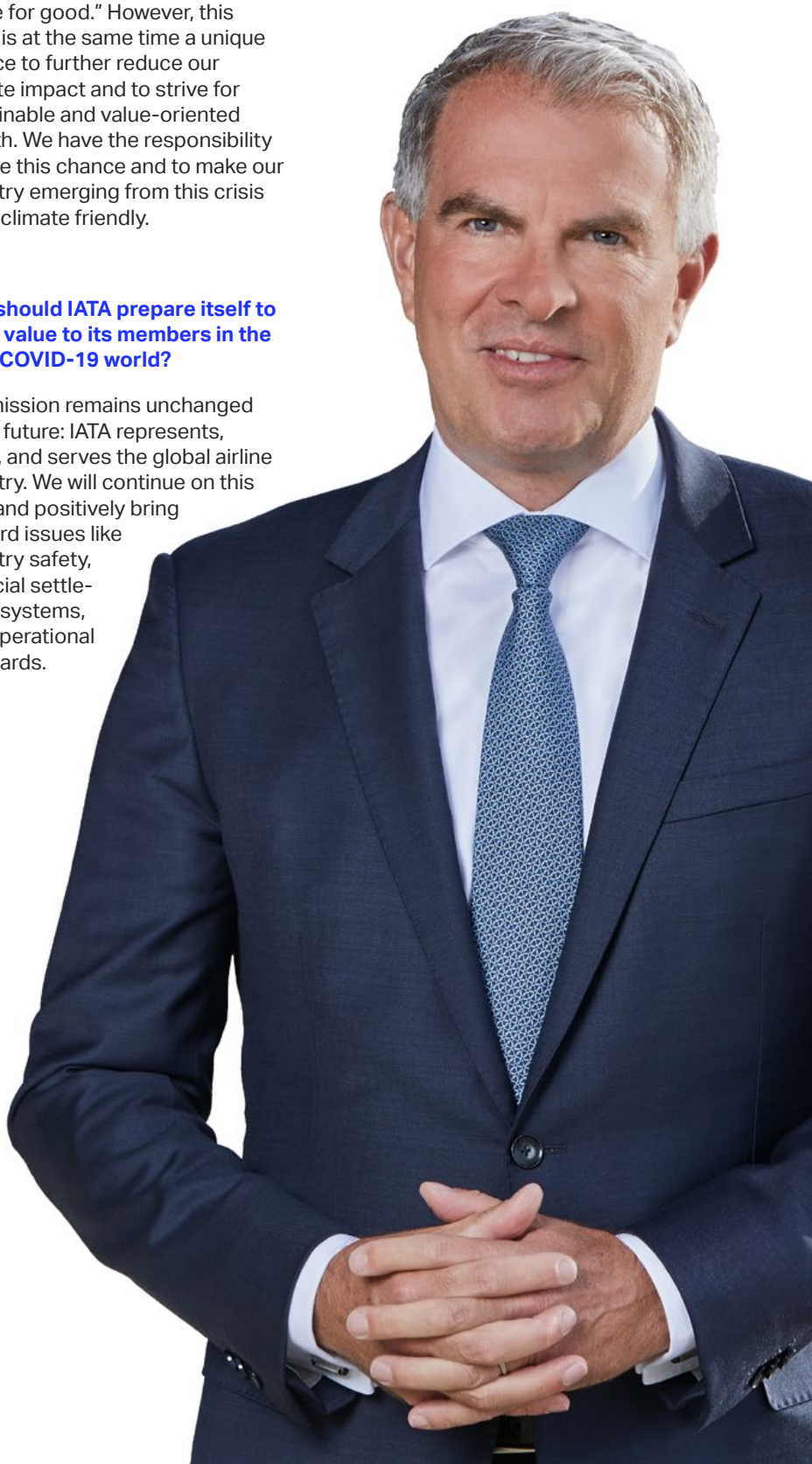
Frankly speaking, no one can predict how long the pandemic will last and how long our industry will suffer from its consequences. A reliable outlook is more difficult than ever before. It depends on the acceptance for free mobility of COVID-19 negative tested travelers as well as on the development and the availability of an effective vaccine. This will determine how governments go on with travel warnings, entry bans, and lockdowns.

But one thing is for sure: A global society and a modern world economy cannot exist without air transport. Flying has an enormous value for societies, cultures, education, economies and international understanding.

This is why I'm deeply convinced that the airline industry will recover and will resume its role as a global "force for good." However, this crisis is at the same time a unique chance to further reduce our climate impact and to strive for sustainable and value-oriented growth. We have the responsibility to take this chance and to make our industry emerging from this crisis more climate friendly.

How should IATA prepare itself to bring value to its members in the post-COVID-19 world?

Our mission remains unchanged in the future: IATA represents, leads, and serves the global airline industry. We will continue on this path and positively bring forward issues like industry safety, financial settlement systems, and operational standards.



But the crisis in which we are in also shows very clearly that we need to take a common and firm political stand. We need to unite our voices and make our positions better heard. This applies to overcoming the current crisis, where we have been successful on the issue of slot waivers. It will certainly become particularly important when we think about the impact of the sustainability debate. The pandemic remains a major challenge for the entire industry that we can only meet together. IATA will play its role in unifying and guiding the global industry through this challenge.

Aside from the pandemic, what other issues must the industry keep top of the agenda?

I see three priorities for our industry.

First of all, of course, safety. That has always been the basis for aviation—and it will remain so in the future.

Secondly, sustainability. Our planes emit carbon. Therefore, we have an obligation to continue to work for climate-friendly air traffic. And we need worldwide-harmonized measures, e.g. CORSIA, to meet the environmental challenges. The meaning of sustainable aviation fuels and new technologies for further CO_2 cannot be emphasized enough.

Thirdly, we need to work on a worldwide level playing field for airlines. This concerns rules of competition, traffic rights, taxes, and passenger and consumer rights. A global industry in a globalized world needs global rules and regulations.

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2019–2020*

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**As at November 2020*

2020

Aviation is in crisis.

This is the most profound de-connecting of modern society since World War II.


EXIT

2020

The industry story in 2020

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The great connectivity shutdown

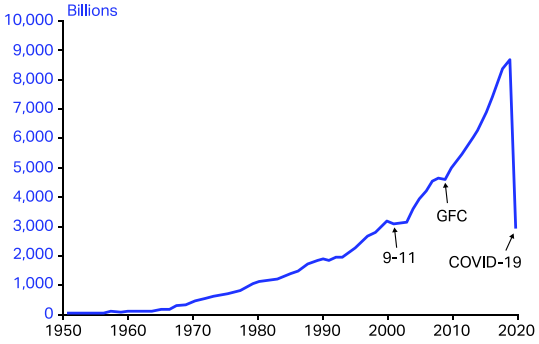
The industry story in 2020

COVID-19 is the largest shock to commercial air travel and aviation since world war II

In 2020, the COVID-19 pandemic delivered the largest shock to air travel and the aviation industry since the Second World War. Previously, the adverse impacts on aviation of the 9-11 terrorist attacks and the 2007–08 global financial crisis were thought dramatic. But neither had an impact that compares with what is estimated to be a 66% decline in global revenue passenger kilometers (RPKs) in 2020.

China's domestic aviation market fell first, at the start of the year, but was recovering by March. As the disease spread, its impact on air transport was felt globally, beginning in February to a low point in April, when passenger traffic was down 94% from the year before and much of the industry was grounded. Recovery since has been disappointingly slow for most markets.

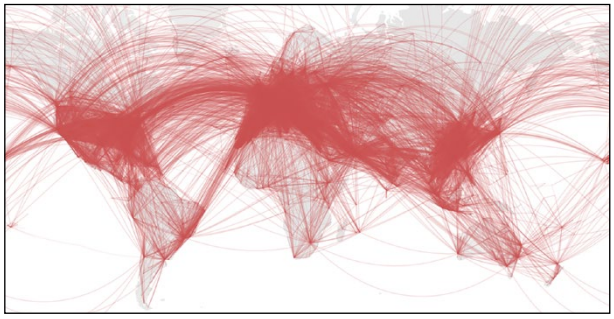
Worldwide revenue passenger kilometers (RPKs) flown annually
Source: IATA Economics, using data from IATA and ICAO



Air connectivity collapsed in April 2020

The consequences of travel restrictions grounding much of the airline industry in April were widely felt. Air service connections between cities worldwide collapsed. Some service continued in the domestic markets of China, which began recovering in March, and of the United States. But the majority of scheduled intercontinental connections between cities disappeared. Freight continued to fly, but since around half of air cargo is carried in the holds of passenger flights the near cessation of passenger flights caused a serious problem for the global supply chains our modern economy relies on.

City pair connections in April 2019
Source: IATA Economics, using data under license from Flight Radar 24



Precrisis air connectivity is essential for the modern economy

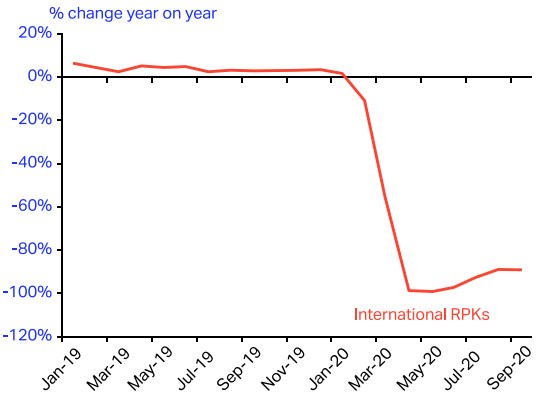
The precrisis route map shows the air connectivity lost, as a result of COVID-19. Most of the air services connecting cities in the European single market cross national borders, many of which have travel restrictions preventing a significant resumption of service. Most importantly for world trade, the dense city connections across the North Atlantic and between Europe and Asia have also been slow to reopen because of travel restrictions, especially those resulting from second and third waves of COVID-19. Many of the 87.7 million jobs aviation was supporting before the crisis are in sectors across economies that rely on good air transport services. It is estimated that more than half of these jobs are at risk in 2020.

City pair connections in April 2020
Source: IATA Economics, using data under license from Flight Radar 24

International air travel has shown little sign of recovery

International air travel was hit to a much greater degree than either domestic air travel or global air cargo. This is the result of governments imposing travel restrictions to prevent the import of COVID-19 from outside their national borders. International RPKs began falling in February. They collapsed in March and in April to a level 98% lower than in the previous year. The subsequent lethargic recovery of international air travel has been extremely disappointing, for airline revenues and for the connectivity of the global economy. Global RPKs remained almost 89% lower by September than a year earlier.

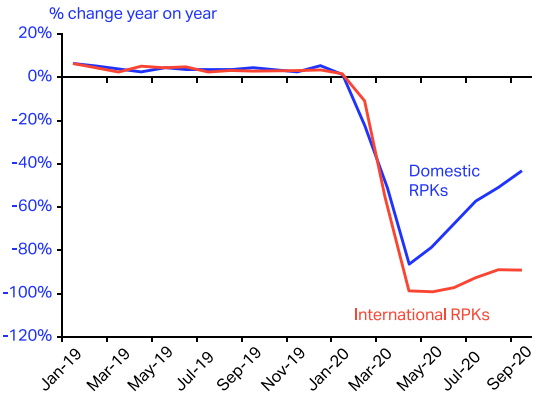
International RPKs
Source: IATA Economics, using data from IATA Statistics



Strongly rising domestic air travel shows a willingness to fly

Domestic air travel has shown a more encouraging rise from its low point in April, which, at 87% less than the previous year, was not as severe as the low point for international air travel. By April, China's domestic air travel market—the world's second largest after the US's domestic market—had been recovering for two months, as COVID-19 was brought under control and travel resumed earlier in that market than in other markets worldwide. But other domestic markets, too, have since April seen a return of air travel, which demonstrates that there is pent-up demand at least for leisure and visiting friends and relatives (VFR) travel.

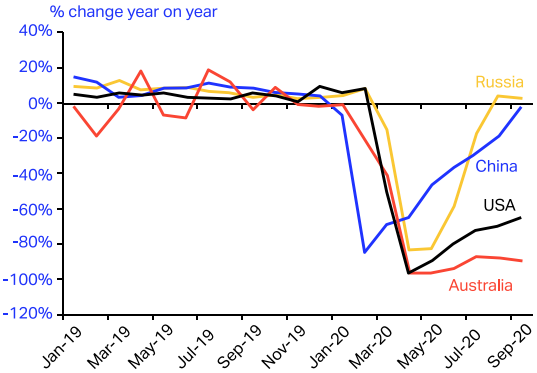
International and domestic RPKs
Source: IATA Economics, using data from IATA Statistics



There is very wide divergence among different domestic air travel markets

As the year progressed, we saw very different results for air travel in the world's main domestic air transport markets. China's air travel market began its recovery early, having hit its low point in February, and by September was within 3% of its precrisis level, as China continued to keep COVID-19 cases low. Russia's domestic air travel market was fully recovered by late summer, as the normally substantial outflow of tourists did not occur; tourists were instead diverted to vacations at home. Australia's domestic air travel market, however, had barely improved by September, continuing to lag at 89% below the year before. Recovery in the world's largest domestic market for air travel, the United States, has also been disappointing, largely because air travel there has been hit by second and third waves of COVID-19 cases.

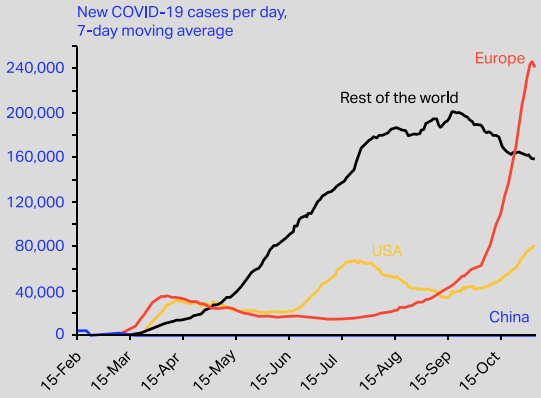
Domestic RPKs
Source: IATA Economics, using data from IATA Statistics



Second and third waves of COVID-19 have reversed air travel recoveries in many markets

The disappointing progress in controlling COVID-19 in most countries has been the principal factor shaping air travel in 2020. Domestic air travel, as just discussed, was largely affected by China's control of cases and by the second and third waves of cases in the United States. It is in Europe where a surge of second-wave cases is so damaging for a nascent revival of international air travel.

