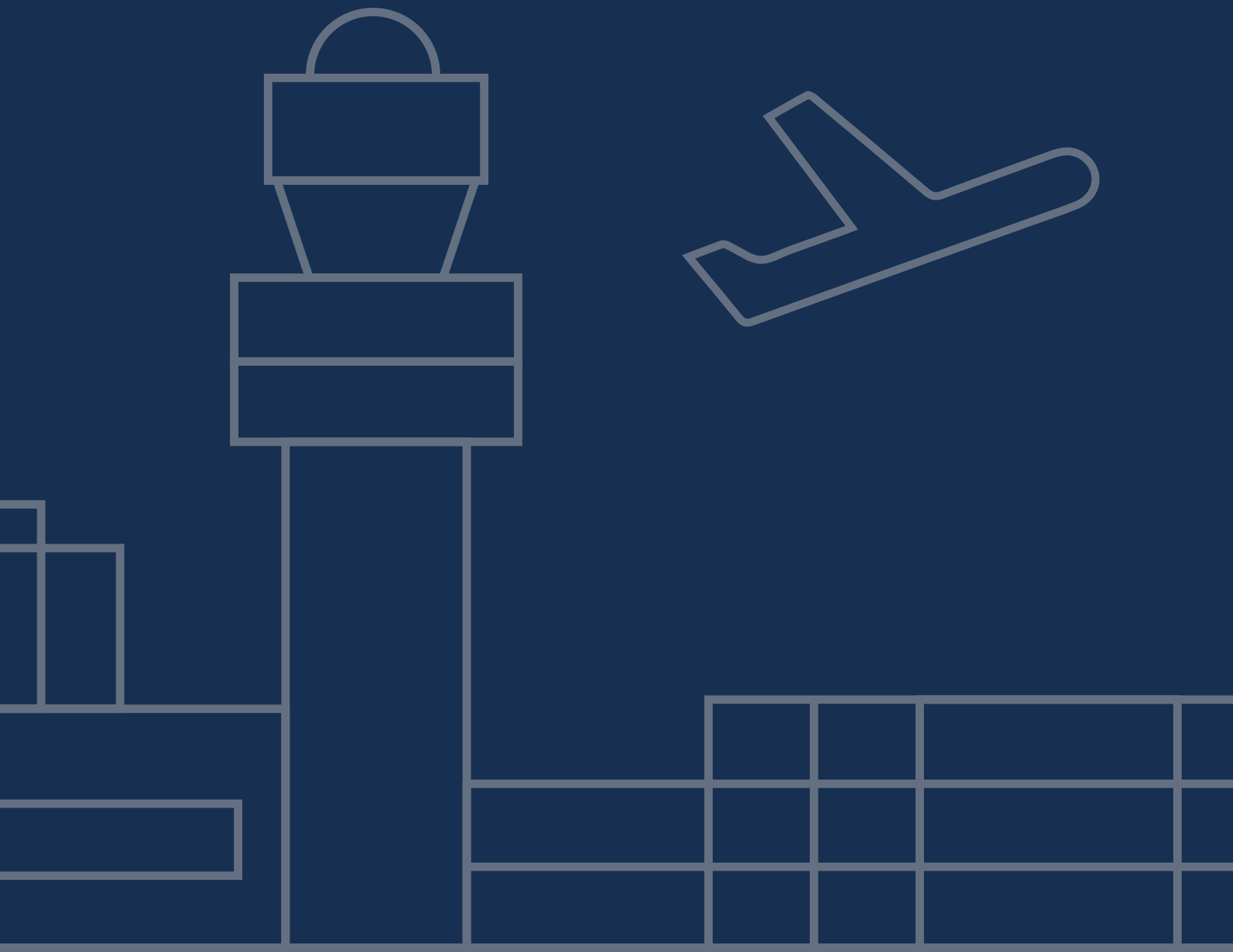
ACI EUROPE
AIRPORTS COUNCIL INTERNATIONAL

POLICY BRIEFING



CONNECTIVITY

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ACI EUROPE POLICY BRIEFING

CONNECTIVITY

THE IMPACT OF AN AIRPORT & AIR CONNECTIVITY

Why does airport connectivity matter?

The importance of air connectivity is summed up in one simple statistic: a 10% increase in air connectivity comes with a 0.5% increase in GDP per capita[1]. Beyond this simple economic measure, air connectivity ensures that people can easily travel from isolated areas, peripheral regions and islands to conduct business, trade and invest. Air connectivity is part of our social fabric, allowing visits to friends, family and home, experiencing new places, exploring Europe's cultural heritage, and benefitting from education abroad.

Therefore, European policy should take steps to support the development of air connectivity, following the policy proposals suggested throughout this Policy Briefing.

What is airport connectivity?

ACI EUROPE's annual Connectivity Reports[2] provide indices for direct, indirect and hub connectivity:

- **Direct connectivity:** These are the direct flights available from the airport – the sum of the frequency of scheduled departing flights.
- **Indirect connectivity:** This metric is the number of destinations people can fly to from a particular airport, including through a viable connecting flight at other airports.
- **Airport connectivity:** This metric sums both direct and indirect connectivity from the airport – thus measuring the overall level to which an airport is connected to the rest of the world.
- **Hub connectivity:** This measures the number of connecting flights that can be facilitated by an airport where reasonable transfers are possible – usually at hub airports.

What are the developments for air connectivity?

In the 10 years from 2010 to 2019, Europe's total airport connectivity increased by 2.8% on average each year. Overall during the decade before COVID-19, Europe's air connectivity grew by one-third, an astonishing rate for what was seen as a mature sector, demonstrating the high levels of demand for air travel. During this period, nearly all the increase in direct connectivity came from low cost carriers (LCC) (136% increase in market share) while full service carriers (FSC) have contracted their connectivity offer (-7%). This means that European airports are increasingly in competition to attract air services from ultra-flexible and footloose LCCs shopping across Europe for the best airport deals.

However, the COVID-19 pandemic that started in 2020 had a devastating impact on connectivity, which decreased by -92%, falling to absolute minimum connectivity levels. Rebuilding connectivity will depend on a number of factors, the primary of which is the affordability of tickets. Secondary factors include the ability of the air transport ecosystem to provide the capacity and services needed, the level of airline competition, consolidation, network development, and the ability to serve demand by air navigation service providers, ground-handlers and airports.

By the end of the full year 2024, European airport passenger volumes finally surpassed the 2019 level, exceeding that level by around 3%. However, total air connectivity remained -14% below, revealing a change in the structure of aviation route networks and varied impacts on airports.

Europe's hub airports have regularly held 3 of the top 5 positions for Global Hub Connectivity, with the exception of the pandemic years, up from only 2 in 2009 – demonstrating the vitality of Europe's hubs and centrality to global air connectivity.

[1] https://www.aci-europe.org/component/attachments/attachments.html?id=3151
[2] https://www.aci-europe.org/air-connectivity.html

AIR TRAFFIC MANAGEMENT

The Single European Sky remains incomplete, with European airspace continuing to be fragmented and susceptible to record delays caused by inefficiencies and lack of capacity. Successive regulations since 2004[1] have aimed to defragment Europe's airspace and improve performance levels, yet national boundaries remain evident in the air, and the air traffic management system (ATM) is increasingly unable to handle current and future traffic levels.

Summer 2018 saw the worst airspace delays on record. According to EUROCONTROL[2], en-route delays more than doubled in July-August 2018, with the average delay per flight increasing by +192%. Overall, 20% of operated flights were delayed in this period. The main causes were a lack of air traffic controllers and other ATC capacity issues (61%), weather (30%), and strikes/other disruptive events (9%). These inefficiencies led to an additional +5.2% of CO_2 emitted by aircraft in Europe in 2018.

