# POLICY BRIEFING

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AIRPORTS COUNCIL
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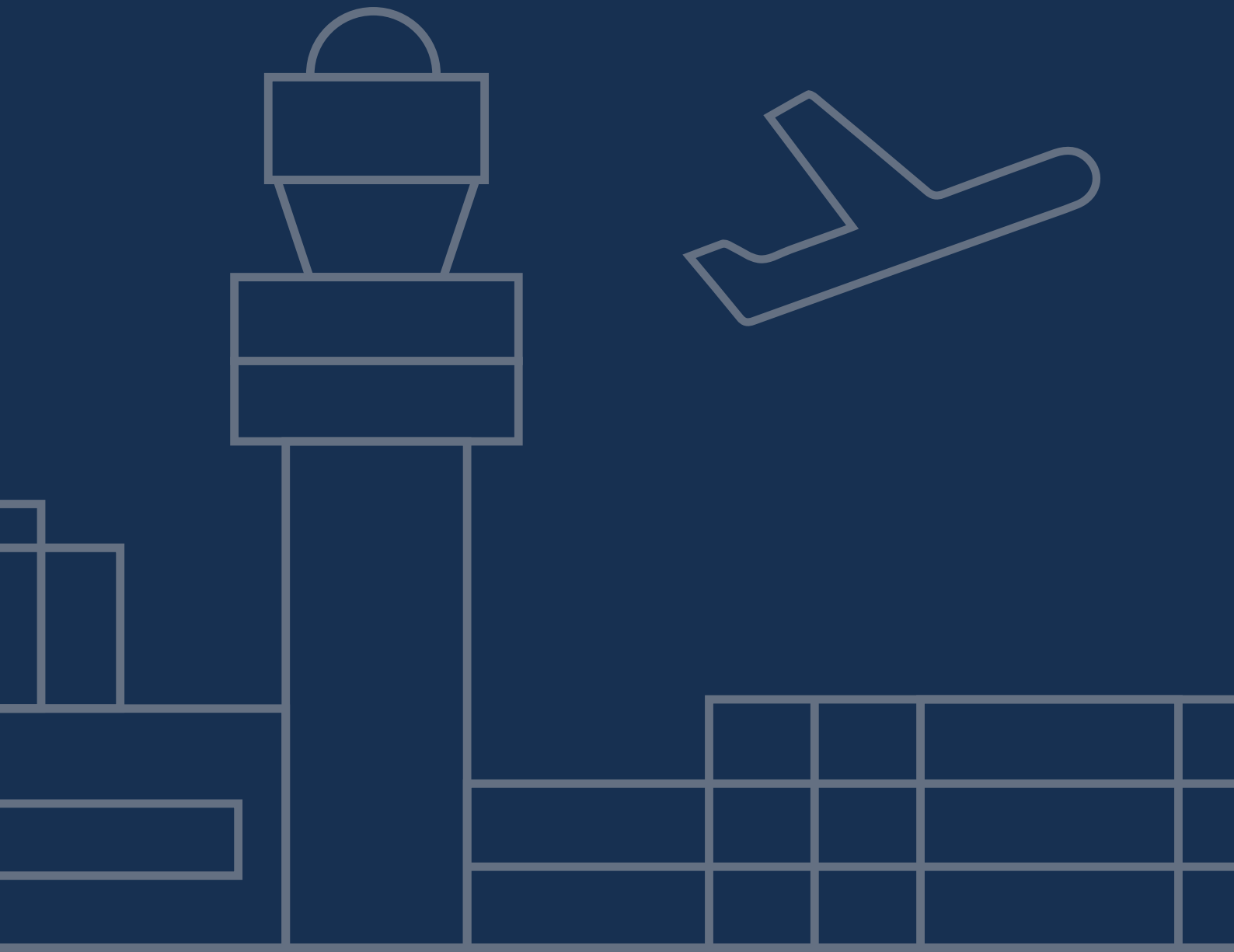
# CONNECTIVITY

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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. 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 benefiting 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 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 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.

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

https://www.aci-europe.org/air-connectivity.html

# AIR TRAFFIC MANAGEMENT (ATM)

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.

Strike action in some Member States was a factor for this state of affairs, but the primary cause remains a chronic lack of capacity in Europe's ATM system. 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.

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.

This means that the new Single European Sky (SES) Regulation must serve the goals of increasing network performance, balancing capacity and demand, and recognising airports as equal partners in the network. The recommendations of the April 2019 Wise Persons Group[4] report are a good start in this respect, and it will be important to maintain a full role for airports, and other operational stakeholders, in the realisation of the next phase of the SES.

A more centralised approach to delivering the SES may therefore be what is required, provided that airports are fully involved in its management and delivery, and that local capacity needs are not neglected in a pure focus on the network.

