arab air carriers' organization

2023 ANNUAL REPORT

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Annual Report Arab Air Carriers' Organization

56th Annual General Meeting

AACO's Mission

To serve the Arab airlines, represent their common interests and facilitate, in a manner consistent with all applicable competition and other laws their cooperation so as to improve their operational efficiencies and better serve the travelling public.

AACO's Vision

To stand out globally as THE association that serves with dedication the Arab airlines and to be instrumental in dealing with an evolving aviation industry.



AACO's Objectives

- To support the Arab airlines' quest for highest safety and security standards.
- To support the Arab airlines' quest for developing their environmental policies for processes in harmony with the environment.
- To actively contribute in the development of human resources.
- To interact with the regulatory bodies to support and protect the interests of the Arab airlines.
- To launch joint projects between member airlines with the objective of achieving efficiencies that will lower their costs in a manner consistent with all applicable competition and other laws and that enhances the members' best practices.
- To provide forums for members and for industry partners to enhance the knowledge base.
- To reflect the positive image of The Arab Airlines Globally.





H.E. Eng. Ibrahim A. Al-Omar Chairman of the AGM and Chairman of the Executive Committee

H.E. Eng. Ibrahim A. Al-Omar, Director General, Saudia

Eng. Yehia Zakaria, Chairman & CEO, EgyptAir Holding Company

Mr. Antonoaldo Neves, Group Chief Executive Officer, Etihad Airways

Mr. Bander Almohanna, Chief Executive Officer & Managing Director, flynas

Mr. Mohamad A. El-Hout, Chairman - Director General, Middle East Airlines

H.E. Mr. Akbar Al Baker, Group Chief Executive, Qatar Airways

Mr. Abdelhamid Addou, Chairman of the Board & Chief Executive Officer, Royal Air Maroc Eng. Samer Majali, Vice Chairman / Board Designee CEO, Royal Jordanian

Mr. Khaled Chelly, President & Chief Executive Officer, Tunisair



AACO'S PRIORITIES



OPERATIONAL SAFETY

To assist members in maintaining the safety of their operations through raising awareness on the latest safety regulatory requirements, advocating the adoption of safety culture, contributing to capacity building, and fostering collaboration among airlines in emergency response planning.



SECURITY

To maintain a platform to share information and risk assessments to improve the security culture, address emerging threats, contribute to capacity building, and promote and support collaboration among all stakeholders in aviation security.



CLIMATE CHANGE

To mitigate the impact of international aviation's emissions on climate change through supporting the efforts of ICAO to ensure successful implementation of its environmental short, medium and long-term goals, and to promote for regulatory and technical principles that would ensure the availability of cleaner energy as one of the major contributors to reaching those goals, in addition to joining efforts with stakeholders to improve operational performance, infrastructure development and waste management.



REGULATIONS

To advocate for policies and regulatory principles that are clear and balanced and that are adopted through transparent methods that include adequate consultations with the relevant stakeholders.



DIGITAL TRANSFORMATION

AACO strives to raise awareness about the significance of digital transformation in the travel sector, support airlines in adopting technologies that can cater to consumers' aspirations and empower airlines to optimally manage their relationship with them.



AIRSPACE INFRASTRUCTURE

To promote and support infrastructure reform in air traffic management and airports in order to alleviate congestion in the airspace and at airports, improve operations, and contribute to carbon footprint reduction.

COST

To assist member airlines in optimizing their operational environment, promote best practices while rationalizing their cost through cooperative activities, within the boundaries of competition and anti-trust laws.



AWARENESS & CAPACITY BUILDING

To provide the highest quality and cost-effective training services to meet the training needs of member airlines and contribute to improving the performance of human capital in the region by organizing various training courses covering most fields of the air transport industry that are held in the branches of the regional training center or at member airlines' premises or through eLearning platforms in addition to organizing specialized forums to ensure continuous communication between all parties concerned in the air transport industry.

Table of Contents

| Operational and Financial Performance of the Industry and AACO Members5 | | | |
|---|--|--|--|
| The Economy | | | |
| Global Air Travel | | | |
| Global Passenger Operations | | | |
| • Global Fleet Status | | | |
| • Financial Performance of the Industry8 | | | |
| AACO Member Airlines | | | |
| AACO Members' Passenger Operations9 | | | |
| • AACO Members' Fleet Status | | | |
| • Financial Performance of AACO Members | | | |
| Airports | | | |
| Travel and Tourism | | | |
| Safety | | | |
| Aviation Security | | | |
| Aeropolitical Affairs | | | |
| Aviation and Environmental Sustainability | | | |
| Digital Transformation | | | |
| Effective Cooperation and Awareness 27 | | | |

Operational and Financial Performance of the Industry and AACO Members

Air Traffic Updates

Passenger Traffic (RPKs) and Seats (ASKs) as % of 2019, and PLF (%)



Trade and Cargo Activity



Financial Performance





The **Economy**

With the impact of COVID-19 still reverberating worldwide, the war in Ukraine unleashed a new crisis in 2022, collectively resulting in significant supply chain disruptions and steep rise in commodity prices. Although monetary tightening helped control inflation, it triggered capital outflows and financial instability. In addition, the fight against inflation comes with a heavy debt burden from the COVID-19 era, leaving countries with limited fiscal buffer. **Global GDP grew by 3.5% in 2022, down from 6.3% registered in 2021**.

As debt levels remain high, and global inflation still above the pre-pandemic levels (expected to reach 6.8% in 2023, almost double that of 2019), coupled with capital outflows, especially in emerging and developing economies, and supply chain disruptions, **GDP growth is expected to slow down further in 2023 to reach 3.0% compared to 2022**.