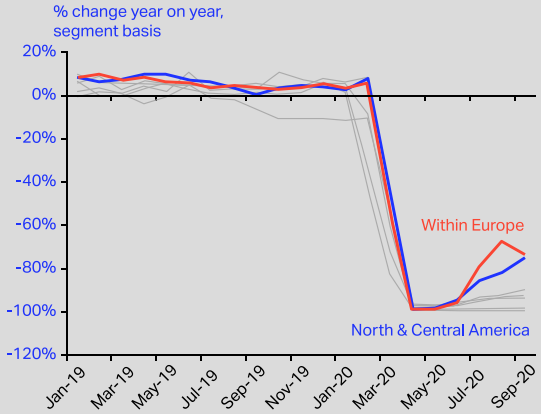
Surging COVID-19 cases in Europe
Source: IATA Economics, using data from ECDC



Europe's international air travel "bubble" evaporated

The gray lines in the chart opposite show that many international air travel markets remain near their April lows. This is principally because of travel restrictions. In May, the easing of restrictions in Europe for inbound travelers from European countries with a low risk of importing COVID-19 cases generated optimism for a European air travel bubble or corridor. Late summer saw a significant rise in cross-border air travel in Europe, but a second wave of COVID-19 abruptly reversed the trend and brought reimposed travel restrictions. The only other international markets to show signs of revival are those of North and Central America. This probably reflects the introduction of testing rather than quarantine requirements, especially by a number of Central American countries, for international entry.

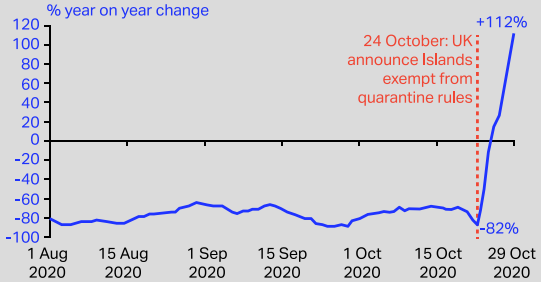
Growth in passenger km flown, international markets
Source: IATA Economics, using data from IATA Statistics



Signs indicate pent-up demand for leisure travel

COVID-19 will undoubtedly change aspects of air travel. There are nevertheless signs of pent-up demand for leisure and VFR travel. When the UK government lifted the quarantine requirement for passengers from the Spanish Canary Islands in late October, for example, there was an immediate surge in bookings to and from those islands. In one week in late October, bookings were more than double precrisis levels. Soon after, the UK closed its borders in a second lockdown, but this episode demonstrates a willingness to fly, if permitted.

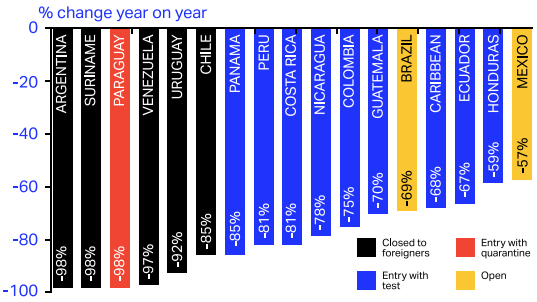
UK-Canary Islands, Ticket sales growth, Aug-Oct 2020
Source: IATA Economics, using data from DDS



Quarantine is equivalent to a travel ban, but testing boosts air travel

Evidence indicates little difference in the adverse impact on international travel between countries with open borders but quarantine requirements and countries with full travel bans. This was the case for European countries and for Paraguay. People, though, are prepared to travel by air if quarantine is replaced with a negative COVID-19 test. In the first two weeks of October, a number of Latin American countries requiring only a negative test experienced substantially higher bookings, by 10–20 percentage points, relative to countries with quarantine or other severe travel restrictions.

National variances in net bookings by travel requirement, 1–5 October 2020 vs. 2019
Source: IATA Economics, using data from DDS



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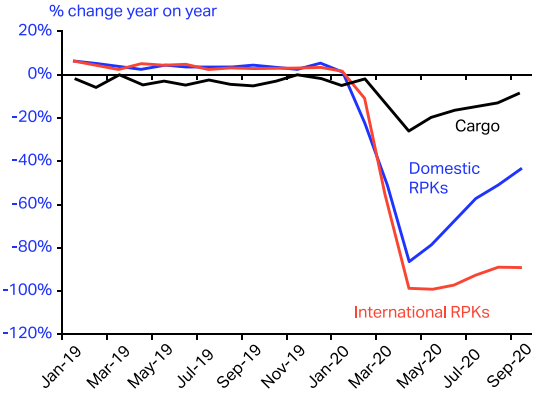
Air cargo traffic has fallen little because it remains essential

Air cargo's story in 2020 differs from air travel's. Cargo volumes were down but nowhere near as much as passenger numbers. At air cargo's low point in April, cargo tonne kilometers (CTKs) flown were down around a quarter. And by September, air cargo volumes had risen to just 8% below the previous year's figures. Air cargo is, with few exceptions, not a vector for COVID-19. It remains, moreover, essential to sustaining global supply chains and to transporting medical equipment and pharmaceuticals.

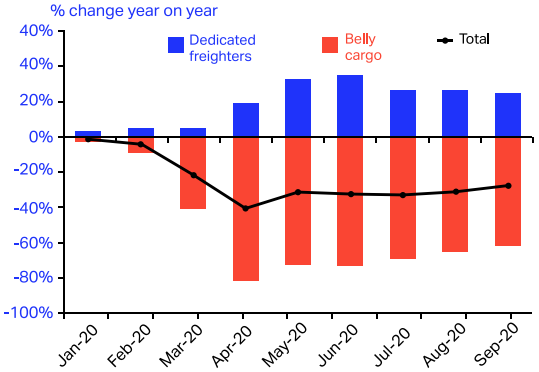
Global passenger and cargo tonne km growth
Source: IATA Economics, using data from IATA Statistics



The problem for air cargo is capacity shortage

Air cargo's main problem in 2020 is a severe shortage of capacity due to the grounding of the passenger fleet. Air freighters are being used to their maximum, with an extra 20% of capacity squeezed out by increasing the average number of hours flown and by adding new freighters to the fleet. In a normal year, nearly half of cargo volumes would be carried in the holds of passenger aircraft. That capacity, however, was grounded in April, and the wide-body, long-haul passenger aircraft that usually provide the most cargo capacity have been slow to return, as long-haul passenger routes are limited. As a result, air cargo capacity was still 25% lower by September than in the previous year.

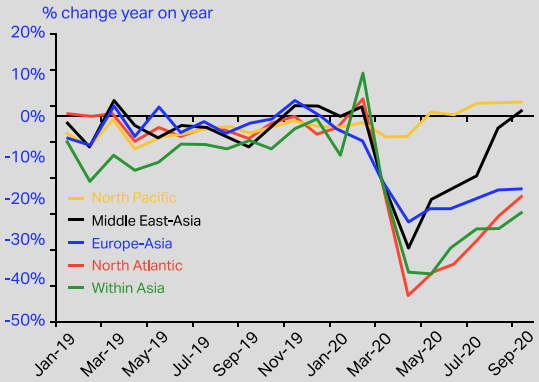
International CTKs
Source: IATA Economics, using data from IATA Statistics



Air cargo traffic differs widely by trade lane

The robust performance of air cargo relative to passenger traffic is unequal across major trade lanes. Most resilient has been the North Pacific market, where typically 90% of air cargo is carried by dedicated freighters. This market, clearly, was barely affected in 2020 by the grounding of the passenger fleet. By contrast, Asia's manufacturing suppliers and assembly plants are typically served by cargo capacity on international air passenger flights. This trade lane, therefore, was hit hard in April and is only gradually recovering. Noteworthy are the stronger recoveries between the Middle East and Asia and in the North Atlantic, where higher cargo yields have made it viable to fly passenger aircraft despite low passenger loads.

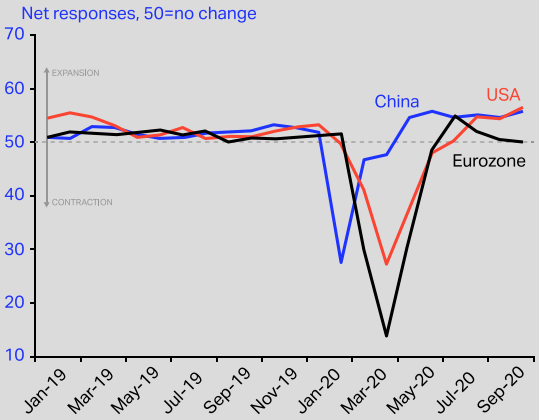
CTK growth by major trade lane
Source: IATA Economics, using data from IATA Statistics



Business confidence supports air cargo demand

Demand for air cargo from the global supply chains of the manufacturing and services industries has been sustained by V-shaped recoveries that reflect growing business confidence amid strong rebounds in output as economies unlock and return to work. Shipping components and finished goods quickly by air is vital. As of October, business confidence remained above precrisis levels, buoying air cargo demand in economies such as China's, the US's, and Germany's. Recent renewed lockdowns in Europe, however, will be damaging, as declining business confidence in France indicates.

Business confidence in manufacturing and services (Purchasing Managers' Index)
Source: IATA Economics, using data from Markit



The impact on airline finances is devastating

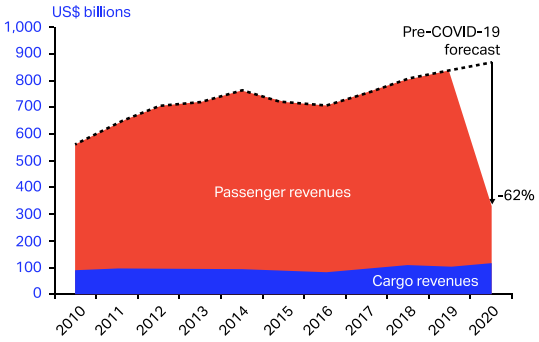
Strong cargo revenues in 2020—caused by the impact of capacity shortages on yields—did little to offset the collapse in passenger revenues.

Overall operating revenues for the air transport industry have so far declined more than 60% in 2020. Because numerous costs in the airline business, including aircraft fleet and skilled workforce costs, are difficult to reduce, this revenue collapse has plunged the industry into an unprecedented loss.

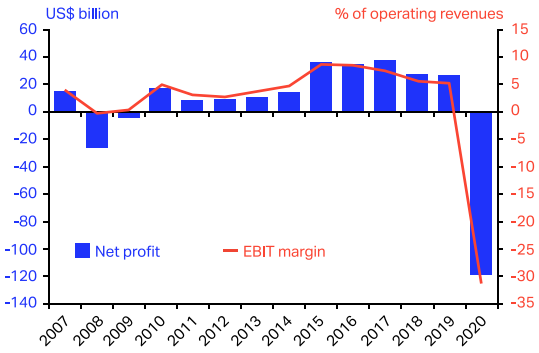
We estimate that loss will exceed $118 billion at the posttax net level in 2020.

The year's second quarter was the worst for the industry, and improvement has been sluggish during the second half of the year. Travel restrictions in many air travel markets continue to depress revenues.

Airline revenues more than 60% below precrisis forecast
Source: IATA Economics



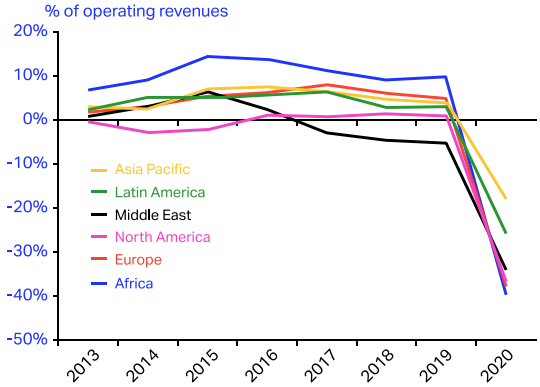
Airline losses to exceed $118 billion this year
Source: IATA Economics Economic Performance of the Airline Industry, Midyear 2020



Chinese and Asia-Pacific airlines outstripped carriers elsewhere

China has been an exception to lackluster revenues. The early and full recovery of its domestic market has played an important role in the business rejuvenation of Chinese airlines. Yields were poor as these airlines sought to stimulate demand, but as year-end approaches most Chinese airlines have returned to breakeven and are generating positive cash flows. Airlines throughout the Asia-Pacific region have benefited from robust cargo revenues because they serve the region's disproportionate array of manufacturing and assembly plants. Other regions have not had the benefit of resurgent domestic markets or of thriving cargo markets of a size sufficient to offset the collapse of international passenger revenues.

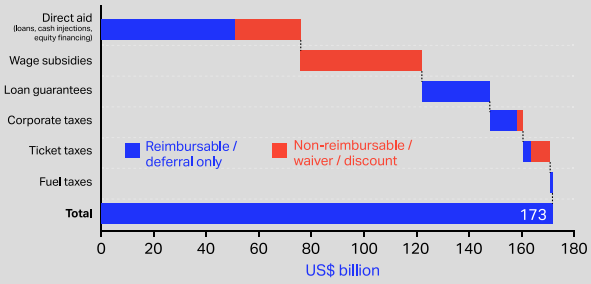
Domestic market RPKs
Source: IATA Economics, using data from IATA Statistics



Government aid has kept airlines on life support in 2020

Given the scale of the air transport industry's unprecedented loss, many airlines would have failed if not for government aid. In fact, only where government support was minimal, such as in Latin America, have there been failures or restructurings under bankruptcy. In North America, Europe, and parts of Asia, airlines received substantial cash injections from governments. Total aid for airlines in 2020 amounts to about $173 billion and came in various forms. More than half is deferred debt or payments that will need to be reimbursed as the industry tries to recover.

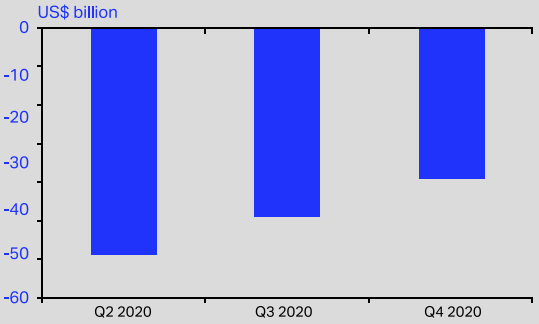
Government aid to airlines, by type
Source: IATA Economics, using using public information and data from SRS Analyser, DDS, FlightRadar 24, TTBS, ACIC, *The Airline Analyst* annual reports regarding government measures



Airline cash burn was substantial throughout the year

The burden of servicing and repaying the debt incurred in 2020 adds to the ongoing drain of cash from airline operations. It is estimated that airlines burned through more than $50 billion in the year's second quarter. That was the worst of the crisis, but the third-quarter financial results reveal that the cash burn has not diminished greatly. This is because the restart of many markets was delayed by continued travel restrictions. As airlines restructure costs during the fourth quarter of 2020, the cash burn should diminish. But the further weakness of revenues ahead of any substantial lifting of travel restrictions will limit the reduction.