What is clear is that the next stage of the SES must come soon and ensure a long-term sustainable solution to Europe's airspace capacity problems, which fully recognises the critical role of airports within the airspace network.

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[1] https://transport.ec.europa.eu/transport-modes/air/single-european-sky_en
[2] https://www.eurocontrol.int/archive_download/all/node/13448
[3] https://www.aci-europe.org/component/attachments/attachments.html?id=1130
[4] https://www.sesarju.eu/sites/default/files/documents/reports/report-wise-persons-group-future-ses.pdf

# 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 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 (ATM) 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.

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[1] https://www.eurocontrol.int/archive_download/all/node/13448
[2] https://www.aci-europe.org/component/attachments/attachments.html?id=1130
[3] https://www.aci-europe.org/component/attachments/attachments.html?id=476

# 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.

Since Spring 2020, a series of alleviation measures have been in place in order to deal with the effects of the COVID-19 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 has advocated for moving away from waivers, to increasingly targeted measures and the progressive reinstatement of the slot usage requirement. The use rate has been gradually reinstated since the Summer 2021 season, along with the introduction of special "Justified Non-Use of Slots" (JNUS) provisions, which protect airlines from the impact of travel restrictions which cause them to cancel flights. 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, 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/2022/07/wasg-edition-2-english-version.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[1]; legislation that was transposed into Member States' national law on or before March 2011.

The EU Airport Charges Directive applies to airports with more than 5 million passengers per annum, along with the largest airport in each EU Member State. It requires airport operators to follow principles of economic regulation on consultation, transparency and non-discrimination and offers airlines a resort mechanism for disputes on charges.

**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*[2], 2017 – Oxera Study: *The Continuing Development of Airport Competition in Europe*[3], and 2022 - Frontier Economics Study *Airport Competition in Europe: Recent and Future Developments*[4] 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[5] 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 Challenges of Growth reports have repeatedly 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 the maintenance of the current EU rules on airport charges.

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[1] https://transport.ec.europa.eu/transport-modes/air/airports/airport-charges_en
[2] Copenhagen Economics Study: Airport Competition in Europe www.aci-europe.org/component/attachments/attachments.html?id=490
[3] Oxera Study: The Continuing Development of Airport Competition in Europe www.aci-europe.org/component/attachments/attachments.html?id=447
[4] Frontier Economics Study: Airport Competition in Europe: Recent and Future Developments https://www.aci-europe.org/index.php?option=com_attachments&task=download&id=2193:Frontier-Economics-Study---Airport-Competition-in-Europe---Recent-and-Future-Developments
[5] https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0144:FIN:en:PDF

# 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 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 ensuring a successful implementation.

ACI EUROPE calls on Regulators to focus on the following:

- There is a 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 when choosing headquarters.

## 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.

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[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.

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[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

# GROUND HANDLING AT AIRPORTS

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

Summer 2022 has seen the resumption of air travel after the devastating effects of the COVID-19 pandemic. Coping with the sudden increase and concentration of demand for air travel has been challenging for airports, airlines and their operational partners – in particular ground handlers. This has resulted in an increase in flight delays and cancellations, and more generally a degraded passenger experience at many airports – as key processes including check-in, security screening and baggage delivery took longer.

The airport and ground handling staff crunch has impacted key operational processes. It is caused by:

- Airports and ground handlers coming out of the COVID-19 crisis with depleted resources, as they have been forced to lay off staff in those areas due to the collapse of air traffic in 2020 and 2021. The fact that airports and ground handlers received very little in Government financial support and that such aid came rather late was a significant contributing factor to their weakened operational capabilities.

- An extremely tight labour market across Europe. The fact that security and ground handling jobs have for many years stood at the lower end of the pay scale and involve working in shifts 7 days a week on site with no teleworking is a clear handicap in attracting people in the current inflationary environment.

- As regards ground handling in particular, years of liberalisation triggered by the EU Ground Handling Directive (96/67/EC)[1] 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-pandemic, they are now coming to the fore – impacting the entire aviation ecosystem.

Airports are leaving no stone unturned as they strive to overcome these challenges. There is, however, no quick and easy fix – but airports are taking unprecedented measures to increase their remit in the governance of ground handling. This requires a paradigm change in the relation between airlines and ground handlers vis-à-vis airports.

The adoption of the 1996 Ground Handling Directive has fundamentally changed the ground handling market at EU airports. The Directive applies to some 112 airports (with more than 2 million passengers per year) across Europe, which together represent 93.5% of passenger traffic. That means almost the entire market is liberalised. 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 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 forthcoming EASA proposal for a ground handling regulation will help to achieve that goal, by making ground handlers more directly responsible for their performance towards airports.

At the same time, the EU Green Agenda and requirements from the Fit for 55 package[2] mean ground handlers must fully align with the decarbonisation efforts of airports.