On the other hand, the Arab world economy registered a notable expansion in 2022, **growing by 5.9% compared to 2021**, reflecting high oil revenues, strong domestic demand, recovery in tourism activity in major tourism markets, and an increase in remittances. That being said, inflation, geopolitical tensions, monetary tightening, and supply chain disruptions remain the main challenges to growth for the Arab economy in 2023. Economic activity is expected to slow down in 2023, **growing by 3.3% when compared to 2022**, which is still above the expected global growth in GDP.

Global Air Travel



Global Passenger Operations

Despite the negative impact of the war in Ukraine and the pandemic-related travel restrictions in the Asia-Pacific region, global passenger traffic (measured in RPKs) and seat capacity (measured in ASKs) witnessed significant improvement in 2022. **RPKs and ASKs grew by 64.6% (31.5% below 2019 levels) and 39.9% (28.0% below 2019 levels), respectively, in 2022 compared to 2021**.

During the first half of 2023, the industry's recovery gained momentum, mainly due to China lifting travel restrictions in December 2022, where RPKs and ASKs reached 9.7% and 8.4% below 2019 levels. The passenger load factor during the first half of 2023 reached 80.9%. According to IATA estimates, RPKs and ASKs are expected to remain 12.2% and 10.1%, respectively below 2019 levels in 2023.

Global Fleet Status

In 2022, the total number of in-service aircraft **reached 26,466 aircraft, rising by 5.1% compared to 2021**, while remaining **6.3% below 2019 levels**. As countries in Asia started easing travel restrictions late 2022 (mainly China), the number of in-service aircraft recovered further, **reaching 28,598 aircraft as at July 31, 2023**.

The total number of fleet retirements reached **476 aircraft in 2022 and 326 as at 31 July 2023**, bringing the rate of retirements as percentage of total in-service fleet to 1.8% and 1.1% respectively. The rate of aircraft retirements has typically hovered between **2.0% and 3.0% of total in-service aircraft**.



Financial Performance of the Industry

Although the industry has recorded a **net loss of USD 3.6 billion in 2022**, airlines have managed to record an operating result of **USD 10.1 billion**. However, the industry remains financially vulnerable considering the huge gap of USD 111 billion losses recorded in 2020, due to the COVID-19 crisis. In addition, the drastic increase in airlines' fuel bill in 2022 exerted further pressure on their margins. In 2022, airlines spent around **USD 214 billion on fuel and USD 169 billion on labor costs**, an increase of **109.4% and 5.3%** respectively, when compared to 2021. Both fuel and labor costs represented around 37% of the overall cost components of airlines in 2022 compared to around 29% in 2021. Inflation and supply chain crunches were the main drivers behind the increase in fuel and labor cost.



Distribution of the Cost Components for the Airline Industry (% of Operating Expenses)

⁸

AACO Member Airlines

AACO Members' Passenger Operations

In 2022, AACO members' passenger traffic witnessed a significant improvement, mirroring the strong demand for travel globally and increase in household consumption in the Arab region. AACO members' Passenger Load Factor (PLF) improved by **22.8 percentage points in 2022 compared to 2021**. Overall, passenger traffic, measured in **RPKs grew by 138.9% and seats offered, measured in ASKs by 66.5% in 2022 compared to 2021**.

Passenger traffic (RPKs) year-to-date (YTD) between January and May 2023 was only **5.9% below 2019 levels and seats offered (ASKs) were lower by 11.0%** compared to the same period. The PLF for YTD between **January and May 2023 reached 79.1%**, **4.4 percentage points above 2019** levels when comparing the same period. **AACO members are expected to fully recover to 2019 levels in terms of RPKs and ASKs by the end of 2023**.



AACO Members' Fleet Status

In 2022, fleet activity for AACO members saw a significant uptick, driven by strong demand for air travel. Fleet utilization for AACO members averaged approximately **9 hours, a notable increase from the roughly 6 hours recorded in 2021**. The total number of **in-service aircraft for AACO members reached 1,273 in 2022**, an increase of 9.1% compared to 2021 but still remaining 9.0% below 2019 levels. The average age of AACO members'

in-service fleet was 8.85 years in 2022, 3.82 years younger than the global in-service fleet. As at July 31, 2023, AACO members' in-service fleet improved further, reaching **1,430 aircraft, 12.3% and 2.2% above 2022 and 2019 levels**, respectively. Finally, AACO members' order book as at 30 August 2023 anticipates the delivery of **1,293 new aircraft until 2035**.



Financial Performance of AACO Members

Given the resumption of operations on most international routes, and the significant increase in passenger load factor (up by around 22.8 percentage points in 2022 compared to 2021), AACO members achieved an operating result of around USD 4.8 billion in 2022, marking their first profitable year after COVID-19. Although AACO Members' fuel bill has increased by 147.2% in 2022 compared to 2021, reflecting the global increase in jet fuel prices, other cost components, especially labor costs remain controlled when compared to the industry.

In addition, regarding employees' productivity per Available Tonne Kilometers (ATKs), reporting AACO members' ATKs per employee regained strength in **2022 to reach 843 thousand ATKs per employee**, remaining slightly below **2019 levels (-5.7%), yet still almost double the industry average**. The total employee count of AACO members remains **1.1% below 2019 levels in 2022 at 146,556 employees**.







In 2022, passenger traffic across the world airports grew by 45.7% compared to 2021 to reach around **6.8 billion** passengers, remaining at 26.2% below 2019 levels.

18.2% below

2019

17.7% below

2019

13.7% below

2019

Arab World

Similarly, passenger traffic across Arab airports remained **18.2% below 2019 levels in 2022**, reaching around 322 million passengers.