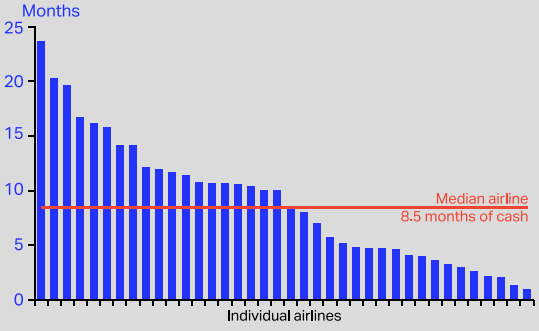
Airline industry cash burn
Source: IATA Economics



Airlines at midyear faced running out of cash

The continued cash burn will have severe consequences for the ability of many airlines to survive the 2020 winter months. A comparison of the cash and near cash assets of a sample of airlines against the estimated cash burn in the second half of 2020 shows the median (or typical) airlines have merely eight to nine months before their cash reserves are depleted. There are, of course, some airlines with sufficient cash reserves or assets against which to borrow cash from the capital markets to last until a vaccine for COVID-19 contributes to a recovery in airline revenues. For most airlines, though, this is not the case, and they may well run out of cash this winter without further government aid.

Monthly cash burn of cash and cash equivalents by end June 2020
Source: IATA Economics, using data from *The Airline Analyst*



The figures in brief

Estimated numbers as of 1 November

During 2020...

Airlines posted an industry net loss of

$118.5 billion

Revenue passenger kilometers (RPKs)

⬇ 66.3%

Available seat kilometers (ASK) globally

⬇ 57.6%

1.8 billion

passenger journeys on a flight-segment basis

Passenger load factor (PLF) around

65.5%

Cargo tonne kilometers (CTKs)

⬇ 11.5%

Variety of financial and regulatory government relief measures totaling

$173 billion

EBIT margin % of revenues

31.3%

Return on invested capital (ROIC)

-17.7%

set against 2019, that's...

Number of flights in 2020

16.4 million

vs

Number of flights in 2019

38.9 million

But these are just statistics.

The air travel collapse puts at risk the livelihoods of 46 million people.

2020

By the end of October 2020, there were **44** published cases of potential flight-related COVID-19 transmissions from among **1.2 billion** passengers flown

Protecting health and safety for all

Health and safety in 2020

Safety is always aviation's number one priority. As the impact of COVID-19 became clear, aviation acted quickly to counter the pandemic with a series of measures aimed at ensuring the health safety of the traveling public and all aviation staff.

IATA and its industry partners immediately initiated intense discussions with global health authorities to reassure governments that flying was safe and to harmonize and standardize required health measures as far as possible.

A strategy was developed involving layers of protection to mitigate the risk of viral transmission. In the first instance, suspected symptomatic passengers were discouraged from traveling, and airlines offered booking flexibility. This ensured that sick or at-risk passengers did not feel pressured to travel.

IATA next advocated for standardized, contactless electronic health declarations through government web portals or government mobile applications. It further noted that health screening using measures such as nonintrusive temperature checks can also play an important role in dealing with COVID-19.

ICAO Council Aviation Recovery Task Force

IATA was part of the ICAO Council Aviation Recovery Task Force (CART). The first set of CART guidelines, on 1 June, put forward a series of recommendations to keep travelers safe in its document, *Take-off: Guidance for Air Travel through the COVID-19 Public Health Crisis*. *Take-off* is a temporary, risk-based, multilayered approach to tackling the spread of COVID-19 during air travel. The recommendations include mask wearing throughout the travel process, enhanced sanitization, health declarations, and social distancing where possible.

The *Take-off* document was amended in November with three additional recommendations to guide governments in reopening borders: testing for COVID-19, implementing public health corridors (popularly known as "travel bubbles"), and extending regulatory alleviations to March 2021.

IATA called for the implementation of the *Take-off* guidelines as the global standard for safe operations. In Europe, the European Union Aviation Safety Agency (EASA) and the European Centre for Disease Prevention and Control (ECDC), agreed to a protocol aligned with the international standards set by the June *Take-off* guidance.

The guidelines address the entire journey from the passenger's perspective. A complementary charter program has been set up by EASA to monitor the implementation of the guidelines and provide feedback. Over 60 organizations serving millions of passengers have signed up to the charter on a voluntary basis.

In the United States, the Department of Transportation issued guidance that was similarly aligned with ICAO's *Take-off* guidelines.

IATA is clear that to avoid inconsistencies countries should not introduce unilateral health safety measures. To create a safe environment for all, the same guidelines need to be followed at every step of the journey, from origin to destination.

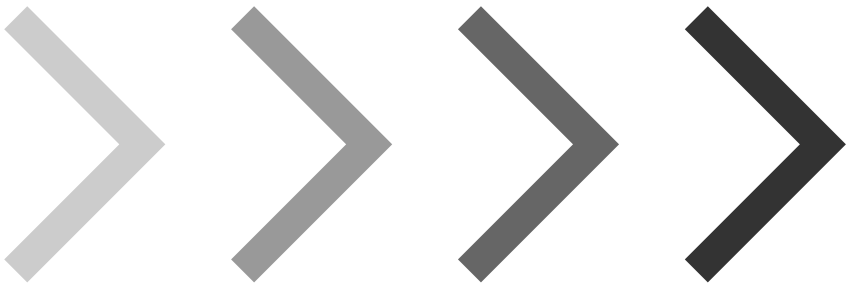
IATA has also reiterated its recommendation to all travelers to wear face coverings during their journeys for the safety of all passengers and crew. Some onboard incidents have resulted in diversions to offload passengers who refused to comply.

The low risk of in-flight transmission

Research has shown that the risk of catching COVID-19 on a flight when wearing a mask remains low. The high flow rate of cabin air from top to bottom, constant filtering of air through state-of-the-art high-efficiency particulate air (HEPA) filters, having all seats face the same direction, wearing a face covering, and sanitization of the aircraft all play a part.

HEPA filters have a more than 99.9% bacteria/virus removal efficiency rate, ensuring that the air supply entering the cabin is not a pathway for microbes. Air is exchanged 20–30 times per hour on board most aircraft, which compares very favorably with the average office space (average 2–3 times per hour) or schools (average 10–15 times per hour).

IATA's data collection on the topic aligns with a peer-reviewed study by Freedman and Wilder-Smith in the *Journal of Travel Medicine*. The Freedman and Wilder-Smith study looked at Emirates flights from Dubai to Hong Kong between 16 June and 5 July 2020. There were five flights with seven or more infected passengers, totaling 58 COVID-positive passengers on the eight-hour trips, and yet no other passengers picked up the virus. Dr Freedman was quoted by NPR saying, "The circumstantial evidence is, your risk is low on a plane, if there is rigid masking."



83%
of travelers
say they will not fly if quarantine is in place

Many other studies likewise support the low transmission findings for aircraft travel. Airbus, Boeing, and Embraer simulations highlight the importance of aircraft design in low infection rates.

An Airbus simulation of the air in an A320 cabin calculated parameters such as air speed, direction, and temperature at 50 million points in the cabin, up to 1,000 times per second. The result clearly demonstrates that potential exposure is lower on an aircraft with masking than when keeping roughly six feet apart in an office or classroom. Boeing and Embraer researchers came to a similar conclusion.

In October, the Harvard University Aviation Public Health Initiative released a report that substantiates that the layered approach instituted on commercial aircraft results in a low risk of SARS-CoV-2 disease transmission during flights.

Another report, by the United States Transportation Command (US Transcom), reveals that a study conducted in August 2020 found that "the overall exposure risk from aerosolized pathogens, like coronavirus, is very low."

Neutralizing the middle seat on aircraft is not effective in combating this virus, as it does not create the recommended social distance. Manufacturer studies demonstrated that cabin air flow features combined with mask wearing create the needed equivalent social distancing the reduce transmission risk to low levels. And with airline margins so thin, empty middle seats are not economically viable. Stripping out one of every three seats reduces capacity to a maximum of 66%, and most airlines need a higher load factor than that to break even.

Replacing quarantine measures with COVID-19 testing

The imposition of stringent quarantine measures on arriving passengers by many governments in response to the pandemic has been a major factor in the collapse of air traffic demand in 2020. Traveler opinion research conducted by Rockland Dutton on behalf of IATA consistently shows that quarantine measures are a barrier to travel. Around 83% of passengers will not travel if quarantine is in place.

The development and deployment of rapid, accurate, affordable, easy-to-operate, scalable, and systematic COVID-19 testing on departure is an alternative to quarantine measures that would help to reestablish global air connectivity. It would also give governments the confidence to open their borders without complicated risk models that see constant changes in the rules imposed on travel.

Rockland Dutton's public opinion research revealed strong support for COVID-19 testing in the travel process. Approximately 65% of travelers surveyed agreed that quarantine should not be required if a person tests negative for COVID-19. Fully 84% agreed that testing should be required of all travelers, and 88% were agreeable to testing as part of the travel process.

ICAO added two recommendations related to COVID-19 testing and public health corridors (PHC) to the second edition of its CART *Take-off* guidelines were developed with the advice of the World Health Organization (WHO) and published in November. The new *Manual on Testing and Cross Border Risk Management Measures* is a key enabler of IATA's call for systematic testing before departure for international travelers. On PHCs ICAO is asking countries to actively share information with each other as to ensure implementation in a harmonized manner. These new recommendations combine with the earlier recommendations, to provide the global standards for the safe operation of international air services and the implementation of testing.

The European Union and other regulators are expected to announce protocols for testing before the end of 2020, and IATA is advocating for these to align with CART best practices. Practical knowledge is in the meantime being gained from the testing programs that already are part of various travel bubble or travel corridor schemes around the world. The initiative for a single, unified approach will need airlines, airports, equipment manufacturers, and governments to work in total alignment.

IATA does not see COVID-19 testing becoming a permanent fixture in the air travel experience but rather an imperative in the medium term. Policy makers should consider the economic stimulus that only aviation can provide when prioritizing their testing resources. Reestablishing global connectivity will, for example, preserve travel and tourism jobs, which account for 10% of global employment.

"The overall exposure risk from aerosolized pathogens, like coronavirus, is very low."

United States Transportation Command (US Transcom)

65%
of travelers
agreed that quarantine should not be required if a person tests negative for COVID-19

84%
of travelers
agreed that testing should be required of all travelers

88%
of travelers
said they would be happy to undergo testing as part of the travel process

To reopen borders without quarantine and restart aviation, governments need to be confident that they are mitigating the risk of importing COVID-19. This means having accurate information on passengers' COVID-19 health status.

Travelers will need a digital platform that informs them of what tests, vaccines, and other measures they require prior to travel and where they can access these measures. Passengers will also need a means of sharing this information in a verifiable and privacy-assured way with governments. To address this challenge, IATA is launching the IATA Travel Pass (ITP).

The ITP is neither the first nor only solution available. It is unique, however, in that it is developed specifically for the industry, by the industry, leveraging as it does IATA's position as a trusted industry partner and core competency of developing industry standards.

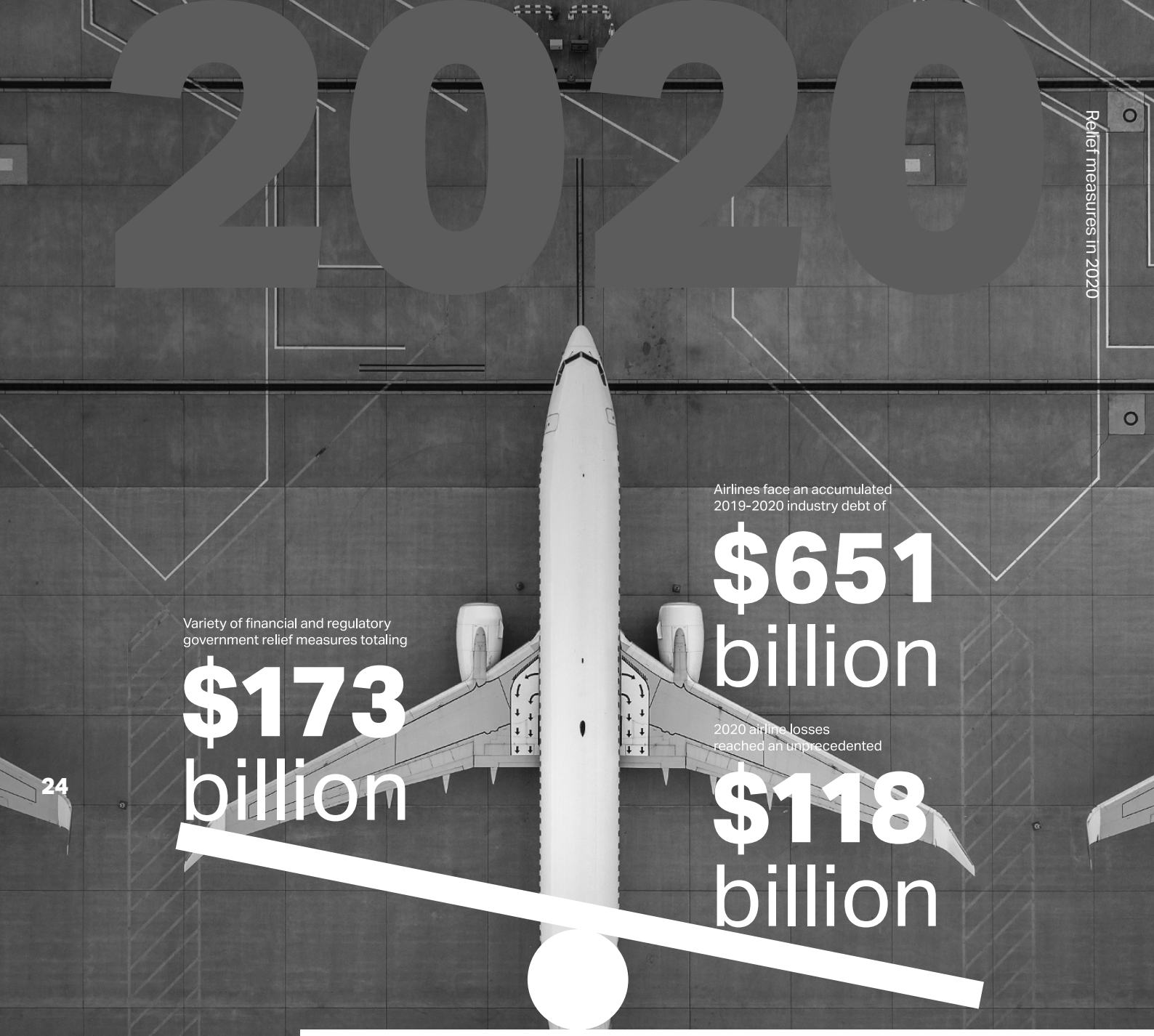
Health costs

The WHO's International Health Regulations require governments to pay the costs of health measures, including mandatory testing. Where a test is offered on a voluntary basis, it should be priced at cost.

