AIRPORTS COUNCIL INTERNATIONAL

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ACI ADVISORY BULLETIN

The impact of COVID-19 on the airport business

Faltering traffic recovery, deepening revenue shortfall, but strong hopes for a vaccine

Montreal, 8 December 2020 – Airports Council International (ACI) World has published its fifth assessment analysing the economic impact of the COVID-19 pandemic, and its effects on the global airport business.

Almost nine months ago, on 11 March 2020, the World Health Organization (WHO) declared the COVID-19 outbreak a pandemic. Since then, the life of almost every single person has changed. Air transport has remained one of the hardest-hit global industries since the very beginning of the crisis.

The ongoing COVID-19 pandemic has resulted in a full-scale transportation crisis with the imposition of travel restrictions and suspension of flights in a global effort to contain the spread of the virus. Aviation was brought to a virtual halt in April following lockdowns imposed in many countries in the second half of March.

As the COVID-19 outbreak unfolded, it became evident that it would evolve into a crisis like no other, forcing the industry into survival mode impaired by the loss of traffic and revenues.

Beyond aviation, the ongoing pandemic has already claimed more than 1.5 million lives worldwide and resulted in dramatic damages to the global economy, trade, and mobility. Practically all aspects of economic and social activity have been disrupted.

Recent announcements of successful Phase 3 vaccine trials are offering a rare beacon of hope that a return to normality is a possibility in the near future. As vaccines are being approved by the health authorities around the world, however, vaccination campaigns are likely to be challenging. It will taketime to reach all the world 7.8 billion habitants and, for this reason, the use of testing to reduce risk of transmission during travel will be fundamental during the transition period..

This document highlights some key figures in terms of the impact of the COVID-19 pandemic and subsequent lockdown on airport traffic and revenues.

Traffic decline amid COVID-19 crisis

By the middle of March, most countries had gone into lockdown. When the gradual reopening of many parts of the economy started and some early signs of recovery appeared, many States were confronted with a second wave of infections and several jurisdictions had no choice other than the re-imposition of partial lockdowns.

Even though most countries have moved away from all-encompassing lockdowns and are now trying to limit the second wave of infections with targeted and less disruptive restrictions, most jurisdictions have retained either partially or totally restrictive regulations pertaining to international travel including 14-day self-quarantine on arrival.

In this context, ACI World has produced the latest estimates regarding impact on passenger traffic.

- The crisis will remove more than **6 billion passengers** by the end of 2020 compared to the projected baseline (pre-COVID-19 forecast for 2020), representing **a decline of 64.2%** of global passenger traffic (see Table 1)

- The second quarter of 2020 posted the worst losses with a global **decline of 89.4%** or more than **2.1 billion passengers**. The month of April recorded a **decline of 94.4%** compared to the same period in 2019

- **Europe** and the **Middle East** are forecasted to be the two most impacted regions with declines above 70% compared to the projected baseline

- After being hit first, **Asia-Pacific** embarked on recovery earlier and faster than other regions and is forecasted to close the year 2020 with a decline of 59.2%, the only region recording a decline below 60%, driven mostly by large domestic markets such as China

- Global passenger traffic in the first half of 2021 will remain **heavily impacted** as vaccination campaigns are rolled out and organized. Major logistical challenges will need to be addressed mainly related to cold chain logistics and distribution capabilities. Air cargo capacity, and belly hold cargo capacity in particular, was severely reduced as the number of passenger flights fell which **could drastically hinder** the distribution of the vaccines

- Global passenger traffic volume for the **first half of 2021** is forecasted to reach **2.2 billion**, a slim 20% increase compared to the same period in 2020. The **second half of 2021** will see a much stronger uptick, reaching more than **3.5 billion passengers**, more than double the passenger volume for the same period in 2020 (see Chart 1)

- **International passenger** traffic continued to be virtually non-existent in the second half of 2020 following the "Great Lockdown" of April. International passenger volume will remain weak in the first half of 2021 but will pick up in the second half of the year as an increasing number of people get vaccinated, and travel restriction are gradually lifted (see Chart 2)

- **Domestic passenger** traffic is recovering faster than international traffic. Countries like China and Russia have already returned to their 2019 levels. Globally, domestic traffic will continue to increase in 2021 to reach **2.35 billion passengers** in the second half of 2021 corresponding to 86.5% of the 2019 level for the same period (see Chart 2).