Finally, the ground handling market must become socially sustainable – to address operational disruptions at airports following staff shortages and social tensions. Social dialogue on working conditions and the general attractiveness of the sector can contribute to that goal.

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[1] https://eur-lex.europa.eu/EN/legal-content/summary/ground-handling-at-community-airports.html
[2] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021DC0550

# STATE AID

## THE 2014 AVIATION GUIDELINES

European State aid policy recognises the positive impact of air transport to link people and integrate remote regions, to justify public financial support to smaller regional airports which are unprofitable. The 2014 Guidelines on State aid to airports and airlines (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. The support would thus need to be phased out by 2024, when airports should become profitable. The European Commission evaluated the Aviation Guidelines in 2020, to decide about next steps beyond 2024.

The Aviation Guidelines determine that airports' financial prospects, and therefore their eligibility for aid, depends on their size (measured in number of passengers per year). Only airports with less than 3mppa[1] are eligible for operating aid. Small airports (up to 200,000 passengers) remain fully exempted.

Following the evaluation of the Aviation Guidelines in 2020,[2] the Commission found that many airports with less than 1mppa would continue to need operating aid beyond 2024. ACI EUROPE had published economic analysis with similar findings in 2019.[3]

Since then, the COVID-19 pandemic has dramatically impacted airports due to the collapse of air travel in 2020 and 2021. The fact that airports have received far less financial aid than airlines to compensate for COVID-19 losses, combined with the fact that such aid came later, contributed to their structurally weak financial position.[4]

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 2024 – with a clear focus on *simplification* and *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 Commission, as European airports remain committed to reaching Net Zero $CO_2$ emissions from their operations by 2050. Airports have welcomed the new Climate, Energy and Environmental State aid Guidelines[5] 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 2024. A pragmatic solution would be an extension for five years, reflecting the time lost due to the pandemic, while expanding the exemption for operating aid to airports with less than 1mppa.

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[1] mppa - million passengers per annum
[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
[4] Member States granted more than 37 billion euro to airlines and almost 5 billion euro to airports.
[5] 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

# SUSTAINABILITY

# CLIMATE CHANGE

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

While the climate footprint of individual aircraft has improved dramatically over the last decades, this development has been outpaced by growth in air traffic. Aircraft emissions in Europe increased by 16% between 2005 and 2018 and are projected to increase by 21% by 2040.[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 400 accredited airports worldwide as of August 2022, welcoming close to 49% of global air passenger traffic.[2] In the reporting year May 2020 – May 2021, the then accredited airports reduced emissions under their direct control by 347,718 tonnes of $CO_2$. *Airport Carbon Accreditation* has won praise from several authoritative institutions, including the UNFCCC, 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 IPCC in their Special Report on Global Warming of 1.5° from 2018[3] require a step change in climate action. Therefore, ACI EUROPE adopted a new Resolution on climate change on 26 June 2019, expanded in 2022[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 agree upon a 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.

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.

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[1] European Aviation Environmental Report 2019, https://www.easa.europa.eu/eaer/  page 22
[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%202022.pdf

# EU 'FIT FOR 55'

Major policy transformations are required to reflect 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.

The European Commission's 'Fit for 55' package[4] is in line with the industry's ambition in many aspects and ACI EUROPE welcomes many of the proposals. However, the proposed policies can be further refined by including appropriate remedies to mitigate against the risk of having Europe and its citizens impacted by downgraded air connectivity, while remaining uncompromising on the acceleration of the decarbonisation ambition.

The cumulative impact assessment[5] of the 'Fit for 55' proposals on the airport industry shows that the package of proposals will result in significant fare increases (by 17% for regional airports and by 5% on connecting flights via EU hubs in 2050), reduced demand (of -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 coun-tries 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 against the risk of downgraded air connectivity. Remedies should include:

- Incentives and financial support for the uptake of SAF by providing for a European single market for SAF and the creation of a 'SAF allowance mechanism' to bridge the price gap between kerosene and SAF
- Introduction of a flexibility mechanism in the physical SAF supply chain similar to a book and claim system
- Earmarking of revenues from taxation and the auctioning of ETS allowances for aviation decarbonisation purposes
- Exemption of small airports from the obligation to supply electricity for stationary aircraft as the costs involved in doing so are likely to exceed the associated emissions reduction potential at these airports
- 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 2022 https://www.aci-europe.org/downloads/content/ACI EUROPE RESOLUTION 2022.pdf
[3] Destination 2050 Report https://www.destination2050.eu/wp-content/uploads/2021/03/Destination2050_Report.pdf
[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/component/attachments/attachments.html?id=2189

# AIRPORTS AND THE SUSTAINABLE FINANCE ACTION PLAN

ACI EUROPE believes that airports, as important infrastructure for cities and communities, should be priority investments for the green transition, understanding that airports are large and expensive immobile infrastructure with environmental impacts.