In *Safely Restarting Aviation—ACI and IATA Joint Approach*, the airport and airline sectors endorse the WHO position that public funding of health measures should be ensured. This includes but is not limited to funding infrastructure or operational changes needed for the implementation of such measures.

Having the cost of health measures borne by governments will enable the industry to focus its scarce resources on reconnecting the world and boosting economic recovery.

2020



Variety of financial and regulatory government relief measures totaling

$173 billion

Airlines face an accumulated 2019-2020 industry debt of

$651 billion

2020 airline losses reached an unprecedented

$118 billion

Government aid

The countries that committed to financial relief for aviation early on in the crisis include Australia, Brazil, China, Colombia, Denmark, Finland, Hong Kong, New Zealand, Norway, Qatar, Singapore, Sweden, and the United States. The relief was divided into three broad categories: wage subsidies, equity financing, and tax relief or subsidies.

The US government passed its Coronavirus Aid, Relief, and Economic Security Act (CARES). And through CARES, it provided about $25 billion in financial assistance to the airline industry.

European countries implemented diverse financial packages. The French and Dutch governments gave €10 billion to Air France/KLM, Germany agreed to a €9 billion rescue deal for Lufthansa, and Sweden initiated a loan guarantee scheme worth about €455 million.

In Asia-Pacific, various governments pledged support for aviation. Airport Authority Hong Kong (AAHK) provided a HK$2 billion fund for the industry there, and the governments of Australia and Thailand granted their airlines respite on charges and fees.

Securing financial and regulatory relief

Relief measures in 2020

Even before the declaration of the global pandemic, the aviation industry was feeling the impact of sharply slowing demand. Revenue passenger kilometers (RPKs) flown collapsed more than 14% in February. By 5 March, IATA was supporting calls for governments to instigate airline relief measures as the implications of the dramatic slowdown in air traffic became clear.

Tens of millions of jobs in aviation and the wider travel and tourism industry were at risk. And only direct financial relief or government salary support schemes would prevent an employment catastrophe.

2020 financial forecasts

In June, IATA released its first financial forecast for 2020. The headline figures—a loss of $84.3 billion and revenues down 50%, to $419.0 billion—reinforced the need for financial relief to preserve the industry and its jobs. IATA revised its outlook for 2020 in November as the full-year impact on the airline industry of the COVID-19 pandemic became clearer. The 2020 loss is now predicted to be an unprecedented $118.5 billion, and the industry's revenues are estimated to collapse to $328.0 billion.

Financial support from governments

IATA joined forces with industry partner organizations, such as Airports Council International and the International Federation of Transport Workers, to argue for swift financial support for the industry.

About $173 billion was pledged by various governments to financially assist the industry. The results, however, were patchy. Some airlines received aid and averted bankruptcy, but others got no support. A few of the latter have ceased operating, and many of the remainder have severely retrenched services. Unless there is a significant uptick in international travel, which looks unlikely while border restrictions and quarantine regulations are in place, governments will need to consider further financial support for the industry.

Governments also need to reconsider the conditions that they attach to their aid packages. The cash injection for troubled airlines from the French government is a case in point. In return for financial aid, carriers in France were required to cut their domestic emissions and invest in more fuel-efficient aircraft, which just added to airlines' financial hardship. Much of the government support, in France and elsewhere, moreover, was simply in the form of loans whose repayment has only added to industry debt.

The industry's recovery is expected to be long and challenging. The crisis of the COVID-19 pandemic, which was finally declared as such on 11 March, is more protracted than envisaged. Airlines are expected neither to turn cash positive until 2022 nor to see their traffic levels recover until 2024.

In the meantime, the initial government cash injections in support of the industry are running out. In October 2020, IATA estimated that the average airline had just 8.5 months of cash left. Further government support is required to avoid a catastrophe for the industry and its employees, direct and indirect.

Debt levels

Airlines that emerge from the crisis will do so with higher levels of debt and with a higher cost of debt.

Airlines entered 2020 with cumulative debt of $430 billion, roughly half their combined annual revenues. Relief measures by governments have added about $120 billion to that total, equivalent to about 92% of expected revenues in 2021.

It is necessary, therefore, that relief measures be continued. Moreover, those measures should focus on helping airlines generate working capital and stimulate demand and not expand their debt.

Further relief for the air transport industry is a solid investment for governments looking to boost economies that have slipped into recession. Each airline job saved supports 24 jobs in the broader economy, and the Air Transport Action Group estimated in its October *Aviation Benefits Beyond Borders* report that some 4.8 million aviation workers' jobs are at risk from the pandemic-induced collapse of air travel demand.

It is in the interest of governments to provide ongoing support to maintain a viable aviation industry. Preserving airline networks and the jobs of skilled industry workers is crucial if aviation is to continue its support of global supply chains and to effect a return to global economic growth and prosperity.

Regulatory relief

In addition to financial assistance, airlines need temporary regulatory relief. One of the most useful regulatory adjustments that can be granted is a global waiver on the

use-it-or-lose-it 80-20 slot rule. The severe uncertainty in their markets makes it more necessary than ever for airlines to have the flexibility to alter their schedules to meet demand without the pressure of being penalized for not using allocated slots.

In early March 2020, the industry went public with its call for relief from the slot rules. Europe was the focal point, as it contains about half of the world's slot-regulated airports. The European Union (EU) was urged to suspend the 80-20 rule for the summer season and did so on 13 March, following significant advocacy from IATA and airlines. Regulators around the world, including in Australia, Brazil, China, Mexico, New Zealand, and Singapore, then granted similar waivers.

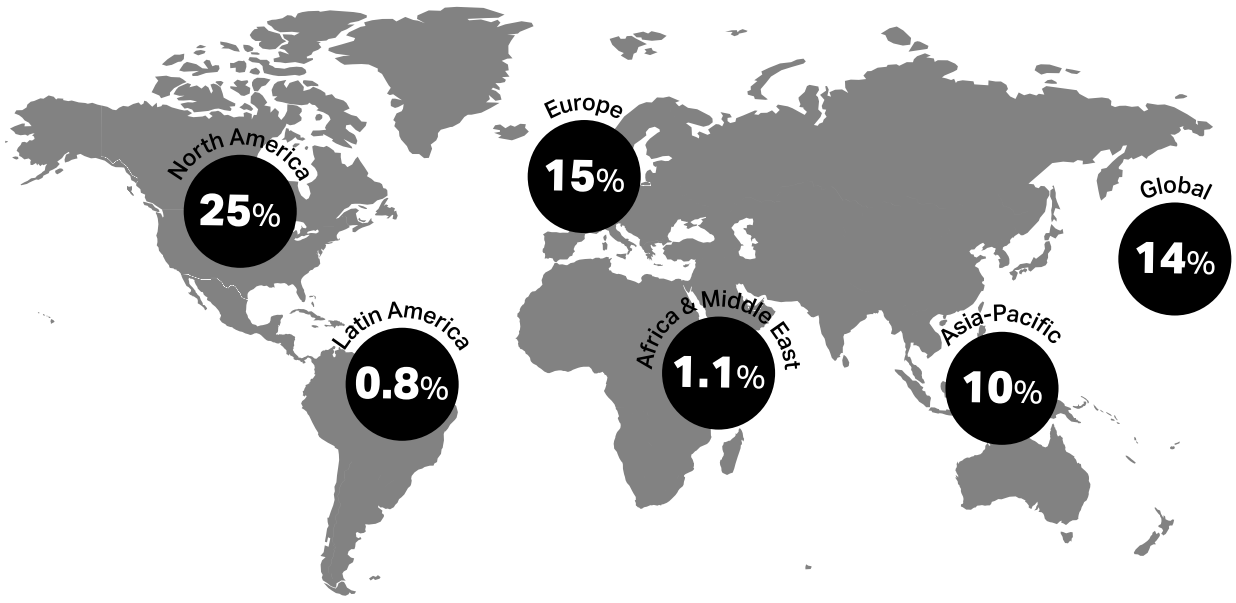
As the crisis continued and traffic numbers stalled, it became apparent that a slots waiver would also be required for the 2020 winter season (October 2020–March 2021). IATA called for this in June and continued to lobby for it throughout the summer. After considerable delay, the European Commission (EC) indicated it would grant the waiver, subject to conditions voluntarily proposed by airlines and airports.

A full-season winter slots waiver will avoid the need to fly empty aircraft to maintain slot allocations and enable flights to be operated in a sustainable manner. It will give airports and airlines certainty in planning their schedules, save millions of dollars in unnecessary costs, and ensure that passengers know what to expect in the tough winter months.

There are many other examples of actions by regulators to aid the industry. The European Aviation Safety Agency published templates for extending the validity of various licenses and certificates. The United Arab Emirates' General Civil Aviation Authority, the Civil Aviation Administration of China, the UK Civil Aviation Authority, and the Agencia Federal de Aviación Civil in Mexico are among the regulatory bodies that have also recognized the need for flexibility in training, crew, airworthiness, and air traffic management requirements.

The need for flexibility must be balanced by the need to mitigate any risks associated with prolonged regulatory alleviation and to retain critical skills. The ICAO Council Aviation Recovery Taskforce guidance recommends that alleviations not extend beyond 31 March 2021 unless circumstances dictate otherwise. It also encourages countries to facilitate access to medical and training facilities, including flight simulators.

Government financial aid % of 2019 industry revenues



IATA, meanwhile, introduced its IOSA Support Program, which temporarily extends IATA Operational Safety Audit (IOSA) registrations and, where needed, offers remotely conducted audits. Airlines are required to complete an IOSA safety questionnaire at a minimum of every 60 days. The IOSA Support Program will be maintained and adjusted throughout the crisis without compromising audit integrity and stakeholder acceptance.

Vouchers

As airlines' cash flow diminished, they began asking customers to accept refundable vouchers instead of monetary refunds. Refundable vouchers enable airlines to preserve cash to survive the crisis and give customers the opportunity to simply delay their trips as necessary.

In Europe, IATA requested a temporary and clearly drafted adjustment of the EU261 passenger rights regulations to permit refundable vouchers as an alternative to cash refunds. EU261 was not designed to deal with the mass cancellations caused by government-imposed lockdowns. Some 16 EU nations, representing 70% of the EU's population, reflected their recognition of this by their support for IATA's request. The EC, however, merely issued a statement clarifying the status quo.

There is little doubt that EU261 remains unfit for purpose. Its reform is urgent; EU261 must be made more flexible. All airlines agree that every traveler should be treated fairly and given what they are owed. Flexibility on EU261 and like regulations elsewhere will ensure this and keep aviation viable during this crisis.

Yet airlines faced a situation in the United States similar to the one in Europe. Authority over US aviation consumer protection regulation resides with the Department of Transportation (DOT). And in April 2020, the DOT confirmed that it would continue its long-standing policy of requiring carriers to provide prompt cash refunds to ticketed passengers when carriers cancel passengers' flights or make significant changes in flight schedules that passengers choose not to accept. The DOT did, however, note the unprecedented nature of the COVID-19 crisis and say that it would use its discretion in enforcing policy.

As in Europe, IATA lobbied to support US airlines. IATA requested that the DOT allow airlines flexibility in managing historic levels of refund requests at a time when they face severe cash flow issues.

There is no benefit in airlines running out of cash. The world requires air connectivity. The employment of millions of people throughout the air transport industry and the travel and tourism industry depends on viable airlines. A robust aviation network is vital if essential resources are to be transported. Despite the shutdown and patchy relief support provided by governments, the industry has continued to work hard to keep the world moving and to fulfill its mission to connect the globe.

2020

1.5 million metric tons of PPE and medical supplies

46,000 special cargo flights

5 million people carried home on

40,000 dedicated repatriation flights

250,000 free tickets to medical staff

Estimated numbers as of 1 November

Maintaining connectivity during the pandemic

Connectivity in 2020

Ensuring the world keeps flying

Despite the unprecedented collapse in air traffic demand caused by COVID-19 restrictions, the world continues to need air connectivity. And the aviation industry has responded. Nearly 40,000 dedicated repatriation flights carried more than five million people home after borders were closed in March. Over 250,000 free tickets were distributed to medical staff globally to enable the swift and cost-effective transfer of essential medical resources. Global supply chains were kept operable by the air cargo network.

Supporting the travel agent sector

IATA's travel agent partners have been as deeply affected by COVID-19 disruptions as airlines. Early on during the crisis, IATA established weekly calls with the Passenger Agency Conference Steering Group (PSG), which represents airlines, and the Passenger Agency Programme Global Joint Council (PAPGJC), a collaboration of airlines, the United Federation of Travel Agents (UFTAA), and the World Travel Agents Associations Alliance (WTAAA). The calls addressed urgent COVID-19 issues that airlines and agents were experiencing and resulted in the following initiatives:

- Exceptions for late payments and the late submission of financial statements and securities by agents
- Approval for cash deposits as a temporary solution for agents to bridge gaps in financial security amounts

IATA also launched a central repository for airline vouchers and ticket exchange policies. This gave travel agents timely access to voucher and ticket exchange information from each participating airline.

All in all, IATA's proactive responses to the crisis saw it extract about $20 million from the year's operational expenses of the IATA settlement systems to cover staff-related costs and information technology (IT) spending. Global Distribution Systems, too, were involved in important discussions regarding and, indeed, supported airline financial liquidity.

IATA's approach to managing its financial settlement systems through the pandemic is being guided by the principles of

- keeping cash flowing while protecting the systems through a balanced approach and exceptional risk management controls at agent, airline, and clearing bank level;
- applying flexible measures given the extraordinary circumstances in accordance with IATA resolutions and IATA Clearing House regulations; and
- engaging with IATA members and with governance bodies through frequent and regular communication.

Revealing how crucial air cargo is to global supply chains and medical response

The impact of COVID-19 restrictions on air connectivity was swift and significant for air cargo. Belly hold capacity declined sharply with the grounding of passenger flights. Air cargo nonetheless remains critical to moving goods and to sustaining public health and economies worldwide.

In the early days of the crisis, air cargo was pivotal in supplying personal protective equipment (PPE) and medicines to destinations globally. Its positive impact continues as the global lockdown persists. Some 46,000 special flights have transported 1.5 million metric tons of cargo.

But the number of freighter aircraft was insufficient to compensate for the 40–45% decline in belly-hold capacity. So passenger aircraft were reconfigured for all-cargo flights. To help with this, IATA published guidance to deal with regulatory hurdles. Cargo, for example, cannot be carried on seats unless approved by civil aviation authorities. Further approvals are required if airlines decide to remove seats. And, of course, the transport of dangerous goods in the passenger cabin and the weight restrictions on overhead compartments had to be considered and approved.

Using the passenger cabin for cargo, however, makes a big difference to the amount of cargo that can be carried. Somewhere in the region of 1,000–1,500 extra boxes can be accommodated, although getting them into the cabin through passenger doors and packing them are further obstacles that can only be overcome with a human chain.