Table 1: The impact of the COVID-19 crisis on quarterly passenger traffic by region (2020, rounded in million passengers)

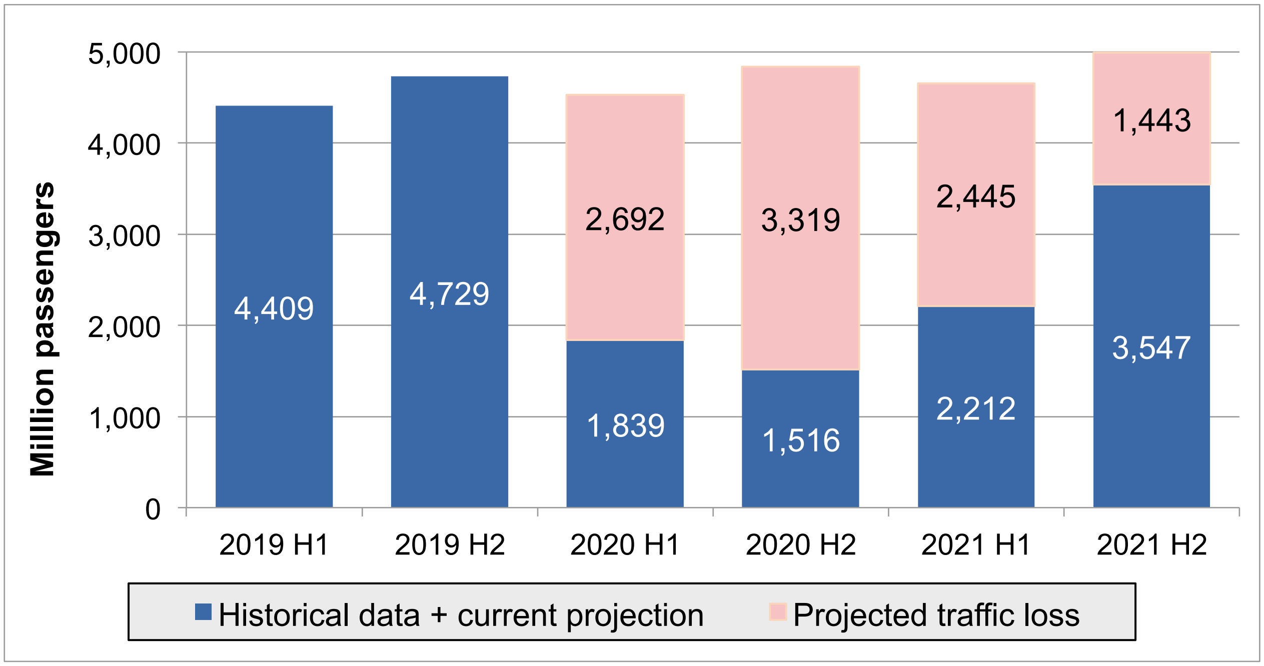
Region	Q1	Q2	Q3	Q4	2020
Projected baseline (pre-COVID-19)*					
Africa	56	58	68	62	244
Asia-Pacific	858	850	876	878	3,463
Europe	494	666	770	560	2,490
Latin America-Caribbean	175	167	179	177	698
Middle East	96	91	100	93	380
North America	477	543	552	519	2,092
World	**2,156**	**2,375**	**2,545**	**2,289**	**9,366**
Estimated under COVID-19**					
Africa	46	1	11	16	74
Asia-Pacific	545	152	305	412	1,414
Europe	379	25	212	112	728
Latin America-Caribbean	151	10	38	68	266
Middle East	81	4	16	11	112
North America	386	59	155	160	760
World	**1,588**	**251**	**737**	**823**	**3,355**
Reduction					
Africa	-10	-57	-57	-45	-169
Asia-Pacific	-313	-698	-571	-467	-2,049
Europe	-114	-641	-558	-448	-1,762
Latin America-Caribbean	-24	-157	-141	-109	-431
Middle East	-15	-87	-84	-82	-268
North America	-91	-484	-397	-359	-1,331
World	**-568**	**-2,124**	**-1,808**	**-1,467**	**-6,011**
% Change					
Africa	-17.8%	-97.4%	-84.0%	-73.8%	-69.5%
Asia-Pacific	-36.4%	-82.1%	-65.2%	-53.1%	-59.2%
Europe	-23.2%	-96.3%	-72.5%	-80.0%	-70.8%
Latin America-Caribbean	-13.9%	-94.1%	-79.0%	-61.5%	-61.8%
Middle East	-16.1%	-96.0%	-84.0%	-87.8%	-70.6%
North America	-19.1%	-89.1%	-71.9%	-69.2%	-63.6%
World	**-26.3%**	**-89.4%**	**-71.1%**	**-64.1%**	**-64.2%**