Mitigation measures developed since 2018 have somewhat eased the situation, but a long-term strategic approach to modernising Europe's airspace is essential in order to sustainably accommodate traffic growth. Nonetheless, Summer 2024 was one of the worst summers ever in terms of performance of the European ATM network, due to much more unpredictable cross-border weather compared to historical data; and reductions in capacity due to air traffic controller understaffing and very limited flexibility to adjust staffing and rostering.

As critical nodes in the airspace network, airports are acutely affected by airspace capacity shortages and disruptions. ATM delays have an impact on the ground all the way into the terminal building, due to the cascading impact of delayed aircraft on demand for and use of airport infrastructure. This deteriorates the passenger airport experience, along with the quality of airport infrastructure and services. Furthermore, if en-route delays result in aircraft landing or departing during airport night restriction hours, then the airport's very license to operate can be called into question.

ACI EUROPE considers[3] that Europe's airspace capacity shortfall will only be overcome through a strategic, network-based, coordinated and consolidated approach. This requires collaboration, coordination and consolidation within airports, and between airports and the airspace network. Successful implementation of this approach would serve to optimise both airspace and ground use, maximise capacity to meet demand, make investments more efficient and deliver efficient air connectivity and improved quality for people, goods and regions.

The SES 2+ agreement was intended to move in this direction, but unfortunately has proven insufficient in delivering the efficiency gains required for European airspace management. This will mean continued high air traffic control-related delays and inefficiencies, increasing the red tape burden on stakeholders whilst doing nothing to curb avoidable carbon emissions – to the detriment of the passenger experience and the environment.

[1] https://transport.ec.europa.eu/transport-modes/air/single-european-sky_en
[2] https://www.eurocontrol.int/publication/eurocontrol-aviation-outlook-2050
[3] https://www.aci-europe.org/component/attachments/attachments.html?id=1130

AIRPORT CAPACITY

According to the EUROCONTROL Aviation Outlook 2050[1], demand for air traffic in Europe is expected to grow by 44% by 2050 compared to 2019 levels. While the report notes that the size of Europe's capacity gap has been reduced compared to previous forecasts, due to the impact of the COVID-19 pandemic, it nonetheless expects that 3-12% of demand will not be accommodated by European airports in 2050. Airports in at least six European countries are expected to have capacity gaps in 2050.

Airports are taking numerous actions to resolve this capacity gap, but are often constrained in their room to manoeuvre, sometimes literally. This is particularly the case with regard to physical capacity expansion, where lack of space, environmental concerns and the impact on neighbouring communities makes such a solution often physically and politically complicated. Airports' ability to maximise their capacity on the ground is also impacted by the capacity crunch in the air, where a shortage of air traffic management (ATM) capacity has led to record delays and underlines the necessity of completing the Single European Sky.

Airport capacity may also be optimised through slot allocation. However, the slot allocation process in Europe, as governed by Regulation 95/93, requires reform in order to ensure better use of available capacity (see separate paper on Slots). New air traffic management technology and procedures offer promising advances in runway throughput, and require investment and a holistic view incorporating airspace and physical airport capacity in order to deliver the most benefits. The Single European Sky ATM Research programme (SESAR) is leading the way in promoting such solutions[2], and is supported by airports through active participation in its work.

Coordinated airport operations are also a critical element in maximising airport capacity. In order to allow airports to operate existing capacity to the best extent possible, all stakeholders operating at an airport need to be involved and synchronised[3]. Otherwise, each stakeholder determining or contributing to airport capacity will try to optimise capacity only within its domain. This would be suboptimal for the entire airport system as, for example, runway capacity might neither be aligned to terminal capacity nor to apron/stand capacity. Stakeholder operations should be based on shared data and information through an integrated airport operations plan (AOP) and Collaborative Decision Making. Many airports are implementing such Collaborative Decision Making, which should be encouraged and supported as a key means to optimise capacity. Development of an Airport Operations Centre (APOC), involving all stakeholders relevant to the airport operation, is an important means of coordinating activities to manage capacity and deal with any contingencies.

It is therefore critical that airport capacity be considered as a central strategic element of any aviation policy initiative. Ensuring that the aviation system is capable of sustainable growth is the priority of the airport sector and should be a key part of future EU transport policy.

[1] https://www.eurocontrol.int/publication/eurocontrol-aviation-outlook-2050
[2] https://www.sesarju.eu/catalogue
[3] https://www.aci-europe.org/component/attachments/attachments.html?id=3220

AIRPORT SLOTS

Airport slots are used to manage congestion and allocate demand for flights in a way which optimises the use of airport capacity. At airports where demand outstrips capacity, an airline wishing to operate is granted a slot by an independent coordinator, giving the right to take off, land and use airport infrastructure for the route and day requested.

Europe's airports are particularly affected by this regime, with most Level 3 airports (those where a slot is required in order for an airline to operate) located in Europe. The slot allocation system in Europe is governed by Regulation 95/93/EEC[1], which is influenced by the Worldwide Airport Slot Guidelines[2]. Two of the central planks of the slot regulation are the "80/20 Rule" whereby if an airline uses a slot at least 80% of the time in a season, it will retain it for the following equivalent season (Summer or Winter), and the New Entrant Rule which grants some priority to airlines which would bring a competitive challenge to incumbents at an airport.

During a three year period from the start of the COVID-19 pandemic in 2020 until March 2023, a series of alleviation measures was in place in order to deal with the effects of the pandemic on aviation. This began with a full waiver, removing the requirement for airlines to meet the 80% use rate in order to maintain historic slots. While necessary at the beginning of the crisis, ACI EUROPE advocated for moving away from waivers, to increasingly targeted measures and the progressive reinstatement of the slot usage requirement. Prolonged use of slot alleviation measures can lead to airport capacity being wasted, as airlines have an incentive to not use slots, while also preventing competitors from entering the market.

A proposal[3] to revise Regulation 95/93 was tabled in 2011, which would have updated the regulation to openly allow airlines to buy and sell slots from one another, broaden the definition of new entrant so as to boost competition by allowing more airlines to fall into its scope, increase the usage rate for grandfather rights, and strengthen the independence and transparency of the coordination process. The introduction of a slot reservation scheme would have given greater incentive to airlines to use the slots which they have been allocated.

Despite offering some promising improvements to the slot allocation regime in Europe, the 2011 proposal was heavily watered down by both the European Parliament and Council, and remains blocked to this day due to Member State disagreement. The outdated 1993 Regulation therefore remains in force in the EU and EEA (as well as in the United Kingdom, which maintained the legislation following its departure from the EU), and its revision is a key priority for Europe's airports.

ACI EUROPE believes that the following elements should form part of a revised Regulation in order to optimise airport capacity and promote airline competition at airports:

- Greater transparency in the slot allocation process;
- More scope to ensure that slot allocation takes into account the economic and connectivity needs and strategies of airports and their local markets;
- Ensuring that airlines make full and proper use of the slots allocated to them;
- Strengthening the new entrant rule so as to deliver greater competition at Europe's airports and more choice for passengers which caters to their needs.

Taking such measures will ensure that the slot allocation system better reflects the available capacity at European airports and is more suited to the current and future air transport market.

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[1] https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1993R0095:20090630:EN:PDF
[2] https://aci.aero/wp-content/uploads/2024/01/WASG-Edition-3-Effective-1-April-2024.pdf
[3] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52011PC0827

CHARGES FOR THE USE OF AIRPORT INFRASTRUCTURE

THE EU AIRPORT CHARGES DIRECTIVE (2009/12/EC)

The European Commission's Directorate-General for Mobility and Transport (DG MOVE) has been considering a revision of the EU Airport Charges Directive, legislation that was transposed into Member States' national law on or before March 2011.

The EU Airport Charges Directive applies process-based economic regulation to airports, requiring airports to consult annually with airlines, to disclose large amounts of information about the airport's prices and also finances, and provides a mechanism for appeal to an independent authority in the case of a dispute. The Directive applies to airports with more than 5 million passengers per annum, along with the largest airport in each EU Member State, which covers around 80 airports in the EU.