There were and are many challenges for air cargo to tackle. IATA works tirelessly with ICAO to urge governments worldwide to take the necessary steps to sustain global logistics.

For the most part, there has been good response from governments, but operational difficulties persist. Airports, for instance, especially alternative airports used in emergency situations, need to be kept functioning. Many of these secondary facilities, though, lost service

amid the pandemic and so were effectively shut down.

Major hubs, meanwhile, remain open, but with existing slots and curfews. These need to be changed or waived to allow cargo flights to operate. And because most of the cargo flights are chartered, permits must be fast-tracked.

Crew regulations are another regulatory obstacle. Clearly, crews can't observe 14-day quarantine periods. Exemptions are therefore needed to allow crew members to return home to their families while taking into account all possible safety measures.

Transporting vaccines

Air cargo's well-established global time- and temperature-sensitive distribution systems will be critical in carrying COVID-19 vaccines to the world whenever vaccines become available.

The scale of that activity will be vast. In September, IATA Director General Alexandre de Juniac made it clear that "safely delivering COVID-19 vaccines will be the mission of the century for the global air cargo industry."

Cold-chain transportation will be vital for vaccines that require consistent low temperatures. Facilities and equipment specific to the storage and handling of vaccines must

"Safely delivering COVID-19 vaccines will be the mission of the century for the global air cargo industry."

be ready and available, as must trained staff. Robust monitoring capabilities will also be needed to ensure the integrity of the vaccines.

Security arrangements must be in place to safeguard vaccine shipments from tampering and theft. The potential volume of those shipments calls for early planning on security measures to ensure that all security-related precautions are scalable.

Border processes, meanwhile, demand correct regulatory approvals and customs clearances for the timely transport of the vaccines.

This could be a challenge given that, as part of efforts to prevent COVID-19 spread, many governments have implemented measures that increase processing times.

Priorities for border processes include the following:

- Introducing fast-track procedures for overflight and landing permits for operations carrying COVID-19 vaccines
- Exempting flight crew members from quarantine requirements to ensure cargo supply chains are maintained

Air cargo regulatory assistance

The COVID-19 crisis has resulted in unique challenges for the air cargo industry, particularly in light of government health and safety restrictions. The challenges include delays in getting charter permits, a lack of exemptions on COVID-19 testing for air cargo crew, and inadequate ground infrastructure to and from and within airport environments.

In response, IATA is urging governments to

- cut the paperwork for charter operations;
- exempt cargo crews from quarantine rules that apply to the general population;
- ensure adequate staff and facilities to process cargo efficiently;
- recognize mutually agreed global standards, such as for health certificates and licenses; and
- make alternate airports available even in the absence of passenger flights.

Guidance for the industry

IATA experts, working with professionals from the airlines and elsewhere in the aviation industry, developed a large number of guidance documents for handling COVID-19.

The COVID-19 hub on iata.org gathers all this information in one easy-to-access list. Among the key documents are the *Roadmap for Restarting Aviation, Aircraft disinfection during and post-pandemic*, and *Guidance for cabin operations during and post-pandemic*.

Also accessible from the hub is a COVID-19 dashboard on national and airport restrictions that gives airlines rapid access to the latest operational rules being put in place by governments worldwide.

- Supporting temporary traffic rights for operations carrying COVID-19 vaccines where restrictions may apply
- Removing operating hour curfews for flights carrying COVID-19 vaccines to facilitate the most flexible global network operations
- Granting priority on arrival of vital COVID-19 shipments to prevent possible temperature excursions due to delays
- Reducing or eliminating tariffs to facilitate the movement of COVID-19 vaccines

Capacity for handling substantial shipments of COVID-19 vaccines is also an issue to contend with. Providing a single dose to each of the planet's 7.8 billion people will fill 8,000 Boeing 747 cargo aircraft. Land transport will help, of course, especially in developed economies with local manufacturing capacity. But vaccines cannot be delivered globally or in timely fashion without the significant use of specialized air cargo transport.

Supporting the industry and travelers

IATA supports industry efforts to keep the world connected throughout the pandemic and beyond. To that end, the association published guidance (see box) and adjusted its financial systems and consultancy products to suit the exacting circumstances under which airlines now find themselves operating. It developed regular bulletins and communications for internal and external use and a suite of infographics for sharing by the industry on social media. As the crisis worsened, moreover, Alexandre de Juniac gave weekly media briefings.

Airlines, too, have worked hard to keep passengers informed. The Rockland Dutton survey found that 79% of people surveyed agreed that airlines were being "transparent in communicating measures that they are taking to keep flying safe."

In aid of airline communication, IATA developed an information hub at www.iata.org that includes a free online interactive world map that provides travelers with the latest, country-by-country COVID-19 entry regulations. The map relies on IATA's Timatic database, which contains comprehensive information on the documentation required for international travel.

To keep pace with the dynamic COVID-19 situation, IATA updates Timatic more than 200 times per day. IATA has also launched an alerts service on Timatic so that subscribers get real-time notifications for all travel updates related to the pandemic.

These new resources for travel planning are timely and important. The Rockland Dutton survey also reveals that more than 80% of travelers are as concerned about potential quarantines as they are about actually catching the virus.

Other free and commercial products developed by IATA exclusively to help airlines negotiate the crisis include these offerings:

- A free three-month access to Turbulence Aware, a real-time database of turbulence reports.
- Discounted training to help people acquire new skills and new jobs. Some training was even offered free, and many courses are available for just $75 in honor of IATA'S 75th anniversary.
- Free webinars hosted by industry experts on a variety of topics.
- The International Airline Training Fund launched a new virtual training program of 29 courses, benefitting 58 African airlines.

2019

A year of progress — in safety, costs, sustainability...

Connecting more people than ever before.

Normal.

Before the storm: 2019 in review

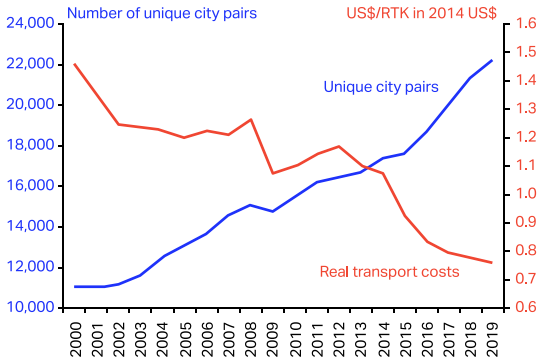
Growth in passenger volumes but declines in cargo volumes

Air transport connected more cities at lower cost in 2019

In 2019, airlines continued to increase the number of city-pair routes they operate globally, with more than 22,000 unique city pairs regularly serviced. This was an increase of almost 1,000 over the number of city-pair connections in 2018. Meanwhile, the inflation-adjusted cost of air travel declined a further 2.3% in 2019.

The doubling in air connectivity and the halving of air travel costs over the past two decades have secured aviation's position as "the business of freedom." They have led to the democratization of air travel, making it possible for more people to fly more often to more destinations around the world.

Unique city pairs and the real cost of air transport
Sources: IATA, Schedule Reference Service (SRS) Analyzer

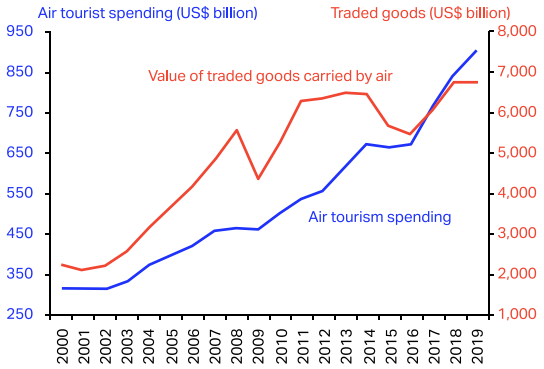


Supported economic growth and prosperity through tourism and trade

Air transport is central to world tourism and trade. Tourists traveling internationally by air are estimated to have spent about $900 billion in 2019, a solid increase of some 7% over 2018. The additional number of city-pair connections and the lower cost of air transport also boosts trade in goods and services and heightens foreign direct investment and other important economic flows.

Air transport accounts for only a small proportion, less than 1%, of world trade by volume but for a much larger share by value, at about 35%. In 2019, the value of goods carried by air is estimated to have been slightly above $6.7 trillion.

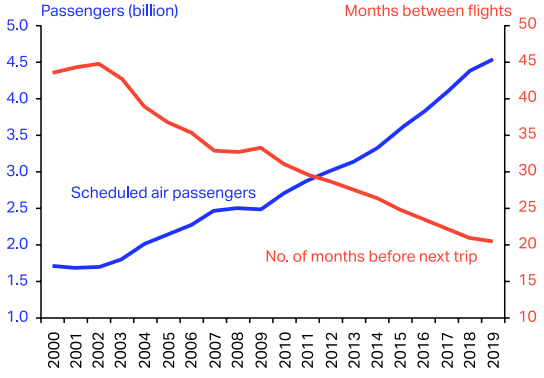
Air tourist spending and the value of trade by air
Sources: IATA, World Travel & Tourism Council (WTTC), IHS Markit



And was more accessible for more people than ever before

Worldwide air passenger numbers continued to rise in 2019, moving beyond 4.5 billion passenger journeys on a flight-segment basis. In 2000, the average citizen flew just once every 44 months. In 2019, the time between passenger trips had dipped below half that time, to just 20 months.

Accessibility of air travel
Sources: IATA, International Monetary Fund (IMF)

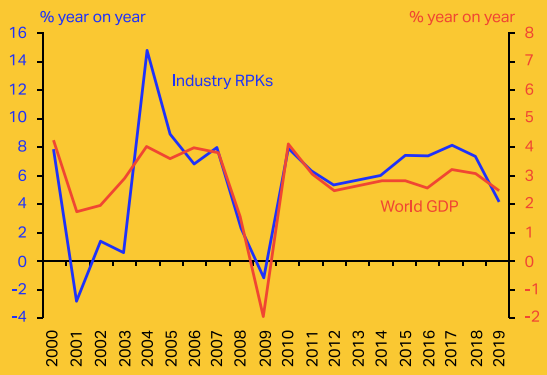


Passenger demand slowed but remained solid

Demand for air passenger services remained solid in 2019, with industry-wide revenue passenger kilometers (RPKs) increasing 4.2%.

RPK growth, however, fell below the long-run industry average growth rate (estimated to be 5.25%–5.50%) for the first time in seven years. Air travel demand in 2019 was adversely affected by a softer global economic backdrop and weaker business confidence amid international trade tensions, especially between the United States and China.

RPK versus world GDP growth
Sources: IATA, IMF

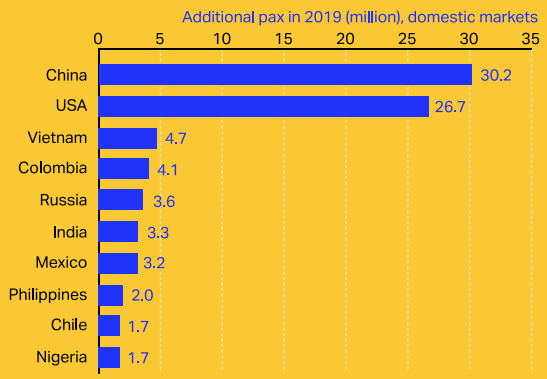


China's domestic market once again added the most passenger journeys

Despite the moderation in global RPK growth, there were more than 3.9 billion origin–destination (O–D) passenger journeys worldwide in 2019.

Among them, domestic routes within China again provided the largest incremental increase in passenger trips. China's market added more than 30 million journeys during the year, compared with 2018, a brisk annual growth rate of 5.8%. The US domestic market followed, with almost 27 million more passenger journeys in 2019 than in 2018, growing at a robust 4.6% pace for the year.

Top 10 increasing O–D markets
Source: IATA Direct Data Solutions (DDS)

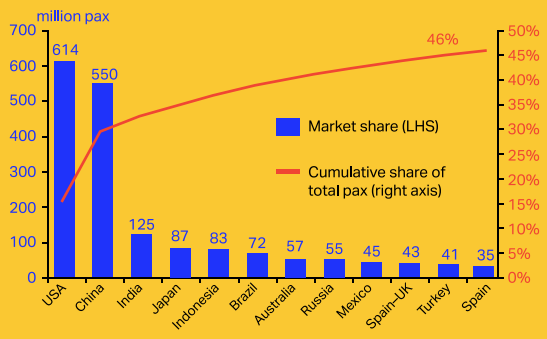


The US domestic passenger market continued to be the world's largest

Although China's domestic market added the most passenger journeys in 2019 compared with 2018, the US domestic market remained the world's largest single O–D air travel market.

Unsurprisingly, the largest domestic travel markets dominated the O–D rankings for 2019. Spain–UK was the top international country pairing, at number 10. The top 12 markets accounted for almost half of the total number of O–D passenger journeys in 2019.

Largest O–D air passenger markets in 2019
Source: IATA DDS

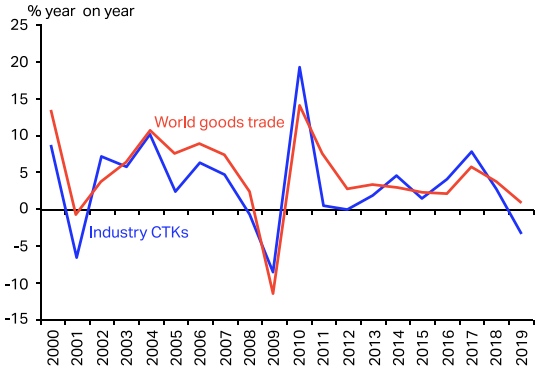


Air cargo volumes declined in 2019

Air cargo volumes began to decline in the fourth quarter of 2018 and continued declining throughout 2019. This resulted in the worst performance for the air cargo segment since the global financial crisis in 2009. Not all air freight sectors were equally affected, however. The e-commerce and pharmaceuticals sectors, for example, performed well in 2019.

Overall, though, cargo tonne kilometers (CTKs) contracted a sizable 3.2% year on year, the first negative result for CTKs since 2012. Global goods trade growth likewise slowed, from 3.7% in 2018 to just 0.9% in 2019, the weakest performance since 2009.

Air cargo versus global goods trade growth
Sources: IATA, Netherlands CPB



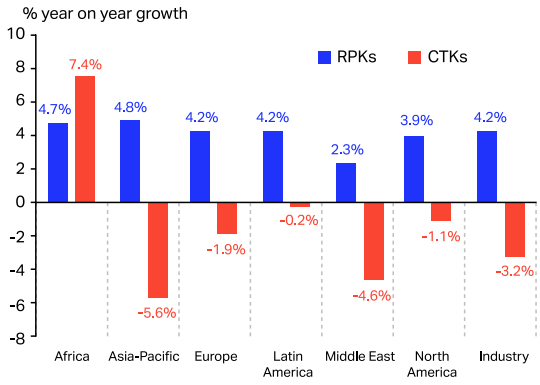
Regional differences were evident in passenger and, more so, in cargo outcomes

The mixed fortunes of the air passenger and cargo markets at the global level were reflected in outcomes at the regional level. Passenger market results, however, showed less regional variation than cargo.