*Projected baseline (pre-COVID-19) scenario based on adjusted World Airport Traffic Forecasts (WATF) 2020–2040 considering latest insights provided by ACI Regional offices and other inputs

**Estimated passenger traffic volumes based on a broad range of inputs provided by ACI Regional offices and industry experts

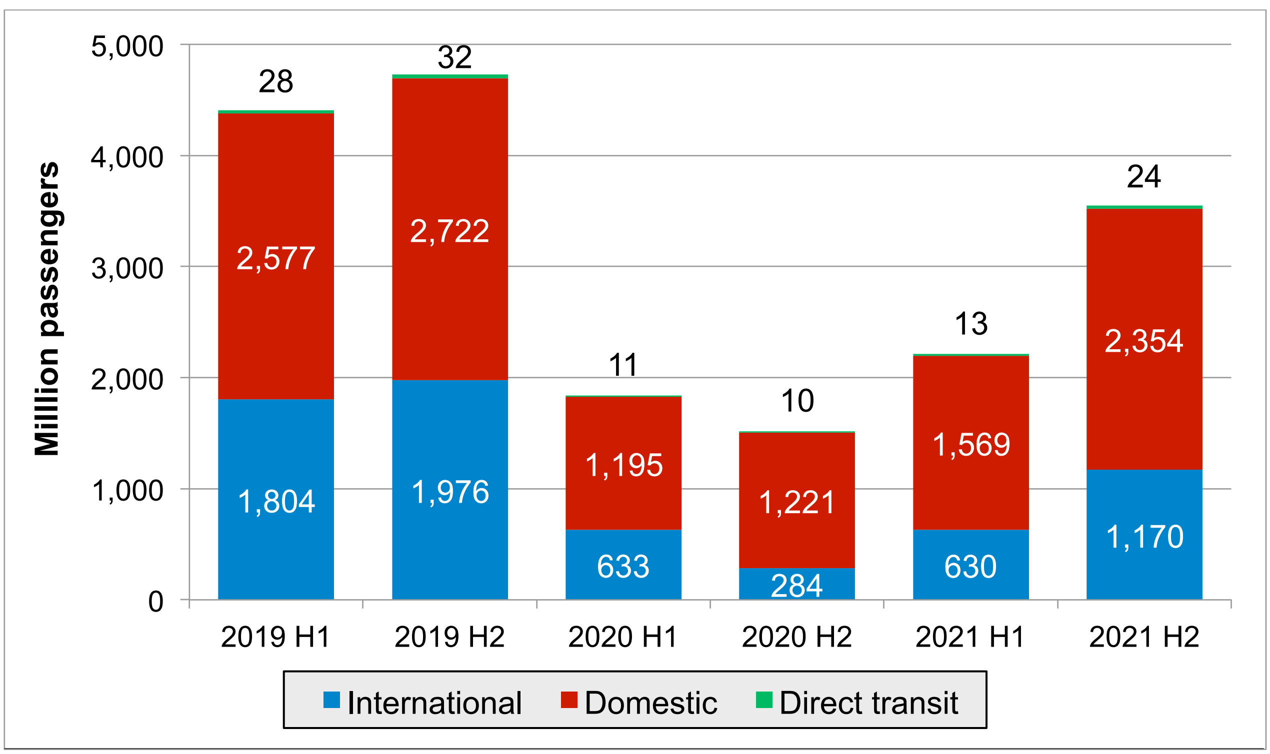
Source: ACI World

Chart 1: Projected global semi-annual passenger losses due to the COVID-19 crisis (2020, in million passengers)



Source: ACI World

Chart 2: Projected global semi-annual passenger traffic recovery by type of traffic (2020, in million passengers)



Source: ACI World

The “Great Shortfall” in revenues

Air traffic is the lifeblood of the airport business. Airports generate more than 95% of all revenue from two operating sources—the two primary business streams—aeronautical and non-aeronautical services. The residual 5% of income comes from non-operating sources that are not directly related to the volume of traffic handled by airports; these can be subsidies, grants, asset divestments, or interest income on investments.