Airports: competing for business in the face of dominant airlines

An airport, like any commercial entity, must earn revenue to cover its costs of operation. Airports typically earn revenue from two streams: the aeronautical business (what airlines pay to use the infrastructure) and non-aeronautical (commercial) business. The former is frequently called 'airport charges' and includes landing, parking and lighting charges as well as passenger services charges. Government taxes are not airport charges.

Today, airports are highly competitive businesses looking to gain new airline services and passengers. This is rooted in the liberalisation of Europe's air transport market, a process which started in 1992. Airport competition is pan-European; airports are competing with other airports across Europe to attract new airline services, as much as they are competing to bring in passengers from the local catchment area.

Over time, many studies on competition between airports (2012 - Copenhagen Economics Study: Airport Competition in Europe[1], 2017 – Oxera Study: The Continuing Development of Airport Competition in Europe[2], and 2022 – Frontier Economics Study: Airport Competition in Europe: recent and future developments[3]) documented the factors which have resulted in a competitive market. A key competitive pressure is the entry of low cost airlines into the largest airports in Europe. Another is the increased flexibility of all airlines in deploying their aircraft; they are simply able to move to the airports that provide the most profitable routes. Additionally, the increase in number of flights to and from the Gulf and long-haul destinations means that airports compete to win inbound flights. Changes in services available to passengers allowing them to take advantage of actions such as creating their own 'self-connection' have further increased competitive pressures on airports.

Air passengers in Europe should have access to adequate, quality airport infrastructure

Even with the current Airport Charges Directive, airlines often do not accept that they should pay for the infrastructure they use. But this is what the Commission's user pays principle[4] is all about. Like it or not, inside the European Union, our State aid rules prohibit the public financing of large airports.

Our key challenges in European aviation are to ensure that the appropriate capacity is provided to meet demand and fair competition throughout the aviation value chain is allowed, thereby ensuring affordable connectivity for consumers. EUROCONTROL's Aviation Outlook 2050[5] report pointed to insufficient airport infrastructure. Private investment is required to provide the capacity needed, and this investment will come only with a stable regulatory framework through keeping in place the current Airport Charges Directive.

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[1] Copenhagen Economics Study: Airport Competition in Europe https://www.aci-europe.org/component/attachments/attachments.html?id=490
[2] Oxera Study: The Continuing Development of Airport Competition in Europe https://www.aci-europe.org/component/attachments/attachments.html?id=447
[3] https://www.aci-europe.org/component/attachments/attachments.html?id=2288
[4] https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0144:FIN:en:PDF
[5] https://www.eurocontrol.int/publication/eurocontrol-aviation-outlook-2050

BORDER CONTROL ENTRY/EXIT SYSTEM

Regulations 2017/2225[1] and 2017/2226[2] from 2017 established an Entry/Exit System (EES) to register entry and exit data and refusal of entry data of third-country nationals crossing the external borders of the EU Member States. They also determine the conditions for access to the EES for law enforcement purposes. The start date for the implementation of EES has been postponed several times.

EES will affect passengers and operators of all modes of transport, not only aviation. Accordingly, there is a need for flexibility for both temporary solutions in the initial stages of implementation as well as on the start date itself, all with a view to ensure a successful implementation.

ACI EUROPE calls on Regulators to focus on the following:

- The need for clarity regarding Member States' responsibility to bear the **costs** of implementation and **financing** of the EES and the use of the European Commission's Border Management and Visa Instrument (BMVI) under the Integrated Border Management Fund (IBMF).

- The **overall planning** of the *IT Systems in the area of freedom, security and justice*[3] should be reconsidered to ensure an effective implementation and to adapt them to the flexibility and transition period of the EES.

- The **start date of operations** of the EES should only be decided once the system has been tested, and the technical and legal arrangements to collect and transmit the data have been validated. These conditions should take into consideration the operational situation at the border and be coordinated with transport operators.

- A **transition period** would allow Member States to gradually invest and deploy appropriate staff and resources to ensure an efficient, high and uniform level of control at all border crossings without adding additional waiting time at border control. Transport operators and infrastructure providers would also be better able to adapt to the new regulatory requirements liaising with their national authorities.

- Allowing **flexibility during the initial stages of implementation in the capture of biometric data**[4] would allow Member States and transport operators to deploy the necessary resources without jeopardising border security. Biographic data, date, time and place of entry and exit, the calculation of the duration of the authorised stay, the generation of alerts, the recording and storage of refusals of entry and the detection and investigation of terrorist offences and other serious criminal offences will be guaranteed at all times.

- The European Commission, Member States and industry should collectively allow, encourage, accelerate and finance **innovation**, including the development of **off-airport solutions** for passenger enrolment in the system.

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[1] https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32017R2225
[2] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017R2226
[3] Also including the Schengen information System (SIS), EURODAC, the Visa information system (VIS), the European travel information and authorisation system (ETIAS) and the European criminal records information system (ECRIS).
[4] European airports and sea ports call for an effective implementation of the EES and support a flexible start of operations (9 May 2022) https://www.aci-europe.org/downloads/resources/Suggestions%20for%20a%20successful%20start%20of%20operations%20of%20the%20EES%20final.pdf

EXTERNAL RELATIONS

International air transport is heavily regulated. All traffic rights (right to land and take off, to transport passengers and cargo) are defined in international agreements signed at governmental level (EU or national). The evolution of air transport in the last decades with regard to ownership and control of airlines (with the notion of Community carrier) and airports (which are considered in Europe as economic enterprises) has led to the need for airports to make their voice heard regarding international aviation agreements. The time when the State general interest was fully aligned with the interests of national carriers and airports they owned is over, and Air Transport Agreements should reflect the strategic relevance of aviation and the connectivity it affords to the economy. They should be based on the full spectrum of interests involved, in particular consumers, regions and local communities as well as businesses that depend on aviation and job creation. Air transport – as with any mode of transport – is just a tool not a goal in itself.

External Relations and connectivity

For airports, increasing the number of destinations served and attracting more passengers and cargo through the development of their route network and the diversification of their airline portfolio is a core business imperative. It is also central to their societal benefits – i.e. maximising connectivity for their communities and supporting economic growth and job creation. Airports are firstly "locations" and have common goals with their region. This often leads to a common approach between airports, local and regional entities to attract airlines, demonstrate the economic value of a route and provide incentives. It also means a common interest in retaining the service, given airlines' propensity to relocate in search of more lucrative routes.

Research on the relationship between international air services and the location of large firms shows that a 10% increase in supply of air service at an airport is associated with a 4% increase in the number of large firms headquartered nearby. Furthermore, the availability of non-stop intercontinental flights is a significant criteria in business location decision-making.

Air transport liberalisation & Open Skies – an agenda for growth and development

Today, passengers want the ability and freedom to fly. They want choice both in the route and the carrier to their destination depending on their priorities, be this a direct non-stop flight or a cheaper ticket. The airport for its part will seek to develop connectivity, multiply routes and carriers and offer the greatest possible choice to passengers. Air transport liberalisation means more choice for consumers, which in turn leads to traffic growth but also economic benefits for the Regions. Indeed, beyond airports and the tourism industry, European consumers have benefited from affordable air connectivity, within and outside the EU. Air connectivity supports economic growth: a 10% increase in air connectivity yields a + 0.5% increase in GDP per capita. Airports are therefore supportive of the further liberalisation of air transport.

European aviation global position and fair competition

International air transport is being reconfigured as a result of globalisation, the economic shift to the Asia-Pacific region and the rise of emerging countries. This is both a challenge and an opportunity to take a leadership position in liberalisation to enhance the competitiveness of Europe, by negotiating at EU and national levels air transport agreements promoting free markets and liberalised Ownership & Control provisions, while at the same time imposing achievable regulatory convergence objectives including fair competition clauses based on equality of opportunities. To mitigate concerns about competitive distortions resulting from State aid, the EU has adopted Regulation (EU)2019/712[1] on safeguarding competition in air transport.