Airports provide connectivity that enables important economic and social development. Airport operators work with their customer airlines, tenants and traveller community to improve environmental performance.

Airport expansion is compatible with the Paris Agreement and the European Green Deal. Furthermore, European airports are leaders in accounting for and addressing their environmental impact, via the *Airport Carbon Accreditation* Programme (see paper on Climate Change). Therefore, any future evolution of the EU Sustainable Finance Action Plan and the Taxonomy for Sustainable Activities should include airports as enabling and transition activities.

**Background related to Airports in the EU Taxonomy for Sustainable Activities**

In 2018, the European Commission published an Action Plan on Financing Sustainable Growth (the EU Action Plan ). This sets out the EU´s ambition to use finance and investment to help achieve sustainability goals.

The European Commission continues development of a methodology to assess the green impacts of investment called the Taxonomy. This living document – meaning it will be constantly updated – of green activities provides a framework of definitions, measures of degree of sustainability, and a transition tool for sectors that remain carbon intensive.

The Taxonomy addresses aviation as a group of distinct activities, including air transport, airport operation and construction, ground-handling, air traffic management and fuel production. Several sustainability-related airport activities are already part of the taxonomy defined for other sectors, including buildings and energy generation for example.

Future development of the Taxonomy should recognise that airports themselves are not significant sources of emissions, and that airport operator activities, such as runway resurfacing, can be done via work that is less impactful on the environment and could reduce the airport's overall impact.

ACI EUROPE has argued that airports, because of the large land area that they cover and their commitment to land management, should be considered sustainable for their contributions to *"protection of biodiversity"* and *"protection of water and marine resources".*

Airport operations can be *"a low carbon activity"* if meeting the applicable technical screening criteria, i.e. is in line with defined sustainability performance thresholds. The construction of airport infrastructure may however fall into a separate category *"as a transition activity"* under which aircraft operations fall.

Finally, the availability of zero/low carbon energy sources at the airport should allow the consideration of the airport operation as a sustainable activity.

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[1] https://finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance_en

# SUSTAINABLE AVIATION FUELS

Sustainable aviation fuels derive from non-fossil carbon resources, such as biofuels or synthetic fuels, that can reduce lifecycle $CO_2$ emissions by up to 85% compared to conventional fuels. They are considered drop-in fuels as they can currently be blended up to 50% with conventional jet fuel with no changes to aircraft or airport infrastructure.

The European aviation sector roadmap for decarbonisation, Destination 2050[1], has acknowledged the pivotal role of Sustainable Aviation Fuels (SAF) in decarbonising aviation in order to achieve a reduction in $CO_2$ emissions of approximately 99 Mt by 2050.

Nevertheless, commercial production of SAF is minimal due to the significant price gap compared with fossil fuels. ACI EUROPE welcomes the European Commission's RefuelEU Aviation[2] initiative to ramp up the production, deployment and supply of high-quality SAF in Europe.

Under the proposal, 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. Regarding the desired use of SAF, from 0.05% in 2020 to 63% of total jet fuel use in 2050, hundreds of millions of tons of SAF will be required for the aviation industry, significantly affecting the SAF supply chain and blending facilities.

ACI EUROPE supports the establishment of an EU mandate of SAF[3] (from 6% in 2030 to 63% in 2050), which will provide greater certainty on future demand and unlock investment to allow the production of SAF. Nevertheless, in the absence of a global framework for SAF and due to the higher fuel costs arising from their use, financial support to EU airports is required to mitigate against the risks of competitive distortion with non-EU airports for flights beyond the EU.

A transition period is required to allow fuel suppliers to make the necessary technological and logistical investments and demonstrate compliance at the aggregated level (i.e. across all EU airports taken together in scope of RefuelEU legislation).

ACI EUROPE advocates for a European book and claim system whereby the supply of SAF would lead to the issuance and trading of SAF certificates. Airlines can purchase SAF without being geographically connected to a supply site. Consequently, tankering is prevented as it will remove the need for physical aircraft refuelling. Additional safety and environmental risks at airports arising from increasing the number of refuelling events due to the physical refuelling obligation are also avoided.

In order to comply with SAF mandates, funding instruments and other policy measures such as SAF allowances[4] are critical to de-risk investments in the production of SAF and their uptake. Related airport activities such as transportation, storage and use of SAF should be included in the EU Sustainable Finance Taxonomy Regulation to help airports finance their efforts to reach climate neutrality.