All regions are falling behind 2019 levels, mainly due to the weak performance in the Asia-Pacific region in 2022, which remains at **53.8% below 2019 in terms of passenger traffic**. The top performing region in 2022 was Latin America, achieving **92.7% of 2019 levels in 2022**. Global airports passenger traffic is expected to reach 92.2% of 2019 levels in 2023, with all regions (Sub-Saharanb Africa, Arab World, Asia-Pacific, Europe, and North America) remaining below 2019 levels, **except Latin America which is expected to exceed 2019 levels by 2.1%**.

Reflecting the slowdown in global trade activity, cargo traffic **shrank by 6.7% in 2022 compared to 2021 and remains 2.6% below 2019 levels**. Cargo traffic in North and Latin America in 2022 **exceeded 2019 levels by 6.3% and 6.9% respectively, while the remaining regions remain below 2019 thresholds**.

Source: ACI, AACO

Travel and Tourism (T&T)



Travel and Tourism (T&T) Contribution in the Economy (per region)

In 2022, the Travel & Tourism (T&T) sector contributed 7.6% to the global GDP, an increase of 22.0% compared to 2021 (22.9% below 2019 levels). The T&T sector supported 9.0% of the global jobs market in 2022, increasing by 7.9% compared to 2021, while remaining 11.4% below 2019 levels. International tourist arrivals in 2022 reached 963 million tourists, 111.2% above 2021 and 34.3% below 2019 levels.

The recovery of the global T&T sector during 2022 was stifled by the weak performance recorded in Asia-Pacific, as the region grappled with the pandemic wave that hit it, whereby governments introduced travel restrictions on both domestic and international flights.

Safety

Aviation Safety Recap 2022

- In 2022, there were five fatal accidents involving loss of life to passengers and crew. This is reduced from seven in 2021 and an improvement on the five-year average (2018-2022) which was also seven.
- The **fatal accident rate improved to 0.16 per million sectors for 2022**, from 0.27 per million sectors in 2021, and also was ahead of the five-year fatal accident rate of 0.20.
- The all-accident rate was 1.21 per million sectors, a reduction compared with the rate of 1.26 accidents for the five years 2018-2022, but an increase compared with 1.13 accidents per million sectors in 2021.

| Global Overview | Total Accidents | Fatal Accidents | Hull Losses | | Fatalities | Accident Rate / million |
|-------------------|--------------------|--------------------|-------------|-----------|------------|-------------------------|
| | | | Jet | Turboprop | | sectors |
| Average 2018-2022 | 43 | 7 | 5 | 4 | 231 | 1.26 |
| 2021 | 29 | 7 | 3 | 5 | 121 | 1.13 |
| 2022 | 39 | 5 | 5 | 5 | 158 | 1.21 |

Source: IATA Safety Report 2022, AACO



Source: IATA Safety Report 2022, AACO

AACO member airlines have not reported any fatal accident since 2016.

| AACO Members | Total Accidents | Fatal Accidents | Hull Losses | Fatalities |
|-------------------|------------------------|-----------------|-------------|------------|
| Average 2018-2022 | 0.6 | 0 | 0 | 0 |
| 2021 | 1 | 0 | 0 | 0 |
| 2022 | 1 | 0 | 0 | 0 |

AACO continues to work with relevant organizations, including ICAO, IATA, and Flight Safety Foundation to bring awareness to aviation stakeholders on the importance of mitigating safety risks through: Awareness Sessions & Training, Encouraging Proper Safety Reporting, Developing Recommendations, Enhancing Aviation Safety Culture, and Information Sharing.



The Aviation Spectrum

The issue of **5G interference with radio altimeters has been under the spotlight in the United States** with the rollout of c-Band 5G operations in January 2022 at some US airports which resulted in big disruptions to aviation operations as radio altimeters are key to aircraft landing and safety systems.

The FAA has issued its final airworthiness directive in May 2023.

The new issued directive prohibits airplanes from performing certain low-visibility landing operations at almost all US airports after 30 June 2023. Unless having upgraded their radio altimeters, all aircrafts must have a 5G c-Band-compatible radio altimeter installed before 1 February 2024.

The directive also requires certain airplane flight manual revisions.

AACO, along with IATA and other regional associations for airlines around the world, continue to voice concerns to the US FAA about the impact of this new airworthiness directive.

ICAO has adopted a resolution in 2022 to urge States to ensure close collaboration between aviation authorities, military authorities, service providers, radio regulatory and spectrum enforcement authorities to put in place any special measures required to ensure that the spectrum used by all CNS systems, and GNSS in particular, is free from harmful interference; while also urging states to refrain from any form of jamming, or spoofing affecting civil aviation;

Aviation Security

Aviation is a sector particularly vulnerable to unstable international political and security situations. These situations pose risks that can vary in nature and complexity and addressing them is crucial to ensure the safety of passengers, crew, and the general public.

Unruly passenger behavior, cyber-threats, insider threats, and conflict zones prevail as major threats on aviation's safety. While other threats include terrorism, unauthorized access to restricted areas, hijackings, lone wolf attacks, rogue drones, and identity fraud.

To mitigate these risks, **aviation security measures** are continuously evolving and involve a combination of **technologies**, **regulations**, **training**, **intelligence sharing**, **and cooperation** among governments, airlines, and relevant agencies.

Below is a focus on four major threats:

Conflict Zones

While conflict zones proliferate around the globe, below are two major updates from 2023.

Ukraine and Russia: There is an ongoing active war in Ukraine between Russian and Ukrainian forces. **Ukraine closed its entire airspace** to all commercial operations on February 24, 2022. **Russia, Belarus and Moldova have closed large sections of their own airspace** near to their FIR boundaries with Ukraine. The US and Canada have since banned their operators from the section of airspace in Russia along its FIR boundaries with Ukraine, and several other countries have issued airspace warnings.