[1] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0712&rid=9

PASSENGER RIGHTS

REVISION OF REGULATIONS 261/2004 AND 2027/97

Regulation 261/2004[1] provides the common basic framework for information, assistance, reimbursement, rerouting and/or compensation under certain conditions in the event of denied boarding, cancellation or long delays of flights. Regulation 2027/97[2] transposes the Montreal Convention into European law.

These two regulations and the international conventions do not impose any legal obligation on European airports.

The COVID-19 pandemic led to an unprecedented crisis which entailed border closures, travel bans, restrictions and additional checks that showed the limitations of the legislation in force.

For this reason, ACI EUROPE calls for a swift adoption of the revision of the air passenger rights' regulations ensuring that:

- A passenger's primary relationship continues to be with the air carrier, with whom they have a contractual relationship.
- Passengers are protected and the role and responsibilities of each stakeholder (air carriers, ground handlers, airport managing bodies) is clear.
- The physical presence of an air carrier's point of contact at the airport is guaranteed (whether employed by the airline or subcontracted). This point of contact should be empowered to assist, re-route and compensate passengers – including in cases of insolvency and/or revocation of the operational license.
- Crisis situations leading to a complete stop of the air transport system, border closures and travel bans are contemplated in the legislation and considered as "extraordinary circumstances" with a view to avoiding an excessive financial burden on air carriers.
- Contingency plans effectively include the participation of all relevant stakeholders (carriers, airport managing bodies, ground handling operators, air navigation service providers and national, regional and local authorities) and foresee long-term assistance to stranded passengers.
- Member States do not introduce similar and multiple health and sanitary checks along the passenger journey that are proven ineffective and may cause additional denials of boarding, long delays and cancellations with a negative impact on the passenger experience and Europe's air transport network.

Proposal for a Regulation as regards enforcement of passenger rights[3] and Proposal for a Regulation on passenger rights in the context of multimodal journeys[4]

ACI EUROPE believes the following aspects should be considered by the co-legislators:

- Service quality standards developed by Airport Managing Bodies and other multi-modal hub managers must refer only to those items under their direct responsibility.
- Where mobility equipment is damaged or lost or assistance dogs are injured or lost during a connecting transport service in the context of a single multimodal contract or at a multimodal passenger hub, the carrier or intermediary providing the single, multimodal ticket shall be liable for that loss, damage or injury, and provide compensation without undue delay. Adding other stakeholders in this relation will create confusion and uncertainty amongst the most vulnerable passengers.

[1] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32004R0261
[2] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:31997R2027
[3] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2023%3A753%3AFIN
[4] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2023%3A752%3AFIN

GROUND HANDLING AT AIRPORTS

THE EU GROUND HANDLING DIRECTIVE (2009/67/EC)

The adoption of the 1996 Ground Handling Directive (96/67/EC)[1] has fundamentally changed the ground handling market at EU airports. The opening of the market saw the emergence of independent ground handlers offering their services to airlines, and the retreat of airports as providers of these services. Airports support the balanced market access in the Directive.

The growth of the aviation market has also resulted in levels of congestion and operational complexity that were unthinkable at the time the Directive was adopted. Therefore, ground handling policies should be recalibrated to focus on operational efficiency and safety. The EASA ground handling regulation will make ground handlers more directly responsible for their performance towards airports[2].

As regards the ground handling market itself, years of liberalisation triggered by the EU Ground Handling Directive has resulted in a downward spiral that has now become both socially and operationally unsustainable. If low wages and compromised service quality were already a concern pre-COVID, they are now coming to the fore – impacting the entire aviation ecosystem.

ACI EUROPE has identified the following principles for a better functioning and more resilient ground handling market – all compatible with the EU Ground Handling Directive (96/67/EC):

- **The ground handling market should not be further opened** – the market access rules are balanced and provide for competition, while problems with regard to service quality and social conditions can be addressed. Member States have discretion to adjust their market access if needed to balance competition with resilient and stable airport operations.
- **Airport operators should increase their remit to define and enforce minimum service levels/ standards** – to improve the quality, safety, sustainability and social stability of operations. This requires close and effective cooperation with national regulators.
- **Ground handling suppliers should become accountable for their operational & safety performance towards airport operators** – to mirror the increased role of airport operators to define rules. This requires cooperation and information exchange with Ground Handling Service Providers (GHSPs).
- **The scope of common infrastructure may be expanded** – to address airport congestion (efficiency, safety) and facilitate investments in sustainability and innovation that may not otherwise be achieved by higher operational standards or the pooling of equipment between GHSPs. Member States should accept airport operators' requests to categorise infrastructure and ground support equipment (GSE) as centralised infrastructure.
- **Ground handling operations must become aligned with the decarbonisation efforts of airports** – to support Net Zero-emission goals and prepare for new obligations from the Fit for 55 package (providing electricity to stationary aircraft, ensuring the availability of Sustainable Aviation Fuels). Member States must support investments in fleet renewals and charging infrastructure, as provided in State aid rules.
- **The Ground Handling market must become socially sustainable** – to strengthen operational resilience and improve the attractiveness of the airport as a workplace. Airport operators may, depending on their legal possibilities, encourage social dialogue and collective labour agreements. Member States must ensure labour laws provide adequate social protection.

[1] https://eur-lex.europa.eu/EN/legal-content/summary/ground-handling-at-community-airports.html
[2] https://www.easa.europa.eu/en/document-library/opinions/opinion-no-012024

STATE AID

THE 2014 AVIATION GUIDELINES

European State aid policy recognises the positive impact of air transport to link people and integrate remote regions, and consequently allows public financial support to smaller regional airports which are unable to cover their costs. The 2014 Guidelines on State aid to airports and airlines[1] (or "**Aviation Guidelines**") introduced a framework to allow *operating aid* (i.e. public financial support for operating costs, as opposed to *investment aid*) to regional airports during a transitional period of 10 years, which was then extended by an additional 3 years following the COVID-19 pandemic. The possibility for State aid to airports under the Guidelines will end in 2027, unless action is taken.

The Aviation Guidelines allow for operating aid to airports with less than 3mppa (million passengers per year). Small airports (up to 200,000 passengers) remain fully exempted, under the general block exemption rules (GBER).

Following the evaluation of the Aviation Guidelines in 2020,[2] the European Commission found that many airports with less than 1mppa would continue to need operating aid beyond 2024. ACI EUROPE had published economic analysis in 2019 and in 2024 which also found that airports with fewer than 500,000 passengers per year are expected to remain consistently unprofitable, while those between 500,000 and 1 million passengers per year are unlikely to become consistently and significantly profitable.[3]

Airports have come out of the COVID-19 crisis with depleted resources. They are facing a recovery in challenging economic circumstances, while maintaining their commitment to decarbonisation.

In this context, ACI EUROPE has called for an extension of the Aviation Guidelines beyond 2027 – with a clear focus on *simplifying* the rules and *facilitating decarbonisation*.

Simplification can be achieved by exempting airports with less than 1 million passengers per year from the rules on operating aid. These airports represent less than 3% of European traffic, which means these cases put a disproportionate burden on airports and regulators.

The *decarbonisation* of airports needs the unequivocal support of the European Commission, as European airports remain committed to reaching Net Zero CO_2 emissions for their operations by 2050. Airports have welcomed the new Climate, Energy and Environmental State aid Guidelines[4] adopted by the European Commission, which provide a basis to support green airport investments. However, the Aviation Guidelines also need to be improved in order to support the decarbonisation of airports and airlines specifically.