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[1] https://www.destination2050.eu/
[2] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12303-Sustainable-aviation-fuels-ReFuelEU-Aviation_en
[3] RefuelEU for aviation established an EU SAF mandate increasing from 2% to 63% between 2025 and 2050 (2% in 2025; 5% in 2030; 20% in 2035; 38% in 2040; 63% in 2050)
[4] Policy mechanism under the EU Emissions Trading System (EU ETS) to support the uptake of SAF

# HYDROGEN-POWERED AIRCRAFT

Increased focus on reducing fuel consumption and improving aircraft and engine technology is a key driver for decarbonising air transport and minimising its environmental impacts. For flights within the EU, hydrogen-powered aircraft will bring the largest contribution to achieving net zero $CO_2$ emissions in 2050 followed by Sustainable Aviation Fuels. As demonstrated by the European aviation industry roadmap Destination 2050[1], hydrogen-powered aircraft will deliver 20% of net $CO_2$ emissions reductions of European aviation emissions by 2050.

Hydrogen is gaining serious traction as a possibility for aviation and tests are already underway to prove its effectiveness. But the transition to this new type of fuel in planes requires investment for the development of hydrogen-powered aircraft as well as for the associated supporting infrastructure at airports. The first commercial hydrogen-powered aircraft is expected in 10-15 years. From an airport's perspective, it is essential to start preparing infrastructure and operations as early as possible.

Considering that airport infrastructure is built to serve for decades, new projects launched today should already anticipate the needs of future aircraft and be designed with tomorrow's energy demands in mind. ACI EUROPE welcomes the proposal[2] of the European Commission for Member States to include deployment plans for airport infrastructure in their national decarbonisation strategies to enable hydrogen-powered and electrified aircraft.

The production, distribution, and use of hydrogen will significantly affect the supply chains and infrastructure requirements depending on each airport's location, size, capabilities and infrastructure assets. Initially, fuel tankers could be used to deliver hydrogen to the aircraft, but a liquid hydrogen hydrant system may be required as demand rises. The on-site hydrogen production would transform airports into hydrogen hubs[3]. Thus infrastructure at airports could provide hydrogen for aircraft, airport ground transport operations, heating and cooling, but also for trains and local industries.

Airports can contribute to the development of hydrogen aircraft by indicating how the most efficient infrastructure and operations can be ensured. In 2022, ACI EUROPE signed a Memorandum of Cooperation with Airbus to accelerate the development of hydrogen-powered and hybrid-electric aircraft, prepare associated supporting airport infrastructure and bring these to the market.

All implications should be assessed without compromising safety and the efficiency of operations. In other words, the refuelling and servicing of hydrogen aircraft shall take place safely and efficiently alongside conventional aircraft.

ACI EUROPE stands ready to support the planning for the roll-out of hydrogen-powered aircraft. We urge EU policymakers to ensure a level playing field that is crucial in a highly competitive international context regarding energy access costs. Additionally, industry investments shall be supported through incentives or by reducing risk through a consistent and stable policy framework.

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[1] https://www.destination2050.eu/
[2] Revision of the Alternative Fuels Infrastructure Directive: https://ec.europa.eu/info/sites/default/files/revision_of_the_directive_on_deployment_of_the_alternative_fuels_infrastructure_with_annex_0.pdf
[3] Airbus'"Hydrogen Hub at Airports" concept: https://www.airbus.com/en/newsroom/news/2021-06-tomorrows-airports-future-energy-ecosystems-0

# 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**

Whilst the aviation industry is maximising efforts to achieve net zero emissions by 2050, the European Commission is encouraging a modal shift from air to rail by actively promoting the reduction of short-haul flights as one of the measures to ensure all collective travels under 500km become carbon neutral by 2030[2]. Meanwhile, some Member States are taxing or restricting short-haul flights to encourage a modal shift to rail.

The European aviation industry has published a study[3] showing the limited $CO_2$ reduction benefits of shifting short-haul flights[4] to rail. While a direct comparison of current emissions confirms that rail has lower $CO_2$ emissions per passenger than air travel, the $CO_2$ benefits of shifting short-haul flights to rail are limited and generate other environmental as well as social and economic costs.

In addition, EUROCONTROL highlighted[5] that short-haul flights under 500km accounted for only 3.8% of European aviation's $CO_2$ emissions in 2019 (4.3% in 2020). It should be noted that recent studies have failed to include the significant environmental impacts of building high-speed rail infrastructure, in particular the total life-cycle emissions, and the energy source used when comparing the total environmental footprint of air and rail. When taking into account rail's impact on biodiversity and noise pollution as well as possible passenger shift to road transport, the gap in total environmental performance between rail and air travel is significantly reduced.

According to Destination 2050[6], 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 and factor in aviation's decarbonisation in the next 15 years.