Sudan: Following a military coup in April 2023, **Sudan airspace remains closed to all civilian flights**. There is ongoing fighting in Sudan between government and militant forces, despite a ceasefire agreed at the end of April. Khartoum airport is closed. No NOTAMs are being issued.

CONFLICT ZONES THREAT TO AVAITION

- Anti-Aircraft Weapons
- Uncontrolled Airspace
 Misidentification and Shoot-Downs
- Lack of Airport Security
- Risks of Aircraft Diversion
- Increased Terrorist Activity
- Lack of Surveillance and Intelligence
- Lack of Regulatory Oversight
- Deterioration of Infrastructure
 - Lack of ATC service

AACO Aviation Security Group continued utilizing the Information Sharing Mechanism which was established in 2014. AACO also arranged for an industry briefing for member and partner airlines to know more about the situation in Sudan, and the resumption of operations in Syria and Yemen.

Cyber-security

Cybersecurity in aviation is a critical aspect of maintaining the safety, integrity, and reliability of aviation systems, networks, and data.

As the aviation industry becomes more digitized and interconnected, the risk of cyberattacks increases.

Threat comes from breaches to the **flight control** systems, air traffic control systems, airport digital systems for security screening, baggage handling, access control, and more. **Onboard** systems, such as inflight entertainment systems, Wi-Fi, and **passenger databases**, supply chain risks such as aircraft manufacturers and aviation suppliers, and attacks on personal passenger data and sensitive information are also a threat.

AACO and member airlines continue to strengthen the cybersecurity culture, where airlines continue to adopt a comprehensive approach of technological measures, operational practices, policies, and employee awareness, and AACO continues to provide awareness on threats and mitigation measures.

Insider Threats

Insider threats in aviation security refer to **individuals who have authorized access to secure areas**, **information**, **or systems** within the aviation industry but **misuse their privileges** to engage in criminal or harmful activities. These threats can have serious implications for aviation safety and security.

Recently in a post-pandemic situation, insider threats increased due to an urgent need for security personnel after airports opened for operations that sometimes resulted in **inadequate background checks**. Other factors that contribute to insider threats could **be financial difficulties**, **ideological beliefs**, **personal grievances**, **pressure from external parties**, **lack of oversight**, **or a weak security culture in the organization**.

The industry applies **mitigation measures** to avoid insider threats such as:



Addressing insider threats requires a multi-layered approach that involves technological solutions, organizational policies, and a commitment to fostering a security-conscious workforce.

Unruly Passengers

Unruly behavior onboard an aircraft refers to **disruptive or disorderly conduct** exhibited by passengers during a flight. Such behavior can pose significant risks to the safety, security, and overall experience of passengers, crew members, and the aircraft itself.

National regulations and enforcement measures are positively increasing, while more states are joining Montreal Protocol of 2014; now **ratified by forty-five states, comprising 33% of international passenger traffic have ratified MP14**, with Angola, Armenia, Cyprus, Kenya, Luxembourg, Niger, **Oman**, Peru, Romania, Rwanda, Sierra Leone and the **United Arab Emirates** becoming signatories in 2022 and the first half of 2023.

MP14 is an essential tool that allows state law to address incidents onboard flights that land in its territory regardless where the aircraft is registered. This **eases the prosecution process**.

Prevention and deterring unruly behavior are as important. This requires bringing awareness to the passengers on the unruly acts and the consequences of such acts.

MOST COMMON INCIDENT CATEGORIZATIONS IN 2022

There was **1 incident reported for every 568 flights in 2022**, up from one per 835 flights in 2021, as per IATA's most recent data. Most incidents fell under the below categories:

- non-compliance
 - I smoking
 - I failure to fasten seatbelts
 - exceeding the carry-on baggage allowance or failing to store baggage when required
 - I consumption of own alcohol on board
- verbal abuse
- intoxication.

Physical abuse incidents remain rare, but they did increase 61% over 2021, occurring once every 17,200 flights.

On the other hand, ICAO has provided, in its last assembly resolution a **model legislation on Certain Offences Committed on Board Aircraft**, in addition to the availability of **ICAO's Manual on the Legal Aspects of Unruly and Disruptive Passengers (Doc 10117). IATA** has also issued in 2022 a **"Cabin Operations Safety Best Practices Guide"**.

> AACO has advocated for ratifying MP14 since its inception in 2014. So far, Bahrain, Jordan, Egypt, Kuwait, Qatar, Oman, and the United Arab Emirates are party to the Protocol from the Arab world.

Aeropolitical Affairs

In a post-pandemic world, countries around the world have recognized the vital importance of enhancing their air services relations. As international travel and tourism surged, there's a **newfound emphasis on air service** relations which is driven by the realization that interconnected and resilient air networks play a pivotal role in stimulating economies, reuniting families, and fostering cultural exchange.

Bilateral air services agreements, along with **easing visa procedures**, **are helping** cater for the increase in air travel demand while promoting more efficient air routes, increasing flight frequencies, and **mutual benefits for airlines and most importantly for the traveling public**.

On the other side, we see **some regulators increasing taxes on aviation**, allowing airports to raise user charges, and proposing and adopting regulations that do not reflect an understanding of aviation's mechanism and operational environment. More on this in the below:

Air Passenger Rights Regulations

Following the operational disruptions that took place during the pandemic, **regulators are now re-visiting their regulations for air passenger rights**, although those disruptions were beyond the control of airlines. **Most air passenger rights regulations hold airlines financially accountable for the inconveniences instead of a shared responsibility between all relevant stakeholders** (airlines, airports, air traffic controllers) where the causer of the disruption would be held financially liable towards passengers.