Airports need visibility on the future of the Aviation Guidelines well before 2027. A pragmatic solution would be to allow operating aid to airports with less than 1mppa, which research from Oxera has proven will always struggle to cover costs, while remaining critical to people and economies.[5]

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[1] eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2014:099:FULL&from=EN
[2] Commission Staff Working Document, 'Fitness Check of the 2012 state aid modernisation package, railways guidelines and short-term export credit insurance', SWD(2020) 257 final, 30 October 2020.
[3] The European Commission's consultation on the 2014 Aviation State Aid Guidelines
https://www.aci-europe.org/downloads/resources/OXERA STUDY on State Aid - An economic analysis on airports profitability.pdf
https://www.aci-europe.org/press-release/511-eu-state-aid-guidelines-must-be-extended-to-safeguard-vital-regional-air-connectivity-and-facilitate-decarbonisation.html
[4] Climate, Energy and Environmental State aid Guidelines
https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.C_.2022.080.01.0001.01.ENG&toc=OJ%3AC%3A2022%3A080%3ATOC
[5] https://www.aci-europe.org/downloads/resources/Oxera_Economic%20analysis%20of%20the%20profitability%20of%20regional%20airports_23.09.2024.pdf

ACI EUROPE POLICY BRIEFING

SUSTAINABILITY

CLIMATE CHANGE

The Climate Emergency is one of the biggest challenges of our time. This has led ACI EUROPE and EUROCONTROL to launch the European Aviation Climate Change Adaptation Working Group in 2022 to adapt the aviation industry to the impacts of climate change.

While the environmental footprint of individual aircraft has improved dramatically over the last decades, this development has been outpaced by air traffic growth. Noting that traffic growth forecast was revised downwards compared to previous outlook, full-flight Net CO_2 emissions of all departure from EU27+EFTA are projected to increase by 15% by 2050.[1]

Airport-related emissions are estimated to represent 2% to 5% of global aviation emissions. Nevertheless, ACI EUROPE and its members have actively addressed the carbon footprint of airport operators. Indeed, in 2009, ACI EUROPE launched *Airport Carbon Accreditation* – a voluntary carbon management programme, providing airports with a technical framework for their carbon management and recognising their efforts through independent certification. From an exploratory initiative that began with 17 of the environmentally most advanced airports in Europe in the first year, it grew to a global industry standard with more than 600 accredited airports worldwide, welcoming more than 53% of global air passenger traffic.[2] In the reporting year May 2022 – May 2023, the then accredited airports reduced emissions under their direct control by more than 1 million tonnes of CO_2. *Airport Carbon Accreditation* has won praise from several authoritative institutions, including the UNFCCC, ICAO, the European Commission and EUROCONTROL.

At the same time, ACI EUROPE has actively supported the aviation industry in defining and pursuing its three climate goals as defined in 2007. In particular, ACI EUROPE welcomed the adoption of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) as a complementary mechanism to the other components of the ICAO Basket of Measures – technology improvements, new operational procedures and the deployment of Sustainable Aviation Fuels (SAF).

However, the scientific findings of the Intergovernmental Panel on Climate Change in their Special Report on Global Warming of 1.5° from 2018[3] require a step change in climate action. This prompted ACI EUROPE to adopt a new Resolution on climate change on 26 June 2019, expanded and strengthened in 2024[4], through which European airports:

- Call on all aviation industry stakeholders globally to complement the existing aviation climate goals with a joint vision and roadmap towards a net zero carbon emissions air transport system.
- Call on governments at ICAO to deliver on the long-term carbon emissions reduction target and deliver a related roadmap aligned with the Paris Agreement.
- Commit to net zero carbon emissions from airport operations fully within their own control by 2050 at the latest – without offsetting.
- Call on the EU and governments to accelerate, where necessary, a clean energy transition.
- Disclose their roadmaps towards net zero by 2050 or earlier, translating their commitment into concrete action[5].

ACI EUROPE and its members stand ready to support the EU institutions in defining a policy framework to incentivise the above. Particular attention should be paid to the deployment of SAF as well as R&D in new aircraft propulsion systems (e.g. electric, hybrid and hydrogen). Efficiency improvements in the European Air Traffic Management system also need to accelerate, as pursued in particular through the Single European Sky. Finally, consideration should be given to the environmentally most effective options for the future of EU ETS for aviation in the context of the implementation of CORSIA in Europe.

[1] European Aviation Environmental Report 2025, https://www.easa.europa.eu/en/domains/environment/eaer
[2] For more information on *Airport Carbon Accreditation*, visit www.airportcarbonaccreditation.org
[3] https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/
[4] https://www.aci-europe.org/downloads/content/ACI%20EUROPE%20RESOLUTION%202024-1.pdf
[5] https://www.aci-europe.org/netzero/repository-of-roadmaps.html

EU 'FIT FOR 55'

Major policy transformations are required to deliver on the EU climate goals for 2030 and 2050. All economic sectors, including the hard-to-abate ones such as the aviation sector, need to contribute to materialise it.

The European airport industry is committed to accelerate decarbonisation in line with climate science and political and societal expectations. This has been demonstrated by airports' long-standing engagement in *Airport Carbon Accreditation*[1] – the only global carbon management standard for airports, their commitment to Net Zero CO_2 emissions from their own operations[2], as well as the European aviation industry's Destination 2050[3] roadmap setting in motion a pathway to Net Zero CO_2 from all flights departing EU/UK/EFTA airports by 2050.

ACI EUROPE welcomed the adoption of the European Commission's 'Fit for 55' package[4], which aligns with the industry's ambition in many aspects. However, the adopted policies need appropriate remedies to mitigate the risk of Europe and its citizens losing air connectivity, while remaining committed to acceleration of decarbonisation.

The cumulative impact assessment[5] of the 'Fit for 55' proposals shows that the 'Fit for 55' legislations will result in significant fare increases (+ 17% for regional airports and + 5% on connecting flights via EU hubs in 2050), reduced demand (-12% for regional airports and -9% for EU hubs by 2050), causing leakage of carbon emissions, and impacting the EU's air connectivity.

While the impact is set to be greater on intra-EU flights – a serious concern for the stability and growth of countries and regions at the periphery of the EU – it will also be felt on flights connecting the EU to the rest of the world via its hubs.

Therefore, appropriate remedies are required to address the impact of 'Fit for 55' on both the EU's regional/secondary airports and hubs – so as to mitigate the risk of downgraded air connectivity. Remedies should include:

- Incorporation of aviation energy needs in the EU Energy Policy and national frameworks.
- An ambitious EU Sustainable Aviation Fuels (SAF) industrial strategy supporting the production of SAF in Europe and encouraging the uptake and deployment of SAF.
- Increased financial support for SAF through the Innovation Fund and simplification of the administrative procedure.
- Introduction of a flexibility mechanism in the physical SAF supply chain similar to a book and claim system.
- Extension of the SAF accounting flexibility mechanisms beyond 2034.
- Extension and enriching of the SAF Allowance Mechanisms beyond 2030.
- Engagement with the EU's main trading partners and other third countries to accelerate international decarbonisation goals and actions notably as part of aviation and trade agreement negotiations.
- A strong policy framework to support European air transport in meeting its decarbonisation targets is urgently needed to effectively reach Net Zero CO_2 by 2050, while enabling our sector to continue to offer the social and economic benefits that European regions and communities depend upon.

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[1] *Airport Carbon Accreditation* - What is it? https://www.airportcarbonaccreditation.org/about/what-is-it.html
[2] ACI EUROPE NET ZERO RESOLUTION 2024
https://www.aci-europe.org/downloads/content/ACI%20EUROPE%20RESOLUTION%202024-1.pdf
[3] Destination 2050 Report https://www.destination2050.eu/
[4] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021DC0550
[5] Impact assessment of Fit for 55 policies on the aviation sector
https://www.aci-europe.org/downloads/resources/OXERA%20Impact%20assessment%20of%20Fit%20for%2055%20policies%20on%20the%20aviation%20sector.pdf

SUSTAINABLE AVIATION FUELS

Sustainable Aviation Fuels (SAF) are derived from non-fossil carbon resources, such as biofuels and synthetic fuels, and can reduce lifecycle CO_2 emissions by up to 85% compared to conventional fuels. These are considered drop-in fuels, allowing for blending up to 50% with conventional jet fuel without requiring changes to aircraft or airport infrastructure.