Practically all aeronautical revenues are a direct function of traffic and include passenger-related charges from passengers and aircraft-related charges from aircraft operators. As traffic declines, airports’ ability to collect those charges decreases proportionately.

The current assessment assumes constant airport revenues on a per-passenger basis even though preliminary evidence suggests that unit revenues may both increase or decrease depending on a combination of airport-specific factors.

Every airport has a unique portfolio of non-aeronautical activities. As a rule of thumb, however, a higher proportion of passenger-related activities - such as retail or food and beverage concessions - lead to a steeper reduction in commercial revenues, while higher reliance on real estate income and rents acts as a cushion in times of crisis.

In this context, ACI World forecasts the following related to airport revenues:

- Before the crisis, the airport industry was expected to generate about $172 billion (all figures in US Dollars) in 2020. The impact of the COVID-19 crisis on airport revenues was unprecedented, resulting in a severe reduction of **$111.8 billion** from airport revenues for 2020, **a reduction of 65.0%** compared to the projected baseline (pre-COVID-19 revenue forecast). See Table 3

- As for the passenger traffic, the biggest losses were recorded in the second quarter of 2020 with a reduction of **$39 billion** in revenues compared to the projected baseline **(-89.7%)**

- **Europe** is the most affected region in absolute terms with an estimated revenue shortfall of **$40.8 billion** for 2020. In relative terms, the sharpest fall was recorded by the **Middle East** with a **reduction of 73.5%** of revenues for 2020 compared to the projected baseline

- While the situation is expected to slightly improve for Q4 compared to the two previous quarters, the fourth quarter of 2020 is nevertheless projected to end up much weaker than previous assessments were forecasting.

Table 2: The impact of the COVID-19 crisis on quarterly revenues* by region (2020) (in million USD)

Region	Q1	Q2	Q3	Q4	2020
Projected baseline (pre-COVID-19)**					
Africa	1,000	1,000	1,200	1,100	4,300
Asia-Pacific	12,400	12,200	12,600	12,700	49,900
Europe	11,600	15,700	18,500	13,500	59,300
Latin America-Caribbean	2,700	2,500	2,700	2,600	10,500
Middle East	3,300	3,100	3,600	3,200	13,200
North America	8,000	9,000	9,100	8,600	34,700
World	**39,000**	**43,500**	**47,700**	**41,700**	**171,900**
Estimated under COVID-19***					
Africa	800	30	200	300	1,330
Asia-Pacific	7,800	2,200	4,400	5,900	20,300
Europe	9,000	700	5,700	3,100	18,500
Latin America-Caribbean	2,200	100	600	1,000	3,900
Middle East	2,500	100	500	400	3,500
North America	6,400	1,000	2,600	2,600	12,600
World	**28,500**	**4,500**	**13,200**	**14,800**	**60,130**
Reduction					
Africa	-200	-970	-1,000	-800	-2,970
Asia-Pacific	-4,600	-10,000	-8,200	-6,800	-29,600
Europe	-2,600	-15,000	-12,800	-10,400	-40,800
Latin America-Caribbean	-500	-2,400	-2,100	-1,600	-6,600
Middle East	-800	-3,000	-3,100	-2,800	-9,700
North America	-1,600	-8,000	-6,500	-6,000	-22,100
World	**-10,500**	**-39,000**	**-34,500**	**-26,900**	**-111,770**
% Change					
Africa	-20.0%	-97.0%	-83.3%	-72.7%	-69.1%
Asia-Pacific	-37.1%	-82.0%	-65.1%	-53.5%	-59.3%
Europe	-22.4%	-95.5%	-69.2%	-77.0%	-68.8%
Latin America-Caribbean	-18.5%	-96.0%	-77.8%	-61.5%	-62.9%
Middle East	-24.2%	-96.8%	-86.1%	-87.5%	-73.5%
North America	-20.0%	-88.9%	-71.4%	-69.8%	-63.7%
World	**-26.9%**	**-89.7%**	**-72.3%**	**-64.5%**	**-65.0%**

* Revenues estimated assuming constant airport revenues on a per-passenger basis and based on KPIs from the ACI 2020 Economic Report as well as input from ACI Regional offices. Financial figures are rounded for ease of reading. Percentage of change use exact figures.
** Projected baseline (pre-COVID-19) scenario based on adjusted World Airport Traffic Forecasts (WATF) 2020–2040 considering latest insights provided by ACI Regional offices and other inputs.
*** Estimated passenger traffic volumes based on a broad range of inputs provided by ACI Regional offices and industry experts

Source: ACI World

The recovery trajectory

Much uncertainty still surrounds the situation of the aviation industry and projecting the path to recovery at this point is an exercise requiring prudence.