The cost associated with unthought-of regulations is very high. The below demonstrates essential principles for passenger rights regulations.

Conducting Consultations

Proportionality and Compatibility

Joint Liability & Financial Accountability Principles of Air Passenger Rights' Regulations

Consistent with Relevant Treaties Allows for Service Differentiation

Caters for Massive Disruptions

Clarity

Respect of Jurisdictions

Over the past year, proposed changes to the air passenger rights regulations in **Canada** and the proposed or planned rulemakings in the **United States** mostly focus on disruptions to travel and hold airlines accountable for that. Meanwhile, the **revision of the EU air passenger rights regulation (261/2004) is still stalled** in spite of the huge cost for airlines and hence passengers, and even with more than 70 interpretations by the European Court of Justice, showing the unclarity and ambiguity of the regulation while deviating it from its original purpose.

AACO has worked under the umbrella of the Aeropolitical Watch Group to communicate and advocate for the above principles in Canada and the United States this year in cooperation with IATA, with a lot of focus on the principle of the importance of joint liability and financial accountability to be shared with relevant stakeholders.

Passengers with Disabilities

ICAO has committed, through its 41st Assembly resolution, to develop guidance on the design and implementation of a policy aimed at making air transport more accessible for passengers with disabilities and reduced mobility. AACO supports harmonious approaches to such regulations, and advocates for essential principles to be followed by regulators when developing such regulations, like the ones advocated for in air passenger rights regulations.

Slots Regulations

Utilization of scarce airport capacity and consistent airline schedules across airports benefit consumers. This requires a harmonization in slot regulations across the globe to avoid disruptions to airline schedules and distorting global connectivity.

AACO has joined IATA, the African Airlines Association (AFRAA), Airlines for America (A4A), Airlines International Representation in Europe (AIRE), Association of Asia-Pacific Airlines (AAPA), European Express Association, European Regions Airline Association (ERAA), and Latin American and Caribbean Air Transport Association (ALTA), in a global statement that set out the benefits of the World Airport Slot Guidelines (WASG), which has ensured decades of stability and consistency in the application of slot management.

Taxation

Governments continue to adopt **green taxes which returns are not invested in aviation**. Such taxes are only adding to travel cost and sacrificing connectivity.

The EU Energy Taxation Directive is still under review as part of the EU Fit for 55 Package. It removes jet fuel's current tax-free status. In the proposal, the minimum tax rate for aviation fuel for intra-EU flights would start at zero and increase gradually over a 10-year period. Sustainable Aviation Fuels would be exempt, as would cargo-only flights. AACO continues to advocate that regulators should:

- Avoid adding taxes to aviation as that only increases the cost of travel and hurts connectivity.
- 2 Follow the ICAO recommendations when considering taxes, that include conducting consultations, among other principles.
- **3** Re-invest the returns of existing taxes in initiatives related to aviation.

Aviation and Environmental Sustainability

Environmental Regulatory Obligations for Aviation

AACO member airlines, and airlines around the world, are dealing with a variety of environmental requirements and targets. That includes their obligations under ICAO's CORSIA, the EU Emissions Trading Scheme, SAF uplifting mandates in some countries, and the road to Net Zero Emissions by 2050. Add to that taxes and charges under the green banner.



CORSIA is in place till 2035. It requires offsetting all emissions exceeding 85% of 2019 levels.

In the Arab world, UAE, Qatar, and KSA are within the scope of CORSIA. In addition, Oman, Kuwait, Bahrain and Iraq volunteered to join CORSIA.

EU ETS

For the time being, it is applied on airlines operating flights within the EEA region. Starting 2027, departing flights from the EU to countries that are not captured by CORSIA will be included.

Starting 2026, airlines will have to offset all emissions. SAF Mandates

EU regulation – Refuel EU: 2% by 2025, 6% by 2030, and 20% by 2035, up to a maximum of 70% by 2050.

France, Norway & Sweden mandates are in place (1% - 5%). UK aiming at 10% by 2030. Many in the pipeline including, India, Turkey, Japan.

Net Zero Emissions as per ICAO

Agreed by states in ICAO to be achieved through the contribution of the following in emission reduction of 11% from infrastructure, 21% technology, 55% SAF and 13% residuals which need to be offset.

In addition to other Emissions Trading Schemes, various taxes under the green banner that are not benefiting aviation's drive towards meeting its environmental targets, and operational restrictions related to noise that in some cases are being introduced without following the ICAO Balanced Approach for noise management; as is the case at Schiphol airport, where the Dutch government decided to limit the number of flights at the airport to mitigate noise, while not following the balanced approach.

CORSIA

- The total number of states voluntarily participating for 2024 is 125 states.
- Batches of sustainable aviation fuels (SAF) have been certified under CORSIA for the first time. Nine batches, totalling 1,542 tonnes, were produced from wastes and are characterized by 75% to 84% lower CO2 emissions compared to conventional aviation fuels.
- To ensure enough offsets are available for airlines to buy, there's still a need that ICAO approves more projects to issue carbon offsets eligible for use under CORSIA, and that states are encouraged to register their projects to be eligible for use under CORSIA.

EU ETS

On 9 February 2023, the EU formalized the agreement reached on the provisions to reform the EU ETS and outlining the implementation of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) in the EU. The main elements are:

- Departing flights from the EU into third countries not captured by CORSIA will be captured by the EU ETS as of 2027 and would need to offset all of their emissions above the ETS baseline.
- As of 2027, all flights departing from an EU country will be subjected to the EU ETS if the below two conditions do not apply. This will be decided upon on 1 July 2026.
 - ICAO 2025 Assembly strengthens the CORSIA scheme in line with achieving its long-term aspirational goal.
 - Countries within the scope of CORSIA represent at least 70% of international aviation emissions
- Gradual phase-out of the free EU ETS aviation emission allowances (EUAAs). Airlines will need to offset all their emissions as of 2026.