EU policies should promote better integration of the various transport modes, working together to deliver optimal multimodal solutions to the benefit of passengers and Europe's connectivity while minimising the carbon footprint. Conversely, short-sighted policies aiming at curbing 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://transport.ec.europa.eu/transport-themes/mobility-strategy_en
[3] https://www.aci-europe.org/media-room/384-new-study-confirms-co2-reduction-benefits-of-shifting-short-haul-flights-to-rail-are-limited.html
[4] French Government ambition to ban domestic flights when a rail alternative exists under 2,5 hours.
[5] https://www.eurocontrol.int/article/eurocontrols-think-paper-air-and-rail-balance-european-environment-agencys-reaction
[6] https://www.destination2050.eu/

# NOISE

According to the European Environment Agency, 4.2 million people in Europe are exposed to excessive average noise levels (equal to or above Lden 55dB) from aircraft. In comparison, 18.8 million are exposed to such noise levels from rail traffic, and 104.8 million from road traffic.[1] Noise exposure can negatively affect health and the well-being of citizens.

Aircraft noise is regulated at several policy levels, from global, through the International Civil Aviation Organisation (ICAO), to local. Thus, since 1972, ICAO has set standards for aircraft noise which are globally applicable, the last of which is ICAO Chapter 14. In the EU, aircraft noise is addressed by the Environmental Noise Directive (2002/49/EC[2]), which requires Member States to regularly perform noise mapping around industrial areas and transport infrastructure, including airports, as well as to define noise action plans. Regulation 598/2014[3], dedicated to aircraft noise, reinforces the implementation of the ICAO Balanced Approach, which was adopted by ICAO back 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 the most suitable noise mitigation measures to be defined on an airport-by-airport basis, with engagement of all stakeholders concerned - local communities in particular -, supported by a cost-effectiveness analysis. European airports are already implementing a wide array of actions to reduce or mitigate against 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]

This multi-level approach recognises the complex nature of noise and noise management. Thus, while it is relevant to regulate the noise performance of aircraft and define a general framework for noise management at the international level, decisions related to noise exposure at individual airports are best made locally. For instance, as outlined in the ACI EUROPE *Analysis Paper Addressing the Future of Aviation Noise*[5], there are often trade-offs between noise concentration, which can reduce the number of people exposed but entail a relatively high exposure for them, and noise distribution – which can lower noise levels but increase the number of people exposed. Furthermore, there are interdependencies between noise and gaseous emissions: circumventing a densely populated area to reduce noise exposure might lead to longer routes and increase 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. This is all the more important as it is increasingly acknowledged that non-acoustic factors (e.g. subjective perceptions and attitudes) significantly influence the level of annoyance experienced due to noise exposure.

Following the release of the World Health Organisation Guidelines on noise[6] which aim to drive policy action, this issue 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 considers that it is important for the ICAO Balanced Approach to remain the foundation of noise management in Europe. To enable airports to address noise annoyance in a comprehensive manner, it is also essential to better understand non-acoustic factors. It remains equally important to ensure continued R&D to promote further reduction of noise at source. Given the rapid developments in civil supersonic aircraft technology, it will be crucial to ensure that progress achieved so far in reducing the noise impacts of aviation are not put at risk.

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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.
[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/item/9789289053563

# SECURITY & SAFETY
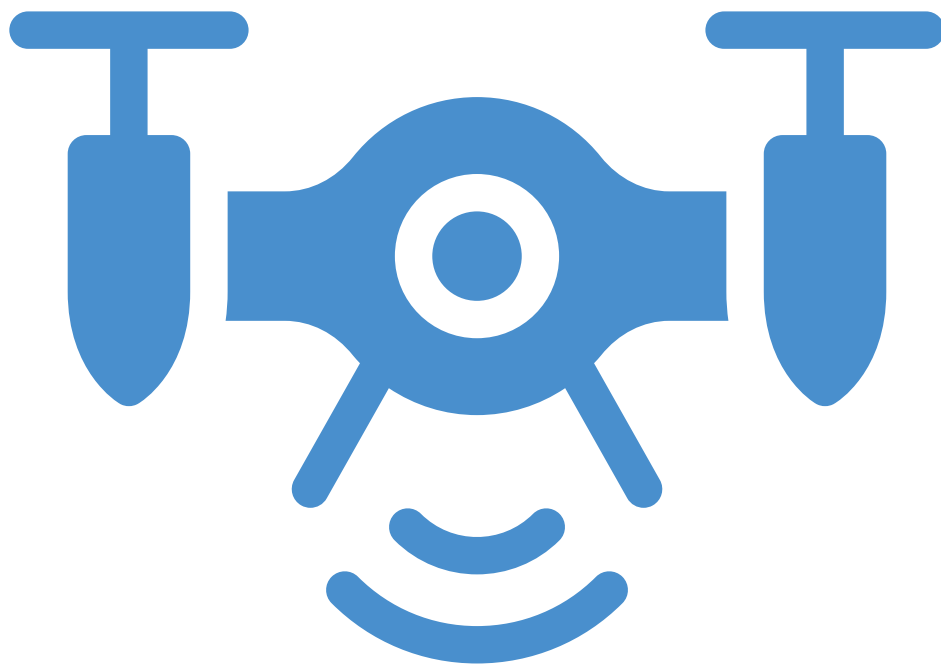
# TRAVEL RESTRICTIONS DURING THE COVID-19 CRISIS AND BEYOND
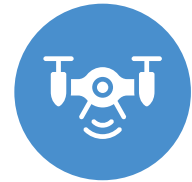
The COVID-19 crisis had an unprecedented impact on all economic sectors, on lives and livelihoods. In 2022, despite an increase in passenger volumes, total air connectivity across the European airport network still remains -29% below pre-pandemic (2019) levels. This reflects the combination of yet not fully lifted travel restrictions worldwide, the impact of the war in Ukraine and structural changes in the aviation market.