The European aviation sector roadmap for decarbonisation, Destination 2050[1], acknowledged the crucial role of SAF in achieving a reduction of approximately 163 million tons of CO_2 emissions by 2050.

However, commercial SAF production remains limited due to a significant price gap with fossil fuels. ACI EUROPE welcomes the European Commission's ReFuelEU Aviation Regulation[2] to ramp up the production, deployment and supply of high-quality SAF in Europe. Under this Regulation, airports are expected to facilitate the provision of the infrastructure necessary for the delivery, storage and uplifting of SAF. However, while SAF is often considered a drop-in solution, it is not always fully compatible with existing airport distribution systems.

The desired use of SAF, from 0.05 in 2020 to 70% of total jet fuel use in 2050, requires hundreds of millions of tons of SAF for the aviation industry, significantly affecting the SAF supply chain and blending facilities. Although announced SAF production capacity[3] appears on track to meet ReFuelEU mandates until 2030, many facilities face challenges such as securing capital and construction permits. An EU SAF industrial strategy is essential for creating a supportive environment for this fledgeling industry to grow, including effective financial support and incentives.

In addition to their primary role of facilitators for the access to SAF, European airports actively support SAF through financial incentives, investments in production, awareness campaigns, and logistical collaboration. These efforts showcase their commitment to green transformation and achieving climate-neutral operations by 2050. ACI EUROPE endorses the EU mandate of SAF[4] (from 2% in 2025 to 70% in 2050), which is expected to enhance future demand certainty and unlock investments in SAF production. However, without a global framework for SAF and due to the higher fuel costs associated with its use, financial support to EU airports is necessary to prevent competitive distortion with non-EU airports for flights beyond the EU.

The flexibility mechanism introduced under the ReFuelEU Aviation Regulation between 2025 and 2034 gives fuel suppliers time to make the necessary technological and logistical investments while demonstrating compliance at an aggregated level across EU airports. ACI EUROPE advocates for extending this mechanism beyond 2034 for cost and environmentally effective logistics while promoting diversified SAF production across all Member States.

ACI EUROPE advocates for a European book and claim system whereby purchasing SAF would facilitate the issuance and trading of SAF certificates. Airlines can purchase SAF without being geographically connected to a supply site, thus preventing tankering, carbon leakage and reducing safety risks associated with increased refuelling events.

All airports with SAF supply (whether physical or "virtual") require assurance regarding the incorporation of SAF as a CO_2 reduction parameter in their Scope 3 emissions calculations. This transparency supports compliance with national and local CO_2 reduction and air quality objectives. The European Commission should clarify the attribution of environmental benefits associated with SAF.

To comply with SAF mandates, funding instruments and other policy measures such as SAF allowances[5], financial support for advanced facilities, and the use of Contracts for Difference are critical for de-risking investments in SAF production and uptake. Additionally, airport activities related to transportation, storage and use of SAF should be included in the EU Sustainable Finance Taxonomy Regulation to facilitate financing efforts towards climate neutrality.

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[1] https://www.destination2050.eu/
[2] https://transport.ec.europa.eu/transport-modes/air/environment/refueleu-aviation_en
[3] https://www.easa.europa.eu/en/newsroom-and-events/press-releases/easa-publishes-report-european-union-sustainable-aviation-fuels
[4] RefuelEU for aviation established an EU SAF mandate increasing from 2% to 70% between 2025 and 2050 (2% in 2025; 6% in 2030; 20% in 2035; 34% in 2040; 42% in 2045; 70% in 2050)
[5] Policy mechanism under the EU Emissions Trading System (EU ETS) to support the uptake of SAF.

HYDROGEN-POWERED AIRCRAFT

Hydrogen-powered aircraft for short- and medium-haul flights within Europe offer a transformative solution to reducing the environmental impact of air travel and can play a critical role in the decarbonisation of aviation. ACI EUROPE emphasises the urgency of preparing airports for the infrastructure and operational challenges posed by this transition. Most critically, securing access to renewable energy and adequate financial support is essential for successfully achieving this transition.

Airports must undergo extensive infrastructure and operational upgrades to support hydrogen aircraft. A crucial step is to estimate the total electricity demand required for hydrogen liquefaction, storage, and distribution systems. This estimation must include the entire electrification of airport operations. Close collaboration with regional and national authorities will be essential to expand high-tension electrical grids near airports and construct medium-voltage substations to support these increased energy demands. Such measures are vital to ensure airports can accommodate the growing need for renewable energy.

The deployment of hydrogen infrastructure is expected to follow a phased approach. The transition will initially rely on gaseous and liquid hydrogen storage systems supported by truck-based refuelling solutions. Over time, the focus will shift toward integrating on-site liquefaction facilities, cryogenic LH2 storage systems, and possibly pipeline networks that enable efficient delivery of liquid hydrogen to aircraft stands. Airports will also likely need to be equipped with multi-fuel refuelling stands capable of supporting both liquid hydrogen and SAF/JetA1, necessitating possibly extensive redesigns and compliance with safety regulations.

The integration of these systems will require new safety standards. Hydrogen's cryogenic properties might require the implementation of specialised risk management protocols, including designated safety zones, advanced leak detection systems, and robust emergency response plans. Operational integration is equally critical. Airports are currently conducting studies to identify the main challenges of accommodating hydrogen aircraft. Participation in European pilot projects allows airports to test hydrogen for ground handling operations, gathering hands-on experience and identifying regulatory and operational gaps. ACI EUROPE highlights the importance of harmonised safety standards to ensure the seamless integration of hydrogen systems into airport operations.

ACI EUROPE strongly advocates for cohesive policy support to facilitate this transformation. Governments must establish a stable regulatory framework to reduce investment risks and create financial incentives. Furthermore, sustained investments in research and development are critical to advancing hydrogen technologies, particularly in innovative refuelling methods and safety protocols. The transition to hydrogen-powered aircraft will significantly raise airports' energy demands, requiring vast amounts of renewable electricity for hydrogen production, storage, and distribution. As some airports evolve into energy hubs, it is vital that future European and national energy policies fully account for these growing demands to support sustainable aviation and energy integration.

ACI EUROPE advocates for the development and deployment of hydrogen-powered aviation, working closely with airports, policymakers, and industry stakeholders. In 2022, ACI EUROPE signed a Memorandum of Cooperation with Airbus to accelerate the development of hydrogen-powered aircraft, prepare associated supporting airport infrastructure and bring these to the market. Since 2022, ACI EUROPE has been a member of the Alliance for Zero Emission Aviation[1], as well as a member of its Steering Committee, while leading the work on Working Group 3 Aerodromes. European airports are leading the decarbonisation of air transport, ensuring a sustainable future for the industry while maintaining its competitive edge.

[1] https://defence-industry-space.ec.europa.eu/alliance-zero-emission-aviation-launches-its-vision-towards-electric-and-hydrogen-flight-europe-2024-06-06_en

INTERMODALITY

Intermodal transport is commonly acknowledged to play a key role in delivering the best solutions from a social, economic and environmental perspective[1]. Combining different modes of transportation can provide the optimal solution for a seamless and sustainable passenger journey from door to door.

ACI EUROPE supports the development of intermodal solutions as they enable economic growth, connectivity, access to and from Europe's regions, and environmental sustainability.