Three scenarios were developed to look at the potential recovery trajectory using the following assumptions.

Optimistic: Multiple effective vaccines available in 2021 reducing the risk of supply shortage in addition to a strong enthusiasm from passengers to restart to fly and an aggressive airlines fleet recovery.

Baseline: Effective vaccine(s) largely distributed in the second half of 2020 in addition to an enthusiasm from passengers to start flying again and a reasonable airlines fleet recovery.

Pessimistic: Effective vaccine(s) in 2021 but complex supply chain requirements (cold chain, limited cargo capacity) and limited vaccine supply as a result. Fear of traveling still present amongst passengers, coupled with prolonged economic downturn and slow airline fleet recovery.

Under those assumptions, ACI World forecast the following related to the recovery of airport passenger traffic (with additional detail in Charts 3 and 4 below):

- Under the **baseline scenario**, global passenger traffic is expected to recover to 2019 levels in the second half of **2023** mainly driven by the recovery of domestic passenger traffic (globally, domestic traffic accounts for 58% of total passenger traffic as of 2019)

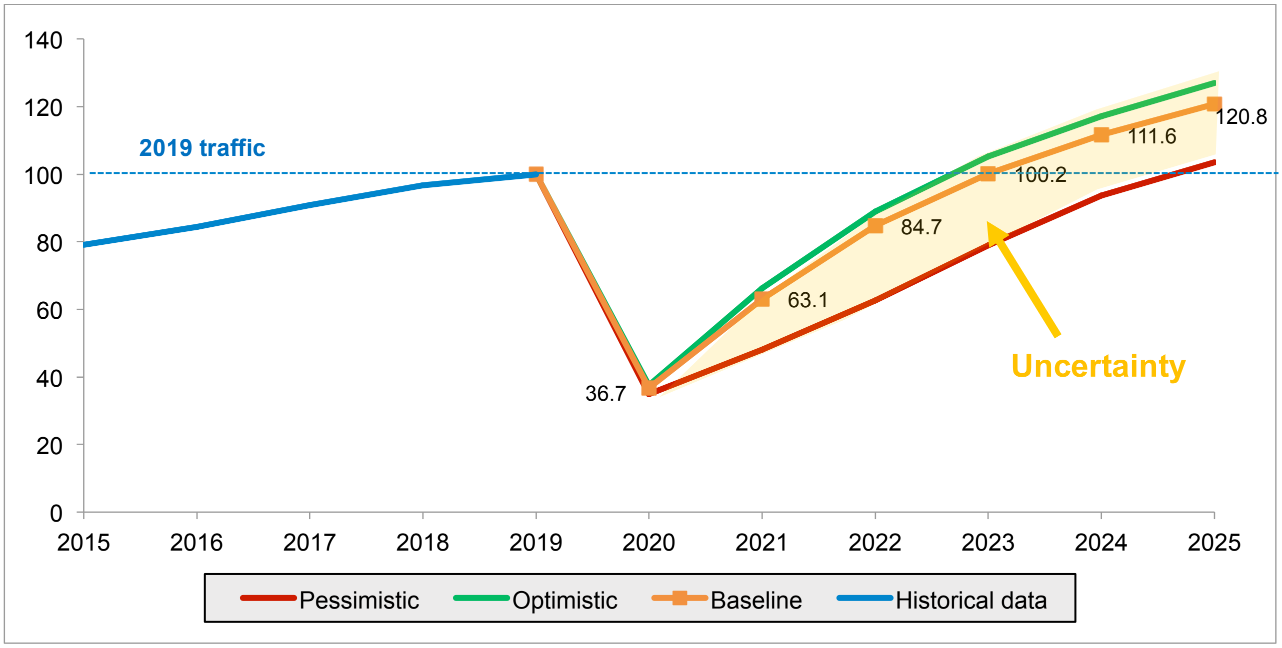
- **Domestic passenger traffic** is expected to recover in **2023**. The recovery of **international passenger traffic** will require one more year, thus getting back to 2019 levels only in **2024**