Two years of the COVID-19 crisis have shown that:

- Travel restrictions are largely ineffective at stopping the spread of the virus. At most, they will only postpone by a few days a new wave of infection. Unilateral, inconsistent, uncoordinated and ineffective measures at national level caused major confusion among passengers and an incredibly heavy burden on the transport and tourism industry.

- According to the WHO[1], *"blanket travel bans will not prevent the international spread, and they place a heavy burden on lives and livelihoods. In addition, they can adversely impact global health efforts during a pandemic by disincentivising countries to report and share epidemiological and sequencing data."*
  The ECDC[2](European Centre for Disease Prevention and Control) stated in August 2022 that *"there are potentially substantial, negative societal consequences to reintroduced stringent disease control measures and travel bans, both directly in terms of impact on population health and livelihoods, and socially and politically if large proportions of the population do not accept them".*
  A study by the independent consultant Oxera[3] demonstrated that pre-departure testing requirements were ineffective at stopping or even limiting

the spread of the Omicron variant. Conversely, the impact of these restrictions, and in particular the limitations to the free movement of people, resulted in significant and unnecessary economic hardship – not just for the travel and tourism sectors and their workforce, but for the whole European economy.

- The multiplication of health document checks along the passenger journey should be avoided. The EASA-ECDC Aviation Health Safety Protocol[4] establishes that *"multiple document verification created bottlenecks and unnecessary queueing, consequently additional opportunities of transmission. It is strongly recommended that document verification should be a 'One-stop' arrangement and to the extent possible in a touch-free manner. This is particularly the case for duplicative verifications at arrival, as this will create unnecessary queues. If verification has been reliably completed prior to departure, there is very little medical reason for additional checks later on through the journey".*

- The EU Digital COVID Certificates[5] (and equivalence decision with third countries) constituted an excellent tool for the recovery of the transport sector. Their verification should not be used as a reason to impose additional restrictions to the freedom of movement. All vaccines that have completed the WHO emergency use listing procedure should be included in the EU DCC.

- The Council recommendations for intra[6] and extra EU travel[7] should be complemented with the discontinuation of the white list of countries for which Member States should gradually lift the travel restrictions; moving fully to a person-based approach if the epidemiological situation allows.

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[1] WHO advice for international traffic in relation to the SARS-CoV-2 Omicron variant (B.1.1.529) https://www.who.int/news-room/articles-detail/who-advice-for-international-traffic-in-relation-to-the-sars-cov-2-omicron-variant

[2] Long-term qualitative scenarios and considerations of their implications for preparedness and response to the COVID-19 pandemic in the EU/EEA https://www.ecdc.europa.eu/en/publications-data/long-term-qualitative-scenarios-and-considerations-their-implications

[3] https://www.aci-europe.org/downloads/mediaroom/Impact%20of%20travel%20restrictions%20on%20Omicron%20in%20Italy%20PR%2001%20feb%2022.pdf

[4] https://www.easa.europa.eu/en/downloads/114674/en

[5] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022R1034

[6] https://data.consilium.europa.eu/doc/document/ST-5400-2022-REV-1/en/pdf

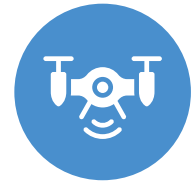[7] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0754

# 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]) has been 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 hijack
- 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.

## 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.

The regulatory framework must also account for the growing impact on business continuity generated by cyber attacks, as well as the pace required to address this threat effectively. Flexible and tailor-made approaches enabling an improved cooperation between industry and authorities are essential to tackle cyber risks.

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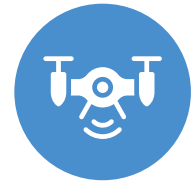
The cybersecurity threat to airports and other critical infrastructure has increased drastically in recent years and is expected to continue to grow. As airport systems are increasingly interconnected, a high level of protection is required to minimise the risk of disruption to operations due to unwanted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

A revised version of the EU Network and Information Security Directive (NIS[1]) is expected to be published in 2023. This updated version (NIS2) 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 will enter into force on 16 October 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 cybersecurity policy should be outcome-focused, ensuring agility between the different regulatory regimes, and provide flexibility for the oversight and compliance for both Member States and industry. There should be oversight coordination between the different authorities. Measures implemented by an organisation to meet the legislative requirements of one functional area (such as security, safety or essential service continuity) should be deemed sufficient to meet the requirements of other obligations, provided that there are equivalent outcomes.