With the exception of the Middle East, the air passenger growth performance in RPK terms was consistent across regions in 2019. It ranged between 3.9% for North America and 4.8% for Asia-Pacific.

The air cargo growth performance across regions was more mixed. Only the African carriers saw their CTKs increase compared with 2018, at a strong rate of 7.4%. In contrast, airlines based in Asia-Pacific and in the Middle East were the weakest performers in 2019, with volumes falling 5.6% and 4.6%, respectively. Because US-China trade tensions have a profound effect on air cargo developments internationally, it is little surprise that the Asia-Pacific market—a global manufacturing and distribution hub—was heavily affected in 2019.

Regional passenger and freight demand outcomes
Source: IATA

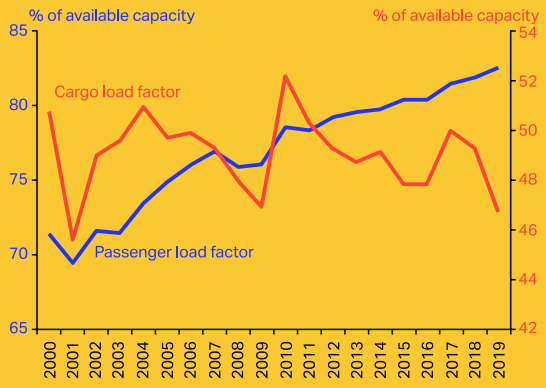


Passenger load factor attained a record high in 2019

The air passenger market's available seat kilometers (ASKs) increased a moderate 3.4% globally in 2019 compared with 2018, the slowest pace since 2009. The grounding of the Boeing 737 MAX aircraft played a role in this subdued, industry-wide capacity growth outcome. Rising demand, reflected in the 4.2% increase in RPKs, outpaced capacity growth and increased the passenger load factor (PLF) around half a percentage point, to 82.6% for 2019. This was the eighth consecutive yearly increase in PLF and a record high.

The contrasting fortunes for air cargo were clear. Available cargo tonne kilometers (ACTKs) increased 2.2% year on year, a pace that was some 5.4 percentage points faster than the rate of demand growth. As a consequence, the cargo load factor (CLF) declined substantially in 2019, around 2.5 percentage points.

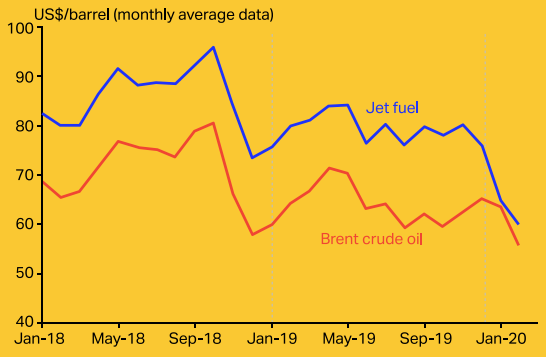
Industry-wide passenger and cargo load factors
Source: IATA



Oil prices were steady and moderate for much of 2019

The yearly average jet fuel price for 2019 was slightly below $80 a barrel. This was down from an average in 2018 that exceeded $86 a barrel and was, overall, a moderate level compared with the past 15 years. What this meant for airlines was that the cumulative unhedged annual fuel bill, excluding handling costs, was $9.5 billion lower in 2019 than in 2018.

World oil and jet fuel prices
Sources: Datastream, Platts

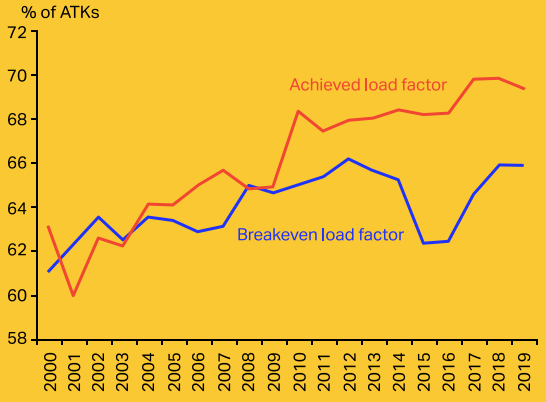


The achieved load factor eased slightly but remained solidly above the breakeven level

The main contributors to airline costs, including oil prices, interest rates, and labor costs, were stable in 2019. And that underpinned an essentially unchanged estimate for the industry-wide breakeven load factor, at 65.9%, compared with 66.0% in 2018.

The record PLF in 2019 was countered by the sharp decline in the CLF. As a result, the combined achieved industry-wide load factor—measured as a share of available tonne kilometers (ATKs)—eased by around half a percentage point, to 69.4%.

Breakeven and achieved load factors
Sources: IATA, The Airline Analyst

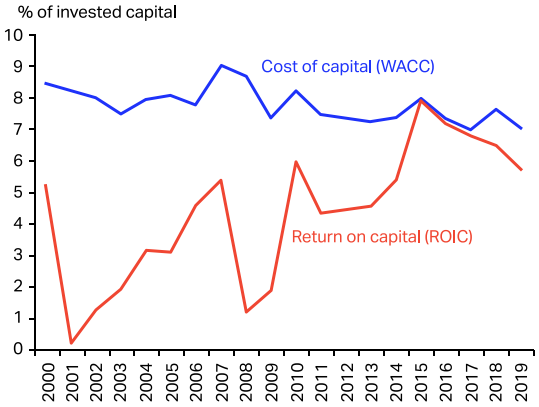


Air transport's financial performance was robust, but returns remained below the overall cost of capital

The global airline industry experienced another year of robust financial outcomes in 2019. Airlines generated an industry-wide net posttax profit of $25.9 billion, with an operating margin (EBIT) forecast to be 5.1%.

Despite moderating for a fourth consecutive year in 2019 following its peak in 2015, the industry-wide return on invested capital (ROIC) remained elevated relative to historical terms, at 5.7%. The cost of capital eased in 2019, returning to its 2017 level, and remained above the level of ROIC.

Industry return on investment and the cost of capital
Sources: IATA, Datastream, The Airline Analyst



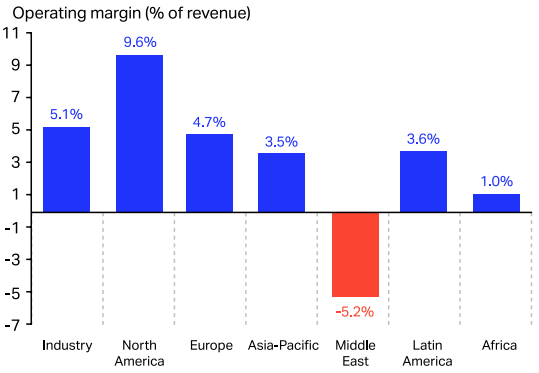
Regional financial performance was varied

Globally, the industry's EBIT decreased in 2019, to an estimated 5.1% of revenues, from 5.7% in 2018. Across regions, industry financial performance remained mixed. North American airlines continued to lead the way, delivering an operating margin of almost 10% in 2019, up about half a percentage point on the previous year.

Similar to 2018, airlines in Europe, Asia-Pacific, and Latin America recorded moderate profitability, with operating margins ranging from 3.5% to 4.7%. Airlines in the Middle East and in Africa faced more challenging business conditions, and those in the Middle East in particular had an overall negative operating margin of -5.2%.

Latin America joined North America in being the only two regions where airline operating margins improved in 2019 compared with 2018.

Regional profit performance
Sources: IATA, The Airline Analyst



2019 The figures in brief

During 2019...

Airlines generated an industry net posttax profit of

$25.9 billion

Revenue passenger kilometers (RPKs)

⬆ 4.2%

Available seat kilometers (ASKs) globally

⬆ 3.4%

Tourists traveling internationally by air estimated to have spent about

$900 billion

more than

22,000
unique city pairs

Passenger load factor (PLF) around

82.6%

Beyond

4.5 billion
passenger journeys on a flight-segment basis

Value of goods carried by air was estimated at slightly above

$6.7 trillion

Cargo tonne kilometers (CTKs)

⬇ 3.2%

Cargo load factor (CLF)

⬇ 2.5%

and from 2000-2019...

x2 more
air connectivity

50% less
in the cost of air travel

In 2000, the average citizen flew just once every **44** months

In 2019, the time between passenger trips dipped to just **20** months

Continuing the strong industry progress

Safety

More than 4.5 billion passengers flew safely on 46.8 million flights. All major safety performance indicators improved in 2019 compared with 2018 and the average over the 2014–2018 period, as shown in the table opposite.

Toward enhanced skills and safety

In 2019, the International Airline Training Fund (IATF) contributed to developing the skills and strengthening the capabilities of 3,982 aviation industry professionals from developing nations. The IATF sponsored 191 events, 110 aimed at enhancing aviation safety and helping airlines with IOSA registration.

The IATA Standard Safety Assessment (ISSA) Implementation Training Program gained momentum in Latin America. This resulted in six registrations: Twoflex, Amaszonas Línea Aérea Bolivia, Amaszonas Uruguay, Asta Linhas Aéreas, Rima, and Sansa.

	2019	2018	Five-year average 2014-2018
Accidents per one million flights	**1.13** or 1 accident every 884,000 flights	1.36 or 1 accident every 733,000 flights	1.56 or 1 accident every 640,000 flights
Total accidents	**53**	62	63.2
Fatal accidents	**8** 4 jet and 4 turboprop, with 240 fatalities*	11 with 523 fatalities	8.2 with an average of 303.4 fatalities yearly
Accidents per one million flights	**0.15** or 1 hull loss for every 6.6 million flights	0.18 or 1 hull loss for every 5.5 million flights	0.24 or 1 hull loss for every 4.1 million flights
Accidents per one million flights	**0.69** or 1 hull loss for every 1.45 million flights	0.70 or 1 hull loss for every 1.42 million flights	1.4 or 1 hull loss for every 714,000 flights

*There were also seven fatalities on the ground in the accident involving Busy Bee Congo.

More information on the industry's safety performance can be found in the *IATA Safety Report*.

Learning from evolving threats

Security

The partnership between governments and the aviation industry is the foundation on which a safe, secure, and accessible air transport network is built. Aviation security policy must learn from evolving threats. IATA pursues security policies based on global standards, with an outcome-based risk-mitigation approach.

Aviation cybersecurity

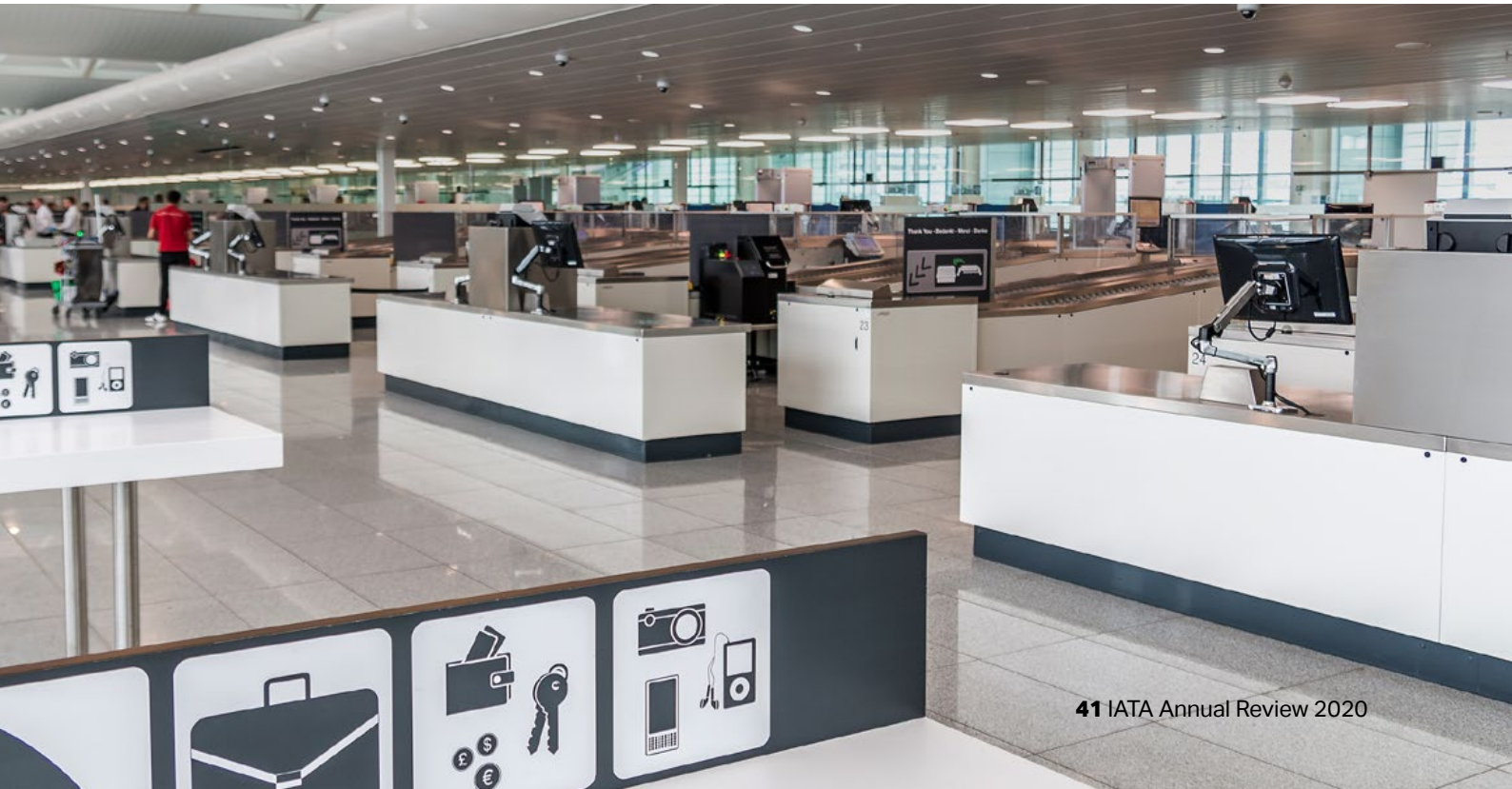
To address cyber threats and ensure the civil aviation industry is resilient to cyberattacks, in 2019 the ICAO Aviation Cyber Security Strategy was endorsed. Following the ICAO 40th Assembly, the need for countries and the industry to take further action to counter cyber threats was emphasized. Therefore, ICAO was called upon to develop a cybersecurity action plan to facilitate the adoption of its strategy.