ReFuel EU & SAF Mandates

- The ReFuel EU will cover flights departing from EU airports (within the Union and departing to third countries).
- Aviation fuel suppliers should supply a minimum share of SAF at EU airports, as follows:
- There is an obligation for aircraft operators to ensure that the yearly quantity of aviation fuel uplifted at a given EU airport is at least 90% of the yearly aviation fuel required.
- The rules require the Commission to report by 2024 on the feasibility of a Book and Claim (B&C) system.
- Meanwhile, some EU states are already applying SAF mandates to uplift a specific percentage of SAF for flights departing from EU airports.
- These mandates apply a penalty on the fuel suppliers that in turn transfer it to the airlines. In many cases the penalty is being applied by the fuel suppliers on the airlines even if the supplier meets its SAF obligations under the mandates.

| | SAF Targets | Of Which: eFuel |
|------|----------------|--------------------|
| 2025 | 2% | 0% |
| 2030 | 6% | 1.2% |
| 2035 | 20% | 5% |
| 2040 | 34% | 10% |
| 2045 | 42% | 15% |
| 2050 | 70% | 35% |
| | | |

SAF Policies Chart



Net Zero Emissions Long Term Aspirational Target

The 41st Session of the ICAO Assembly resolved that "ICAO and its Member States are encouraged to work together to strive to achieve a collective long-term global aspirational goal for international aviation (LTAG) of net-zero carbon emissions by 2050, in support of the Paris Agreement's temperature goal". To achieve the LTAG, a comprehensive strategy consisting of a variety of measures, such as technology, sustainable fuels, operational enhancements, and market-based measures, is required.



Contribution by Pillar to Achieve Net Zero Emissions (NZE) by 2050 according to ICAO and IATA

Sustainable Aviation Fuels (SAF), Lower Carbon Aviation Fuels (LCAF), and other aviation cleaner energies are anticipated to have the largest impact on reducing aviation CO2 emissions by 2050, and while there are increasing initiatives to develop and deploy these fuels, their production levels are still extremely low, accounting for only 0.1% of all aviation fuel consumption.

Adding the component of SAF to the overall cost of fuel could increase the cost per seat flown on different routes up to around USD 47 per seat in 2025, USD 73 in 2035, and USD 109 in 2050. Please see chart below.



According to IATA's Net Zero scenario, airlines would need 350 million metric tonnes of SAF by 2050 to meet their targets, while the potential production targets equate to 120 million metric tonnes. In order to cover this gap, the following is needed:

What is needed to support the availability of Sustainable Aviation Fuels for international aviation at competitive prices, to meets its climate change goals:

Governments to adopt policies to incentivize the production of SAF rather than imposing levies, penalties, and mandates.

Incentives provide positive reinforcement for using SAF. This can encourage producers to increase production levels and airlines and customers to voluntarily adopt SAF, as they are rewarded for doing so.



A global book and claim system allows for transparent tracking and verification of SAF, enhancing the credibility of reduction in emissions resulting from its use. It facilitates the trading and distribution of SAF, making it easier for airlines and other stakeholders to access sustainable aviation fuel regardless of their geographical location and meet compliance requirements and carbon reduction targets.

Such a global system would also encourage investment and collaboration among countries, fostering economic benefits, and help stabilize the price of SAF by creating a more liquid market for trading and distributing SAF. This can make SAF more cost-competitive.

ICAO to standardize SAF certification criteria to enable airlines to be credited for emissions reduction when using SAF under any scheme.

Standardization of SAF certification would bring the following benefits:

- Easier trade and acceptance of SAF across borders.
- Encourages more producers to enter the market and increases the availability of SAF.
- Ensures that all SAF meet the same sustainability criteria, maximizing emissions reductions across the industry.
- Enhances investor confidence in the SAF market.
- Simplifies compliance for airlines and SAF producers, reducing the complexity of navigating different regional or national regulations.

Airlines must be able to claim emissions reductions from the use of Sustainable Aviation Fuels and Low Carbon Aviation Fuels.

When airlines buy sustainable aviation fuels that are 2 to 2.5 times more expensive than traditional jet fuel, they need to be able to claim the reduction in emissions they attained by using that SAF under any regulatory scheme.

ICAO's Third Conference for Sustainable Aviation Fuels (CAAF/3)

The ICAO third conference for sustainable aviation fuels will take place in Dubai on 20-24 November 2023 and is an important milestone to agree on principles for SAF to be commercially available, traceable under an accounting mechanism, and accredited to the airlines when they use it under any scheme. The conference aims at agreeing on a global framework regarding the use of sustainable aviation fuels.

Throughout 2023, climate change issues were managed by three working groups in AACO, being the Environmental Policy Group, the Aeropolitical Watch Group, and the Sustainable Aviation Fuel Task Force. The groups worked in close coordination with the Environmental Committee of the Arab Civil Aviation Organization and the Arab representatives at the ICAO Council.

The groups followed up on all environmental issues leading to coordination for the ICAO CAAF/3.

Digital Transformation

Importance of Digital Transformations in Aviation Industry Development

Digital technologies have become an essential aspect of human life. It has taken the lead in many aspects of the human race. It is now a cultural evolution and a social phenomenon, and all industries, and aviation is no exception, have adopted digital transformation.

For many years, and ongoing still, the aviation industry has been undergoing digital transformation, with many airlines adopting cloud-based applications, big data, and "Internet of Things" to enhance customer experience, airline performance, and competitiveness; because digital technologies enable airlines to shorten planning cycles and become more agile and flexible leading to increased safety, efficiency, and convenience for passengers.