- Improving and increasing connections with public transport on the ground, especially the rail network, can make a significant contribution to extending airports' catchment area, a key enabler for economic growth in the regions.
- In addition, good intermodal connections can help alleviate congestion and relieve road access, thus improving local air quality at airports (landside access can account for up to 50% of some airports' emissions). Another positive impact is the greening of airport workers' commutes.
- At congested hubs, high-speed rail can provide a suitable alternative to short-haul flights, thus freeing up capacity for long-haul flights for which no ground alternatives exist.
- Intermodal ticketing is key to enhancing the travel experience for passengers by offering more options based on timings, duration, prices and environmental footprint.

Air and Rail public debate

While the aviation industry works to achieve net zero emissions by 2050, the European Commission is promoting a shift from air to rail travel. It is actively encouraging the reduction of short-haul flights to ensure all collective journeys under 500 km become carbon neutral by 2030. Meanwhile, some Member States are taxing or restricting short-haul flights to further encourage this modal shift to rail.

A European aviation study[2] highlights the limited CO_2 reduction benefits of shifting short-haul flights to rail. While rail has lower CO_2 emissions per passenger, the shift generates other environmental, social, and economic costs. EUROCONTROL also underscored[3] that flights under 500 km accounted for just 3.8% of European aviation's CO_2 emissions in 2019 (4.3% in 2020). Comparisons often ignore the environmental impact of building high-speed rail, including life-cycle emissions, energy sources, biodiversity, and noise. Factoring in potential passenger shifts to road transport further narrows the environmental gap between air and rail.

According to Destination 2050[4], the European aviation sector decarbonisation roadmap, hybrid-electric and hydrogen aircraft could be deployed on European routes within 10-15 years. Considering the long lead times involved in building high-speed rail (18-26 years), transport policies should be more balanced by factoring in aviation's decarbonisation in the next 15 years.

Instead of dogmatic policies, a dedicated EU Strategy for Intermodality should be developed to assess the current state of play of the transport network. The Strategy should consider the environmental and socio-economic impacts, financial costs, available support mechanisms, and key obstacles to planning and implementation. It should involve all relevant industry and territorial stakeholders, as well as EU Member States, to ensure broad and inclusive participation. The Strategy should follow the principle of neutrality between different transport modes, ensuring citizens' freedom to choose their preferred mode of transport. It should also include Advanced Air Mobility (AAM) within the EU regulatory framework.

EU policies should promote better integration of the various transport modes, working together to deliver optimal multimodal solutions that benefit passengers and Europe's connectivity while minimising the carbon footprint. Conversely, shortsighted policies aiming to curb the development of air transport are likely to be counterproductive and limit the sector's ability to invest in sustainability.

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[1] In light of the European Green Deal (https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en) and the Smart and Sustainable Mobility Strategy of the European Commission (https://transport.ec.europa.eu/transport-themes/mobility-strategy_en)
[2] https://www.aci-europe.org/media-room/384-new-study-confirms-co2-reduction-benefits-of-shifting-short-haul-flights-to-rail-are-limited.html
[3] French Government prohibits domestic flights when a rail alternative under 2.5 hours exist.
[4] https://www.destination2050.eu/

NOISE

According to the European Environment Agency, 4.2 million people in Europe are exposed to excessive aircraft noise (≥Lden 55dB) compared to 18.8 million from rail traffic and 104.8 million from road traffic.[1] Noise exposure can negatively affect citizens' health and well-being.

Aircraft noise is regulated at several policy levels, from global to local, through the International Civil Aviation Organisation (ICAO). Since 1972, ICAO has set globally applicable aircraft noise standards, with Chapter 14 being the latest. In the EU, the Environmental Noise Directive (2002/49/EC[2]), requires Member States to regularly perform noise mapping around industrial areas and transport infrastructure, including airports, and define noise action plans. Regulation 598/2014[3], dedicated to aircraft noise, reinforces the implementation of the ICAO Balanced Approach, adopted by ICAO in 2001, as an overarching framework defining the main pillars of aircraft noise management: noise reduction at source, land-use planning, noise abatement operational procedures and, as a last resort, operating restrictions. It requires airport-specific mitigation measures developed with stakeholder engagement – particularly with local communities – and supported by a cost-effectiveness analysis. European airports are already implementing a wide array of actions to mitigate noise exposure. For example, 90% of airports representing 60% of European air traffic implement noise abatement operational procedures, whilst close to 79% have operating restrictions in place, and 65% have noise insulation schemes for local communities.[4]

While international noise regulations and frameworks are essential, decisions at individual airports are best made locally. The ACI EUROPE Analysis Paper *Addressing the Future of Aviation Noise*[5], highlights possible trade-offs in noise management: concentrating noise to reduce the number of people affected but increasing exposure for some, and distributing it more broadly to lower intensity but expose more people. There are interdependencies between noise and gaseous emissions, as rerouting to avoid populated areas may lead to longer flights and thus more emissions. To tackle such trade-offs, the needs and preferences of local communities, as well as the specifics of operations at the airport, need to be taken into account.

Following the release of the World Health Organisation Guidelines on noise[6] which aim to drive policy action, this topic is receiving increased attention in Europe. The EU and Member States are conducting work to review the rules on noise restrictions at EU airports, particularly at night.

ACI EUROPE strongly supports the application of the ICAO Balanced Approach to aircraft noise management. This approach ensures the identification and implementation of noise-related measures that achieve the best environmental outcomes cost-effectively and consistently. While operational restrictions may sometimes be necessary, ACI EUROPE stresses these should only be implemented as a last resort after exploring all other options.

However, the implementation of the Balanced Approach varies significantly across EU Member States and is often inconsistent and incomplete. Restrictive measures and caps are often imposed without following the Balanced Approach Regulation, undermining the effectiveness of noise management strategies, creating fragmented regulations, reducing collaboration, and harming airport connectivity and competitiveness. Restrictive noise measures contradict findings of Enrico Letta's report[7], which highlights air connectivity as essential for European integration and the future of the EU Single Market. ACI EUROPE's report Benefits of Airports & Air Connectivity[8] shows airports and connectivity contribute 4.6% of the EU GDP. European airports need EU and national support to enhance competitiveness, connectivity, and green transformation.

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[1] Number of people exposed to average day-evening-night noise levels (Lden) ≥ 55 dB in Europe — European Environment Agency https://www.eea.europa.eu/data-and-maps/daviz/number-of-people-exposed-to-8#tab-googlechartid_chart_21
[2] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32002L0049
[3] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014R0598
[4] European Aviation Environmental Report 2019, page 65; based on ACI EUROPE member survey; https://www.easa.europa.eu/eco/sites/default/files/2021-09/219473_EASA_EAER_2019_WEB_HI-RES_190311.pdf
[5] https://www.aci-europe.org/component/attachments/attachments.html?id=321
[6] Environmental noise guidelines for the European Region https://www.who.int/europe/publications/i/
[7] https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf
[8] https://www.aci-europe.org/downloads/resources/ACI%20EUROPE%20SYNOPSIS%20-%20BENEFITS%20OF%20AIRPORTS%20%20AIR%20CONNECTIVITY%20digital.pdf

ACI EUROPE POLICY BRIEFING

SECURITY

THREATS TO CIVIL AVIATION

Background

Aviation security arose as a serious problem in the late 1960s, when the International Civil Aviation Organisation (ICAO) assumed a leadership role in developing aviation security policies and measures at the international level. Up until the early 2000s, civil aviation security was the remit of EU Member States but after the terrorist attacks on 11 September 2001 it was agreed that the European Union should set out common rules in the field of civil aviation security for the EU. The current framework legislation is **Regulation (EC) No 300/2008 of the European Parliament and of the Council of 11 March 2008**[1]**.**

As threats have evolved and new threats continue to emerge, the Commission Implementing Regulation (currently **Commission Implementing Regulation (EU) 2015/1998 of 5 November 2015**[2]) was amended and updated several times.