IATA strongly supports the ICAO position as the most appropriate way to drive coherent global dialogue and action on aviation cybersecurity. The association is collaborating closely with ICAO's Secretariat Study Group on Cybersecurity (SSGC) and Trust Framework Study Group (TFSG) to contribute to the development of the cybersecurity action plan.

Conflict zones

Safety and security risks associated with conflict zones continue to be major concerns for aircraft operators. The downing of Ukraine International Airlines flight 752 on departure from Tehran in January 2020 underscores the imperative that airlines require access to relevant and corroborated information from governments to perform accurate risk assessments.

IATA and its members support the evolving changes to Annexes 6, 15, and 17 regarding enhanced risk assessment requirements for operators in dealing with conflict zones. In 2019, moreover, IATA released a security incident database that provides member airlines with a tool that collates a range of open-source information. That tool establishes a baseline of information that will help airlines formulate the required safety and security risk assessments.



Smart regulations for healthier air transport

Regulation and taxation

The industry pursued its need for smart regulations and the avoidance of excessive or poorly targeted taxation in 2019. This resulted in several noteworthy developments.

Smart industry regulations

The aim of smart regulations is to enable airlines to connect the world as efficiently as possible, with resulting benefits to global society. A lead tool for promoting the benefits of smart regulations are the IATA-developed *Air Transport Regulatory Competitiveness Indicators* reports, which benchmark national performance across five metrics:

1. Passenger facilitation
2. Cargo facilitation
3. Supply chain management
4. Infrastructure management
5. Regulatory environment

IATA published the first batch of reports in 2019 in partnership with local industry stakeholders. They focused on Europe and were distributed among policy makers and the media.

2019 IATA and member taxation campaigns saved over

$150 million

Unruly and disruptive passengers

In 2019, IATA launched public awareness campaigns in partnership with the travel retail industry and regulators in the United Kingdom and Sweden highlighting the consequences of unruly passenger behavior. Progress was also made in ratifying Montreal Protocol 14 (MP14), such that MP14 came into force on 1 January 2020, just six years after its inception. MP14 enhances the legal powers of countries to deal with offenses onboard aircraft that land in their territory, even those committed on foreign-registered aircraft.

Single African Air Transport Market

The number of African nations signed up to the Single African Air Transport Market (SAATM), an African Union initiative to open Africa's airspace, increased to 31 in 2019. Only 8, however, have implemented the "concrete measures" mandated by the African Civil Aviation Commission. IATA's response has been to publish reports on the benefits of aviation in numerous African countries that highlight how important the SAATM is to increasing such benefits.

Slots

In June 2019, a crucial step was taken toward reforming the governance of the *World Slot Guidelines* (WSG). IATA, Airports Council International (ACI), and the Worldwide Airport Coordinators Group (WWACG) signed a memorandum of understanding (MOU) to create the Worldwide Airport Slot Board (WASB).

Under this MOU, the *WSG* have been rebranded as the *Worldwide Airport Slot Guidelines* (WASG). The two last editions of the *WSG* were published in January and August 2019. They incorporate changes agreed to through a strategic review involving airlines, airports, and slot coordinators. Those changes update and strengthen the application of policy and slot coordination processes.

IATA will continue to work through the WASB and with its members to influence slot regulations worldwide to ensure that they remain aligned with the *WASG*.

Taxation

IATA and its members ran campaigns to avoid excessive or poorly targeted taxation with the following significant outcomes totaling $152.6 million in savings in 2019:

- Argentina: removal of a 1.2% tax on credit and debit card payments, for a reduction of $6.9 million;
- Italy: reduction in the Council Tax, constituting a saving of $5.3 million;
- Russia: elimination of a 20% value-added tax (VAT) on services rendered to international airlines by airport operators, saving $140.4 million;
- Bermuda: prevention of the introduction of a 5% general sales tax (GST) on air ticket sales, corresponding to $17.5 million a year.

Improved access for passengers with disabilities

Safe and dignified travel for all passengers, including those with disabilities, is an airline commitment enshrined in a resolution passed at the 2019 IATA AGM. The principles for accessible air travel endorsed in that resolution were, in turn, adopted by ICAO at its 2019 Triennial Assembly as high-level guidance for regulators.

The IATA resolution also commits airlines to building dialogue with the accessibility community and to bringing together stakeholders from across the aviation sector. Toward the fulfillment of this commitment, in November 2019 IATA established the Accessibility Symposium and designated it an annual event.

Diversity in the workforce

Airlines are determined to improve the participation of under-represented groups at all levels of employment and are accelerating this process through nondiscriminatory programs to encourage mentoring and reward talent. The inaugural IATA Diversity and Inclusion Awards in 2019 honored three excellent examples of aviation's progress in this regard:

- Inspirational Role Model: Christine Ourmières-Widener, CEO, Flybe;
- High Flyer Award: Fadimatou Noutchemo Simo, Founder and President, Young African Aviation Professional Association (YAAPA);
- Diversity & Inclusion Team: Air New Zealand.

In September 2019, IATA announced its 25 by 2025 campaign, which seeks voluntary participation from IATA-member airlines. Airlines that participate in 25 by 2025 commit chiefly

- to increase the number of women in senior positions by either 25% against current metrics or a minimum representation of 25% by 2025;
- to raise the number of women in under-represented jobs (e.g., pilots and operations) by either 25% against current metrics or a minimum representation of 25% by 2025;
- to report annually on key diversity metrics.

The first airlines to sign up to the 25 by 2025 campaign were China Eastern, the Lufthansa Group, and Qatar Airways. As of October 2020, 55 airlines have signed onto the campaign.

Cost-effective and flexible

Infrastructure

The air transport industry needs demand-led, fit-for-purpose, cost-effective infrastructure to operate and grow. Toward this aim, IATA released a new version of the *IATA Airport Development Reference Manual* (ADRM) in March 2019. A review, meanwhile, of the *ICAO Airports Economic Manual* focused on ensuring that infrastructure user charges support competitive and cost-efficient air services.

In 2019, IATA participated in campaigns related to charges and taxation that contributed to an airline cost reduction of $1.34 billion. Key achievements included

- reductions in the en route charges from Eurocontrol and Airservices Australia, totaling $556 million;
- reductions in the passenger charge in Trinidad and Tobago, airport charges at Dublin airport, and the value-added tax (VAT) rate on jet fuel at São Paulo airport (totaling $235 million);
- removal of VAT in its entirety in Russia ($140 million).

Airport privatization

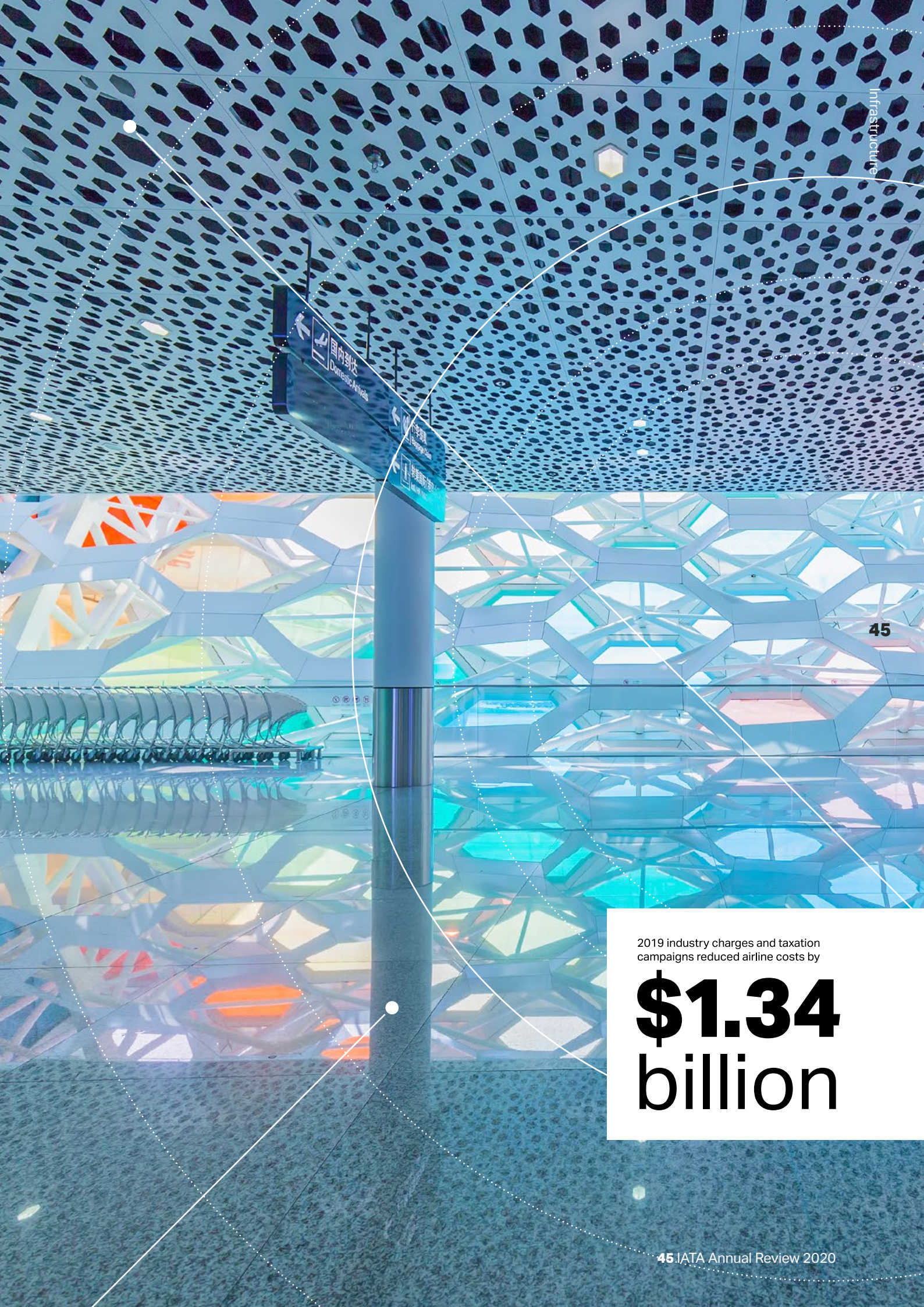
Following IATA's resolution on privatization, adopted at IATA AGM 2018, IATA launched a report with Deloitte providing a framework for a new model of airport concession contracts.

A vision for the future

The NEXTT (Next Travel Technologies) vision outlines how new technology, interactive decision-making, advanced processing, and moving activities off airport will meet changing passenger demand and customer expectations. In 2019, a study on the impact on airport design of deploying the NEXTT initiative. ICAO also indicated support for NEXTT, with the President of the Council requesting a briefing, and exposure at the ICAO world aviation forum and in the 2019 *Aviation Benefits* report.

IATA and Airports Council International (ACI) developed a common program for the future on-ground travel experience. Eleven key IATA projects were harmonized under this program of infrastructure, processes, and business to bring the NEXTT vision to life.

- **ONE Record** will allow all stakeholders in the air cargo supply chain to directly access the shipment data they require, all from a digital ecosystem.
- **Interactive Cargo** will "make cargo talk," with intelligent systems that self-monitor, send real-time alerts, and respond to changes in handling conditions.
- **The Cargo Facility of the Future** will define what the modern cargo facility will look like and how it will be used.
- **Baggage Tracking** will ensure that every bag is tracked throughout its journey to reduce mishandled luggage and increase efficiency in baggage operations and has already been agreed to by airlines across the industry.
- **ONE ID** will enable passengers to travel document free using biometric recognition.
- **ONE Order** will result in the gradual disappearance of passenger name records (PNRs), e-tickets, and miscellaneous electronic documents in favor of a single customer order record that holds the data elements obtained and required for product fulfilment across passengers' air travel journeys.
- **Travel Communications** will enable multiple industry stakeholders to communicate with passengers across all touch points of their journey with accurate, up-to-date information provided by a trusted source.
- **Smart Security** will use stand-off technologies and data-driven processes to provide seamless, efficient, walk-through security for passengers and their baggage throughout their journeys.
- **Enhanced Airport Collaborative Decision-Making (A-CDM)** will improve the efficiency of the aircraft turnaround process and flight predictability through real-time data sharing between airport partners, reducing airport delays.
- **CEDAR (Ramp of the Future)** will accelerate the modernization of ground operation processes.
- **The Airline Industry Data Model (AIDM)** will provide an agreed-upon dictionary for industry vocabulary, data definitions, and their relationships.



2019 industry charges and taxation campaigns reduced airline costs by

$1.34 billion

Pushing for a sustainable future

Environment

Developments in 2019–20

Awareness of climate change increased in 2019 as the efforts of environmental protest groups, such as Extinction Rebellion and the school strike movement led by Greta Thunberg, gathered momentum ahead of the Conference of the Parties (COP)25 meeting in December.

As part of the industry's engagement with environmental groups and the general public, the IATA Board encouraged an education campaign to help travelers become more aware of the environmental impacts of air travel and of the work the industry is doing to reduce emissions. A website, www.flyaware.com, was developed and launched by IATA in February 2020 to begin this outreach. But the consumer aspects of the campaign were paused amid the COVID-19 crisis, which grounded much of aviation from March 2020.

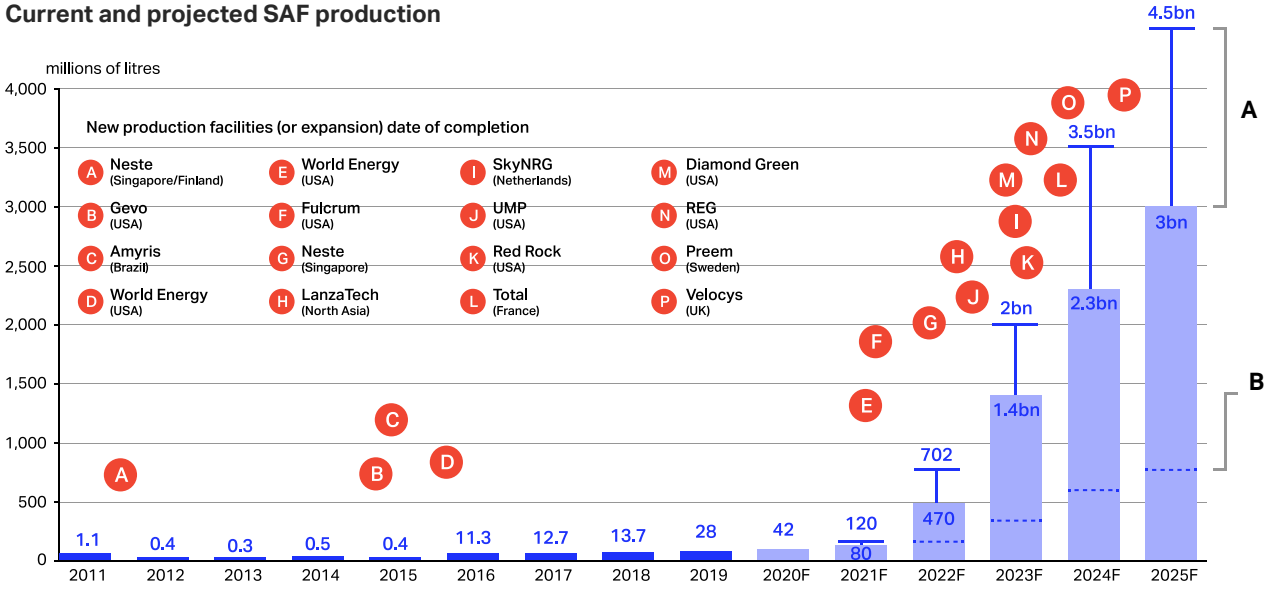
Carbon Offsetting and Reduction Scheme for International Aviation

An important breakthrough in the first half of 2019 was the agreement by ICAO on defining the monitoring, reporting, and verification (MRV) procedures for its Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). In support, IATA arranged capacity-building workshops to ensure that airlines were compliant with CORSIA requirements.