With the influx of demand, travel, commercialization, and advancements, the travel industry has introduced the online booking facilities, mobile apps, automated check-in, and e-tickets which have made booking a flight more accessible and convenient. Digital transformation has also led to smart airports that use technology to improve the traveler experience. However, the interlinking between the various systems is missing as many of the solutions are not interoperable.

Biometric Digital Identity

The adoption of digital identity and the implementation of biometric technology play a pivotal role in creating a seamless and efficient travel journey for passengers at airports and by airlines and it can be at its optimum when adopted by governments.

The key elements for digital identity:

Enhanced Security

Facial recognition and fingerprint scans are secure ways to verify travellers' identities. They reduce identity fraud and improves airport security by verifying the traveller.

Streamlined Check-In and Boarding

Biometrics and digital identities can simplify check-in and boarding. Using a facial scan or fingerprint, passengers may check-in and board flights without boarding tickets, saving time.

Enhanced Passenger Experience

Biometrics and digital identity make travel easy. They no longer need to show their ID and travel documentation at checkpoints, making the trip easier and more pleasant.

Reduced Queues & Congestion

Airports can shorten check-in, security and boarding gate queues by automating identity verification and authentication. This improves airport efficiency and passenger satisfaction.

Efficient Baggage Handling

Digital identity can be linked to baggage handling systems, allowing for automated baggage drop-off and retrieval. This saves passengers time and reduces misplaced luggage.

Cross-Boarder Travel

Biometric authentication streamlines international travel. Digital identities allow passengers to clear immigration and customs quickly and efficiently.

Personalized Services

Airlines and airports can customize passenger services using digital identification data they can provide personalized information and services depending on traveler preferences and history.

Data Privacy & Security

Digital identity and biometrics are convenient but present data privacy and security concerns. Airlines and airports must protect passenger data with strong data protection technologies and legislation.

Interoperability

To ensure a truly seamless travel experience, there is a need for interoperability between different airports, airlines, and governments. Passengers should be able to use their digital identity and biometrics across multiple airports and airlines without issues.

Public Acceptance

Building trust and gaining acceptance among passengers is crucial. Clear communication about how digital identity and biometrics are used and the security measures in place is essential to address concerns and gain passenger confidence.

Finally, digital identity and biometric technology can make travel more efficient, safe, and passenger friendly. However, airlines, airports, and governments must work together to ensure a seamless and secure travel journey for passengers.

Passenger Experience is a Key Differentiator

In a competitive market, providing exceptional customer service and meeting passenger expectations are essential for the success of the travel service provided by airlines and airports at par. This can be achieved through the following:

Customer-Centric Approach

Adopt a Customer-Centric Approach where the needs and preferences of travelers are at the forefront of their operations. This includes understanding customer feedback, analyzing data, and tailoring services to meet passenger expectations.

Personalization

Personalization by using data analytics and technology to personalize the passenger experience. This involves offering personalized travel recommendations, customized in-flight services, or tailored airport amenities based on passenger profiles and preferences.

Efficiency and Convenience

Improving efficiency and convenience for passengers is a top priority. This encompasses streamline all travel related processes from booking, check-in, baggage drop, border control, boarding and even arrivals at destinations where the customer is required to do less and fast.



Digital Transformation

Digital technology plays a crucial role in enhancing the passenger experience. Mobile apps, biometric self-service kiosks, and biometric border control will make travel more convenient and efficient.

Competitive Advantage

Differentiating through exceptional customer service and passenger experience can provide a competitive advantage in a crowded market. Passengers are more likely to choose airlines and airports that consistently meet their needs and provide a positive travel experience.

Brand Loyalty

A focus on the customer can lead to increased brand loyalty. Passengers who have positive experiences are more likely to become repeat customers and brand advocates, helping airlines and airports grow their customer base.

Customer and passenger-centric approach is a significant drive and a key differentiator for airlines and airports. It not only enhances the travel experience but also helps airlines and airports stand out in a competitive market, ultimately leading to improved customer loyalty and business success.

AACO has been pioneering in considering the issue of digital transformation one of its top priorities and has established its digital transformation task force and the outcome of that work will be known at the 56th AGM.

Effective Cooperation, Networking, and Awareness

AACO strives to enhance effective cooperation between member airlines to bring added value to them, and that happens through the work of AACO's steering boards, task forces, and working groups. Under the umbrella of those steering boards and groups, AACO addresses issues of importance to member airlines, and cooperates with regional and international bodies, non-Arab airlines, manufacturers, service and solutions providers, and other air transport stakeholders, offering a broad framework of cooperation for all concerned.

Awareness and networking are provided through AACO's publications, specialized forums, dialogue and coordination with regional and international bodies, and within the work of the various steering boards, taskforces, and working groups.

In addition, AACO continues to utilize the Regional Training Center by providing relevant training through in-person workshops and courses and via its e-learning platform.

Cooperation under the Umbrella of AACO's Steering Boards, Task Forces, and Working Groups

Aeropolitical Watch Group

The Aeropolitical Watch Group (AWG) followed up throughout 2023 on aviation's regulatory environment including but not limited to slots allocation rules, air passenger rights, accessibility, and other aeropolitical affairs affecting the operations of AACO member airlines.

The group as well cooperated extensively with AACO's Environmental Policy Group and AACO's Sustainable Aviation Fuel Task Force on policies related to environmental sustainability and the regulatory environment of Sustainable Aviation Fuels.

Environmental Policy Group

The Environmental Policy Group (EPG) focused its work on the environmental regulatory obligations for aviation, including the ICAO 41st Assembly resolution adopting the long-term aspirational goal of net zero emissions by 2050 and the adjustment of the CORSIA baseline to 85% of 2019 emissions from 2024 till 2035, in addition to ICAO Council's decision on the CORSIA eligible emission units for the first phase and the SAF eligible fuels.