- At the country-market level, markets having **significant domestic traffic** are expected however to **recover in 2023** to pre-COVID-19 levels while markets with a significant share of international traffic are unlikely to return to 2019 levels until 2024

- In the long run, it is predicted that the global traffic **may take up to two decades to return to previously projected levels** (pre-COVID-19 forecast). A structural change (traffic will never return to pre-COVID-19 forecasted level) is still a possibility

- More than 65 experts in the aviation industry were polled regarding their thoughts on the upcoming air transport recovery and their answers were used for the construction of a Delphi-method forecast, which aligns with the above results.

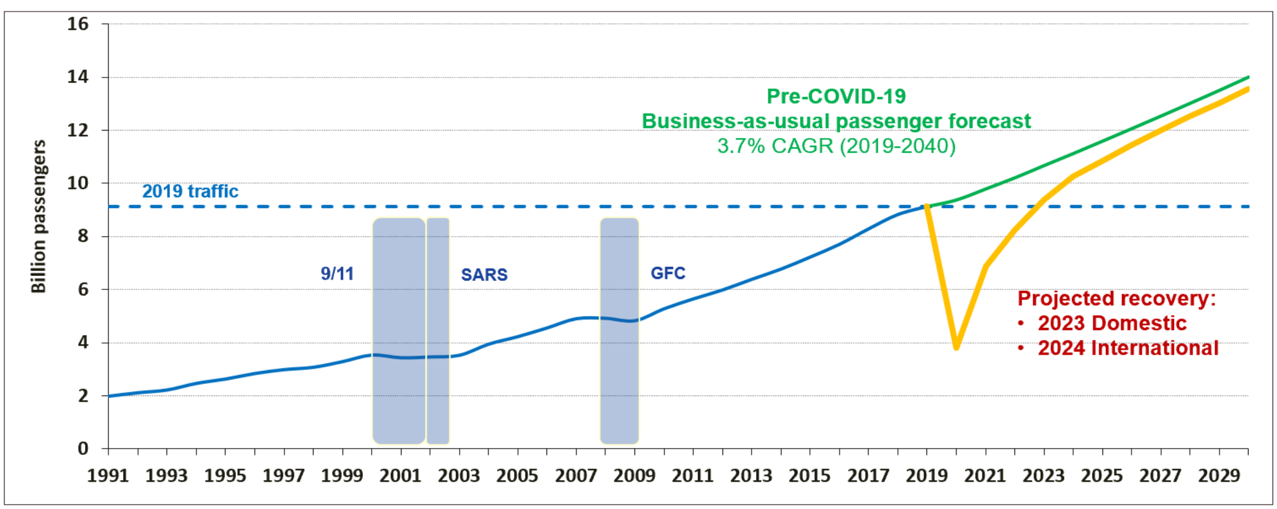
Chart 3: Short-term global passenger traffic projection (indexed, 2019 = 100)



* The business-as-usual (BAU) forecast represents the comparative baseline and is derived from the adjusted World Airport Traffic Forecasts (WATF) 2019–2040 considering latest insights provided by ACI Regional offices and other inputs.
** Estimated passenger traffic volumes scenarios based on a broad range of inputs provided by ACI Regional offices and industry experts

Source: ACI World

Chart 4: Long-term global passenger traffic evolution until 2040 (in billion passengers)



* The business-as-usual (BAU) forecast represents the comparative baseline and is derived from the adjusted World Airport Traffic Forecasts (WATF) 2019–2040 considering latest insights provided by ACI Regional offices and other inputs.
** Estimated passenger traffic volumes scenarios based on a broad range of inputs provided by ACI Regional offices and industry experts

Source: ACI World

Ends

1. Airports Council International (ACI), the trade association of the world's airports, was founded in 1991 with the objective of fostering cooperation among its member airports and other partners in world aviation, including the International Civil Aviation Organization, the International Air Transport Association and the Civil Air Navigation Services Organization. In representing the best interests of airports during key phases of policy development, ACI makes a significant contribution toward ensuring a global air transport system that is safe, secure, customer-centric and environmentally sustainable. As of January 2020, ACI serves 668 members, operating 1979 airports in 176 countries.