At the 2019 IATA AGM, member airlines reconfirmed their commitment to the industry's targets, including carbon-neutral growth from 2020 and cutting emissions to half of 2005 levels by 2050. A resolution was passed at the AGM urging ICAO member nations to support CORSIA, to volunteer to implement the scheme at the earliest possible stage, and to integrate the MRV requirements into their national plans. This was an important show of industry support and solidarity with the ICAO Secretariat ahead of complex discussions at the ICAO Triennial Assembly in September–October 2019. In the end, motions on CORSIA and a long-term goal for emissions reductions were passed at that assembly.

In January 2020, IATA partnered with Xpansiv CBL Holding Group to launch the Aviation Carbon Exchange (ACE). ACE is a centralized marketplace for CORSIA-eligible emission units where airlines and other aviation stakeholders can trade CO_2 emission reductions for compliance or voluntary offsetting purposes. The partnership adopted a phased approach to its different trading options, with the full integration of CBL Markets' trading platform and IATA's settlement systems planned for the final quarter of 2020.

Current and projected SAF production



A: The difference between a low take-up of SAF from production facilities (lower number) and a high take-up, driven by policy and airline decision-making. The top number represents the full possible output of SAF production in operation or under construction or advanced planning and financing.

B: Without the correct policy measures, the fuel output could be optimized to go to other forms of transport. The lowest dotted line represents the least take-up of SAF (output goes to road transport).

As the impact of COVID-19 on 2020 air travel demand emerged, it became clear that this extreme shock to air travel threatened to distort the baseline for calculating carbon-neutral growth. ICAO responded to prompting from the industry and agreed to modify the CORSIA baseline to reflect only 2019 demand levels. This has resulted in a tougher emissions offsetting requirement than would have been the case if 2020 had been a year of similar demand growth to 2019. ICAO's modification did, however, remove the worst of the distortion from the collapse in air traffic demand caused by COVID-19.

Technologies

Offsetting remains a vital short-term option for mitigating aviation carbon emissions. Long term, however, new technology, including sustainable fuels, will be the solution. IATA published its updated Technology Roadmap in 2019, setting out the milestones for expected green technology over the next 30 years. The roadmap suggests that fully electric commercial aircraft carrying around 50 passengers on short-haul flights could be in service from 2035 onwards, with hybrid propulsion systems in place for long-haul journeys also helping to significantly reduce emissions.

Sustainable fuels

With the industry reliant on liquid fuels for most services for the foreseeable future, the take-up of sustainable aviation fuels (SAF) will be crucial if the industry is to meet its 2050 target of halving emissions. SAF offers potential CO_2 reductions of up to 80% compared with traditional jet kerosene.

In 2019, the industry marked the milestone of more than 250,000 commercial flights with a SAF blend. Increasing the production of SAF as rapidly as possible to stay abreast of rising usage remains an industry goal. Throughout 2019, IATA engaged with fuel producers and political stakeholders to encourage investment in SAF production. The air transport industry, basing itself on 2019 demand, targets 2% SAF fuel use by 2025. IATA estimates that the level of annual production needed to meet this target—some 7 billion litres—will create a tipping point to bring prices down and will encourage a virtuous circle of further investment and falling prices.

“SAF is our biggest emissions reduction opportunity. The time is right to push it forward so that, together, we can achieve major carbon reductions on the way toward fossil fuel-free flight.”

Alexandre de Juniac

Binding the global economy together

Cargo

Air cargo enables global trade and supply chains to operate. Goods to the value of one-third of global trade—more than $6.7 trillion—are carried by air.

In 2019, airlines saw revenue from air cargo fall to $102.4 billion, some $9 billion down from 2018 and in line with falling volumes. Cargo tonne kilometers (CTKs) flown fell for the first time since 2012, reflecting a general slowdown in global economic activity. In such a challenging market, airlines must work with their shipping and freight-forwarding partners to modernize and digitize cargo processes to improve the safety, speed, security, and efficiency of cargo services.

To this end, IATA promoted the international adoption and implementation of efficient and effective electronic border measures based on the World Trade Organization Trade Facilitation Agreement. This should address the wide disparity in clearance times for international shipments. The average time taken is 2.1 days, but clearance can take up to 4.4 days in some markets.

Safe shipping of lithium batteries

In December 2019, IATA formed a partnership with the Global Shippers Forum, the International Federation of Freight Forwarders Associations, and the International Air Cargo Association to amplify efforts to ensure the safe air transport of lithium batteries. The partners launched an incident reporting tool to share information on rogue shippers and an awareness campaign on the dangers of shipping undeclared and misdeclared lithium batteries. They also called for governments to crack down on manufacturers of counterfeit batteries and of mislabeled and noncompliant shipments introduced into the supply chain by issuing and enforcing criminal sanctions on those responsible.

Enhanced standards through benchmarking and sharing information

In 2019, IATA published enhanced special cargo standards regarding the transport of live animals, perishables, and life sciences commodities.

IATA also initiated its Center for Excellence for Independent Validators (CEIV) Fresh and CEIV Live Animals certification programs in 2019 to complement its CEIV Pharma program. These three programs benchmark the handling of perishables, animals, and pharmaceutical products, respectively. More than 300 organizations are certified under CEIV Pharma. To date, Cathay Pacific, Cathay Pacific Services Limited (CPSL), Hong Kong Air Cargo Terminals Limited (HACTL), and Turkish Cargo have achieved all three CEIV programs.

The digitization of information and the exchange of smart digital data were boosted with the launch of a number of ONE Record test projects in 2019. The vision for ONE Record is an end-to-end digital logistics and transport supply chain where data is easily and transparently exchanged in a digital ecosystem of air cargo stakeholders, communities, and data platforms.

IATA's development in 2019 of the Smart Facility program is meant to improve transparency on service levels at 3,500 cargo handling facilities. The program reduces audit frequency, complexity, and cost and makes information available on ONE Source, a new online platform. Through ONE Source, shippers can find business partners for their needs through full disclosure on everything from temperature-controlled rooms to IATA certifications.

Certification status

CEIV - EXCELLENCE IN LOGISTICS — IATA — PHARMA

304 Completed
75 In progress
99 In discussion

CEIV - EXCELLENCE IN LOGISTICS — IATA — FRESH

10 Completed
15 In progress
24 In discussion

CEIV - EXCELLENCE IN LOGISTICS — IATA — ANIMALS

11 Completed
7 In progress
7 In discussion

Value of goods carried by air is

1/3 of global trade

and above

$6.7 trillion

More choice, more control, more convenience

Passenger experience

In 2019, IATA members represented through the Customer Experience Workstream developed a strategic roadmap for the automation of a growing number of airport processes. These processes include improved baggage handling and tracking, a single identity token for all travel processes using biometric identification, real-time flight information sent directly to personal devices, and seamless border control.

The aim is to deliver an ever-more personalized and convenient experience that puts the passenger in control. An added benefit of implementing the roadmap will be to facilitate the most efficient use of constrained airport infrastructure.

ONE ID

The 2019 IATA AGM unanimously resolved to accelerate the global implementation of ONE ID, which aims at seamless and secure processing for passengers from airport door to gate using collaborative identity management. This was given a boost when the 40th ICAO Assembly endorsed the initiative. Progress in 2020 has to date included the development of a contactless application and the ONE ID *Overarching Process Recommended Practice* approved by the IATA Travel Board and Passenger Service Conference.

Baggage

Also unanimously passed at the 2019 IATA AGM was a resolution to support the global deployment of radio frequency identification (RFID) for baggage tracking. The AGM also called for the implementation of modern baggage messaging standards to more accurately track passengers' baggage in real time across key points in the journey. IATA members committed to transition to bar-coded bag tags with RFID inlays and to use RFID data alerts to enact processes with airports and ground handlers that prevent potential mishandlings.

New Distribution Capability

The focus for the New Distribution Capability (NDC) for 2019 was on driving a critical mass of NDC transactions. To that end, IATA established the NDC Leaderboard, composed of airlines that seek to grow their NDC volumes rapidly. The 21 NDC Leaderboard airlines have set a target of powering 20% of their sales by NDC application programming interface (API) by the end of 2020.

At year-end 2019, NDC Leaderboard airlines had reached 11% of indirect bookings through NDC API. The COVID-19 pandemic, which led to the virtual shutdown of international traffic (even as of this writing), upended airlines' commercial strategies as the focus turned to business survival. It is, therefore, not possible to say whether the 20% target would have been achieved absent COVID-19.

What can be said is that the crisis has accelerated the trend to airline retailing. The NDC Leaderboard airlines are, on average, conducting more than 20% of their indirect transactions through NDC API. This is off an extremely low base and a traffic mix that leans heavily toward domestic, short-haul, leisure, which is favorable to today's NDC channels. It also shows that the NDC continues to be or is perhaps more relevant than ever.

ONE Order

ONE Order is an industry-led initiative to simplify the airline fulfilment, servicing, delivery, and accounting processes for airline products and services. These processes are largely unchanged from the era of paper tickets, even though paper tickets have all but disappeared.

In January 2019, IATA launched the ONE Order certification registry to provide transparency on ONE Order deployments, validate the capability of supporting IT providers, drive innovation and monitor progress, and support the adoption of ONE Order.

The COVID-19 crisis has significantly slowed ONE Order implementations. Because of a lack of resources, the industry is focused instead on continuing and maturing NDC deployments. IATA is therefore pivoting ONE Order to make it an integral part of a transition to retailing. This means moving to a world of offers and orders aligned with today's online retailing best practices. ONE Order assures the simplification and the customer service components that are vital to achieving this vision.

Efficient, customer-centric systems

Financial services

IATA Financial Settlement Services (IFSS) facilitate payments to airlines from travel agents and freight forwarders, from airlines to airlines, and from airlines to suppliers. In 2019, the IFSS processed $449.8 billion.

IATA's Billing and Settlement Plan (BSP) expedites and simplifies the selling, reporting, and remittance procedures of IATA-accredited travel agents and improves financial control and cash flow for approximately 400 participating airlines. In 2019, the BSP processed $237.1 billion. At the close of 2019, there were 154 BSP operations covering 180 countries and territories. Their overall on-time settlement rate was 99.994%. The 743 million transactions processed through all BSPs during 2019 resulted in an average cost per transaction of $0.065, with the cost of some transactions as low as $0.04.

IATA's Cargo Account Settlement System (CASS) simplifies the billing and settling of accounts between airlines and freight forwarders. It operates through CASSlink, an advanced, global, web-enabled e-billing solution. In 2019, CASS processed $32.7 billion, with an on-time settlement rate of 99.996%. At the end of 2019, CASS was processing 96 operations serving over 180 airlines and 200 general sales and service agents (GSSAs) and ground handling companies.

The IATA Clearing House (ICH) provides fast, secure, and cost-effective settlement services to 463 airlines, airline-associated companies, and airline travel partner participants. In 2019, the ICH processed $62.5 billion and had a financial settlement success rate of 99.996%.

IATA Currency Clearance Services (ICCS) offer global cash management that enables more than 340 airline users to centrally control and repatriate their BSP and CASS sales, including from countries with severe currency liquidity issues. Overall, the ICCS processed $37.3 billion in 2019.

IATA's Simplified Invoicing and Settlement (SIS) is a cost-effective electronic invoicing platform that removes all paper from the invoicing and settlement of industry services. In 2019, SIS had more than 2,637 participants, including 443 airlines, 334 suppliers, and 1,860 others. SIS processed over 1.8 million interline and supplier invoices during the year and settled $76 billion in volume.

IATA's Enhancement & Financing (E&F) enables air navigation service providers (ANSPs) and airports access to IATA's globally trusted systems and processes for the generation of accurate billing data, for standardized e-invoices that can be automatically validated, and for secure fund collection. For airlines, the E&F can help avoid late payment penalties, reconciliation headaches, and disputes through a standardized billing process with a single point of contact for questions or disputes. The E&F processed $4.2 billion in 2019.

New Generation IATA Settlement Systems

IATA's BSP offers tremendous value to the industry by facilitating the distribution and settlement of funds between travel agents and airlines. However, the rules of the BSP were established decades ago, using a one-size-fits-all approach that does not address the different needs, concerns, and risks of today's airlines and travel agents.

In 2018, IATA began rolling out its New Generation IATA Settlement Systems (NewGen ISS) to modernize and transform the BSP to ensure that it continues to deliver strong value to all participants for years to come. At the end of 2019, NewGen ISS had been implemented in some 98 BSP markets, representing 93.4% of global BSP cash sales.

NewGen ISS offers

- three levels of travel agent accreditation, allowing agents to select the level that best suits them and to move between levels as their business evolves;
- a modern risk management framework that provides a more secure environment for all participants, including a remittance holding capacity (RHC) for "cash" sales outstanding to the BSP; and
- IATA EasyPay, a new, voluntary e-wallet solution for travel agents, including GoLite travel agents, for issuing airline tickets in the BSP in a way that gives agents a fail-safe means to continue selling even if they reach their RHC while offering airlines a low-cost per transaction and faster settlement.

In conjunction with NewGen ISS, IATA introduced Transparency in Payments (TIP). TIP is focused on providing airlines with increased transparency and consent over travel agents. It allows airlines to use their own cards for funds settlement. As it stands, airlines only see the payment settlement costs after the fact, if at all. No form of settlement is barred by TIP, but agents can only use forms to which an airline has previously given consent.

BSP

400 participating airlines

$237 billion processed

743 million transactions

99.994% on-time settlement rate

CASS

180 participating airlines

200+ GSSAs and ground handling companies

$32.7 billion processed

99.996% on-time settlement rate

www.iata.org

International Air Transport Association

Annual Review 2020
76th Annual General Meeting,
Amsterdam, November 2020