Furthermore, the EPG also discussed the implications of the EU agreement that reforms the EU ETS, as part of the EU fit for 55 regulations where the scope will be modified to include all departing flights from an EU country to third countries not in CORSIA as of 2027.

Since the environmental regulatory obligations for aviation fall also within the purview of other working groups in AACO, the Environmental Policy Group along with the Aeropolitical Watch Group and Sustainable Aviation Fuel Task Force worked together on those issues and in close coordination with the members of the Environmental Committee of the Arab Civil Aviation Organization in order to safeguard the interest of Arab airlines.

Sustainable Aviation Fuel Task Force

AACO Sustainable Aviation Fuel Task Force worked through phases starting from the last quarter of 2022 and throughout 2023. The phases of work included awareness workshops involving members, partners, and SAF producers and suppliers, followed by deep dive discussions with SAF producers and suppliers to better understand their production roadmaps, while at the same time opening a dialogue with civil aviation authorities to promote for important principles that would make SAF available in a cost-effective manner for airlines to be able to meet their environmental sustainability targets.

Digital Transformation Task Force

Based on the directive of the Executive Committee to have digital transformation as a high priority for AACO, the Digital Transformation Task Force was established, with the goal to explore solutions that empower the direct channels of airlines, enable better customer management, and transition from the current centralized, quasi-monopolistic environment, to a decentralized and modular one. The DTTF held a number of meetings to raise awareness on the areas of focus identified by the group and has concluded the first phase. Those areas are sustainability solution, digital identity, offer and order including revenue management, blockchain and air travel and finally payment platforms.

Aviation Security (AVSEC Advisory Group)

AACO AVSEC Advisory Group continued utilizing the AACO Aviation Security Information Sharing Mechanism. The group addressed emerging security threats, and best practices related to security management systems and cybersecurity.

Dedicated webinars have been held to bring awareness on possible security services that airlines can benefit from in relevance to conflict zones.

AACO Amadeus Steering Board

AACO Amadeus Steering Board continues to explore the various enhancements in technologies as well as the new disruptive ones which contribute to the sustainable growth and rebuilding of travel in a changing world. Moreover, the Board is working in line with the roadmap to leverage innovative technologies to create a transformational environment for the airlines' relationship with their customers.

Fuel Steering Board

AACO's Fuel Project, which is managed by the Fuel Steering Board (FSB) and the Aviation Fuel Advisory Group (AFAG), provides a platform for member airlines and jet fuel industry stakeholders to spread awareness and ensure a safe, sustainable, and competitive aviation fuel industry. AACO held its 11th Aviation Fuel Forum in September 2023, which was attended by more than 150 stakeholders.

Engineering & Maintenance Steering Board

The Engineering & Maintenance groups are currently working on three initiatives. The first one is the purchasing initiative, where the team is preparing to launch their first tender during Q4 2023. The second one is the Loans and Exchanges initiative, where the team is actively utilizing AACO Materials Support Agreement and will be working on enhancing the current version by the end of 2023. The third one is the Vendor Audits initiative, which will be reactivated in the beginning of 2024, after reinstating the new audit requirements in the joint audit procedure by the end of 2023.

Ground Handling Steering Board

The Ground Handling Steering Board (GHSB) intends to promote collaboration among member airlines at Outstations in line with the Steering Board's objective, by spreading awareness related to new technologies, services and regulations to ensure the sustainability of member airlines' operations with the highest quality of services given to the consumer

Human Resources Development Steering Board

The Human Resources Development Steering Board follows up on the activities of the Regional Training Center and discusses the training needs of member airlines during its periodic meetings. The Steering Board followed up on the developments of the training center's e-learning platform and the new training areas that were added to the training activities.

The AACO Regional Training Center (RTC) continued to provide support to the human resources capabilities of aviation personnel in the region. In 2022, the center held 151 courses, attended by 1607 trainees, including 53 virtual courses conducted through the RTC eLearning platform attended by 576 participants. Also, 116 scholarships were granted from AACO to member airlines in addition to securing 3 scholarships from the European Aircraft Manufacturer ATR on the Part-time Executive Aerospace MBA program at Toulouse Business School in France.

During the first half of 2023, the center held 61 courses, attended by 635 trainees, including 22 virtual courses conducted through the RTC eLearning platform attended by 213 participants. Also, 64 scholarships were granted from AACO to member airlines.

Emergency Response Planning Steering Board

The Emergency Response Planning (ERP) Steering Board continues to work on the objectives of the ERP Project through improving crisis preparedness and coordinating support between members, in addition to sharing experience and best practices among all stakeholders involved in emergency response planning.

In-Flight Medical Emergencies Task Force

Given the complexities of diversions in case of medical emergencies, and the need to coordinate with multiple stakeholders, AACO is working with in-flight medical care providers to procure a solution that would allow members to ensure proper medical attention is given to its members on board in case of emergency, facilitate necessary ground support, and minimize their cost of operations related to medical diversions.

Awareness and Networking

| Industry Partnership Program | Comprises 41 partners. Provides a platform for suppliers & providers to cooperate with AACO members. Provides a platform for networking. |
|------------------------------------|---|
| Partner Airlines | Comprises 5 non-Arab airlines namely, FlyArna, IAG International Airlines Group, Malaysia Airlines, Pegasus Airlines, Turkish Airlines. It provides a platform for cooperation with AACO members through joint projects and other initiatives. |
| International Representation | Includes regional & int'l organizations, governmental and non-governmental bodies. Aims at providing a framework of cooperation and protection of members' interests. |



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