The Threats

Threats to civil aviation are evaluated regularly by the ICAO Working Group on Threat and Risk, and in the EU, the European Commission in collaboration with Member States regularly carries out Risk Assessments on the effectiveness of EU mitigation measures and adjusts them where necessary. The threats to civil aviation have been identified as:

- Person-borne improvised explosive device (IED) on the body or in cabin baggage
- IED in cargo
- IED in hold baggage
- Conventional hi-jack
- IED in services such as catering and in-flight supplies
- Chemical, Biological, and Radiological threats
- Aircraft used as a weapon
- Cyber-attacks
- MANPADS in conflict or proliferation zones
- Attack using RPAS/drones (on aviation targets)
- Landside attacks
- Vehicle-borne IED.

Airports are increasingly targeted by new and evolving threats, such as cyber-attacks and sabotage, which can significantly disrupt their operations and business continuity. In today's complex geopolitical climate, these risks have become more pronounced, posing not only security challenges but also threats to the vital connectivity and mobility that underpin the European way of life.

The Way Ahead

ACI EUROPE works with the European Commission to devise risk-based approaches to security that balance the need to address a constantly evolving threat picture with the need to implement measures that are operationally sustainable and improve the passenger experience.

To safeguard the integrity of air transport from new and evolving threats and to ensure that Europe remains connected and that the mobility of its citizens is maintained, comprehensive support is needed. This includes strengthening close and flexible cooperation with regulatory authorities to address these emerging risks, providing financial assistance to invest in robust security technologies, and offering material support to enhance airport's physical and cyber defenses. Additionally, clear processes must be established to help airports respond quickly and effectively to any incidents.

[1] https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32008R0300
[2] https://eur-lex.europa.eu/eli/reg_impl/2015/1998/oj

CYBERSECURITY AND AIRPORTS

The cybersecurity threat to airports and other critical infrastructure has increased drastically in recent years and is expected to continue to grow. As airport systems are increasingly interconnected, a high level of protection is required to minimise the risk of disruption to operations due to unwanted interference. Thus the regulatory framework must keep up with this evolving threat scenario and enable an effective and efficient management of the cybersecurity risks.

Since 17 October 2024, European Union Member States should have transposed the revised version of the EU Network and Information Security Directive (NIS[1]). This updated version (NIS2[2]) should ensure better regulatory consistency, streamlined reporting requirements among Member States, and also provide greater clarity on the scope of the Directive. All airports across the EU are expected to be subject to the same reporting requirements in the area of cybersecurity incidents.

Meanwhile, the European Commission tasked the European Union Aviation Safety Agency (EASA) to develop provisions for the identification and management of information security risks which could affect civil aviation (Part-IS regulation). This Regulation will apply to airports and is expected to enter into force by 2025.

Since 2022, the European Commission has also introduced cybersecurity requirements in the EU aviation security regulation, with some specifically aimed at airports.
As a result, airports find themselves at the crossroads between multiple regulatory requirements that are sometimes overlapping and with different timelines. This creates a risk of lack of coordination for airports between the various oversight authorities resulting in administrative and legal uncertainty.

Therefore:

- Any rule or regulation should be risk-based, meaning that airports may be able (based on their risks and the impact on their operations) to have cybersecurity programmes commensurate with those risks.
- Any rule or regulation should be based on an accepted industry standard for Information/ Cybersecurity such as ISO 27001, etc, which includes elements of the supply chain. This will ensure that suppliers of critical systems and infrastructure are considered within the scope of any new regulation.
- Criticality should not be unilaterally prescribed by authorities but defined in collaboration between the authority and the airport operators. Airport operators should be given the opportunity to demonstrate why systems or services or cyber resources are not critical to their operations.
- The different authorities in charge of compliance oversight should coordinate their inspection/ audit processes and activities. A single compliance framework should be developed to ensure that measures implemented by an organisation to meet the requirements of one regulation are recognised as meeting the requirements of the other overlapping regulations regardless of their origin, be it ICAO, EU, EASA or national authorities.
- As much as possible, airports should be deemed to comply with regulatory requirements if they are certified by an independent certification body (as has been the case for many years in other sectors/ industries with ISO standards).

[1] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32016L1148
[2] https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32022L2555

INNOVATION IN AVIATION SECURITY

In order to mitigate the constantly evolving landscape of security threat, airports have been required to implement an increasing number of aviation security measures. For many years, airports, manufacturers and security services providers have strived to develop and implement solutions delivering a high security outcome with minimal impact on operations and the passenger experience.

However, the concepts currently in place rely heavily on human resources to perform repetitive tasks and are often based on equipment, such as conventional X-ray, requiring highly skilled security officers to operate. Therefore, maintaining the desired security outcome requires a massive amount of operational resource for all airports and is a very demanding task for security officers. In a world transformed by digitalisation, where data is combined to provide business intelligence, aviation security should embrace innovation as well.

One of the main roadblocks to innovation is the current testing and certification system for airport security equipment, which is plagued by several critical shortcomings. First, the system lacks transparency, with stakeholders – including airports, manufacturers, and national authorities – unable to access essential information on testing timelines and certification progress. This leads to uncertainty and delays in deploying new technologies. Additionally, there is insufficient capacity, as a limited number of national laboratories are responsible for testing, creating bottlenecks that slow down the certification process. The system is also disconnected from the European Commission's security policies, meaning testing and certification cannot keep pace with evolving security requirements. Outdated processes and inconsistent quality control further undermine the reliability and speed of the system, delaying the implementation of advanced detection technologies.

Another inhibitor to innovation is the fact that security equipment currently deployed at airports has a limited ability to communicate with each other, and produce data sets that cannot be easily used outside of a proprietary environment. To circumvent the problem, airports and regulators co-operate with screening equipment manufacturers to drive forward Open Architecture (OA) principles. Open Architecture will enable standardised and interoperable interfaces across security systems and business management tools. Whilst important aspects of Open Architecture have already been agreed upon, more work is needed to make Open Architecture a basis on which security concepts can be developed. For example, equipment certification processes are yet to evolve to include this dimension.

Speeding up the development and adoption of innovative solutions also requires:

- A change in the way regulations set standards for detection requirements, which must include the operational dimension to limit the negative impact induced by the implementation of new equipment, such as reduced capacity or higher operational expenditures. In order to ensure that the operational dimension is effectively considered, airports and manufacturers should be included in the standard setting process.
- To develop a modernised Integrated European Union testing and certification system which:
  - allows non-critical testing to be conducted outside the current set of national laboratories and adopting modern standards like ISO. This should increase testing capacity and reduce costs;
  - ensures transparency and open management to increase visibility for all stakeholders, improve coordination and decision-making, allowing for the timely implementation of new technologies;
  - includes manufacturers and airports in the process to help tailor testing to real-world needs and operational requirements;
  - collaborates with like-minded countries to support international recognition of equipment performance and further alignment on aviation security policies (e.g.: lifting of liquid restrictions);
  - direct funding for research and development (R&D) as well as for testing and certification.

Finally, a successful change in the technology baseline across the industry will only be possible if combined with a change in the role of security officers. Security officers will need to be at the core of security concepts and regulations, not as staff conducting compliant tasks but as highly skilled professionals delivering the desired security outcome with the support of efficient and effective technology.

ACI EUROPE is the European region of Airports Council International (ACI), the only worldwide professional association of airport operators. ACI EUROPE represents over **500 airports** in 55 countries. Our members facilitate over 90% of commercial air traffic in Europe. Airports and air connectivity support 14 million jobs, generating **€851 billion in European economic activity (5% of GDP)**.

In response to the Climate Emergency, in June 2019 our members committed to achieving **Net Zero** carbon emissions for operations under their control **by 2050**, without offsetting.

Based in Brussels, we lead and serve the European airport industry and maintain strong links with other ACI regions throughout the world.

EVERY FLIGHT BEGINS AT THE AIRPORT.

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