- The cyber assessment work should result in an airport being compliant with ALL regulations regardless of their origin, be it ICAO, EU, EASA or national authorities.

- Any rule or regulation should be risk-based, meaning that small and medium size airports may be able (based on their risks and the impact on their operations) to have cybersecurity programmes commensurate with those risks.

- 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.

- Any rule or regulation should be based on an accepted industry standard for Information/Cybersecurity such as ISO 27001, EN16495, etc., which includes elements of the supply chain. This will ensure that suppliers of critical systems and infrastructure as well as cross-company, cross-sector, and cross-industry suppliers are considered within the scope of any new regulation.

- Airports should be deemed to comply with the 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).

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[1] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32016L1148

# INNOVATION IN AVIATION SECURITY
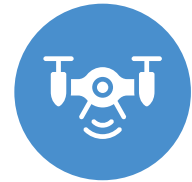
In order to mitigate against the constantly evolving landscape of security threat, airports have been required to implement an increasing number of aviation security measures. For many years, airports, manufacturers and security services providers have strived to develop and implement solutions delivering 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 key inhibitor to innovation is the fact that security equipment currently deployed at airports have 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 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.

- Support from authorities to fund the development of technologies as well as an increase in testing and certification capacity.

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.

# DRONES & URBAN
# AIR MOBILITY

In its position paper on Drone Technology[1], ACI EUROPE calls for effective regulation of drone operations at and around airports. It is imperative that airports be protected from entry by malicious and non-cooperative drones, and that clarity be ensured over which technologies may be safely deployed at airports to detect unauthorised drones and prevent them from interfering with airport operations. Airports should develop Concepts of Operations and contingency plans for dealing with drone incidents, detailing procedures, lines of communication and responsibilities for drone-related incidents. The ACI EUROPE Concept of Operations for Drones at Airports[2] provides a common basis for this.

Regulations[3] have already been adopted setting out requirements for a range of drone operations, depending on the drone being used, its purpose, the relevant airspace and the outcome of the mandatory risk assessment. This represents a good basis for ensuring that authorised drone operations are safe and properly managed.

Further regulations and initiatives are planned with regard to the most stringent "certified" category of unmanned aircraft, as well as for the development of U-Space traffic management services and defining the geographical zones where drones may and may not go.

Urban Air Mobility (UAM, sometimes referred to as Advanced Air Mobility)[4] is rapidly developing as an exciting new paradigm in aviation. New aircraft and air traffic management technologies offer the prospect of electric vertical take-off and landing (eVTOL) aircraft providing a range of advanced mobility solutions in Europe's cities and regions.

Naturally, due to its nature as a form of aviation, and its potential for accessible, rapid and more on-demand connectivity, Urban Air Mobility is being considered for transporting passengers to and from airports.

As such, UAM may benefit the future of European citizens and airports in multiple ways, so as to respectively further improve the passenger experience and develop new sources of revenue. Due to their electric powertrains, eVTOLs constitute a first step towards electric, zero-emission aviation. Their development therefore also presents the opportunity to not only innovate in the services offered to passengers at airports, but also to do so in a way which is in line with the drive for Net Zero and the decarbonisation of aviation.

Consequently, there are numerous ways in which UAM services could be deployed in an airport environment. In order to seize these opportunities, it is essential that a clear regulatory framework enables the efficient, secure and competitive development of UAM. The opportunities are extensive, yet there nonetheless remain concerns which must be addressed by the EU and national authorities. These include the need to integrate eVTOLs into the airport environment, taking into account their advanced performances and capabilities without negatively impacting safety, security, capacity and the environment. The development of such a regulatory framework will serve as an enabler for UAM as an innovative mobility solution which can deliver new passenger services to and from airports.

Other drone applications are also rapidly developing to support airport operations, such as the use of automated drones to perform safety duties (such as runway and light inspections) or security tasks (such as perimeter patrol or intrusion alarm resolution). Such use cases are extremely promising and will pose their own challenges in terms of safe integration in the airport environment. Regulators will also need to fully understand the capacity of these systems to develop policies where they support or replace tasks that currently rely on human skills and their inherent limitations.

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[1] ACI EUROPE Position Paper on Drone Technology www.aci-europe.org/component/attachments/attachments.html?id=1177
[2] ACI EUROPE Concept of Operations for Drones at Airports www.aci-europe.org/component/attachments/attachments.html?id=964
[3] https://transport.ec.europa.eu/news/european-commission-adopts-rules-operating-drones-2019-06-11_en
[4] ACI EUROPE Position Paper on Urban Air Mobility https://www.aci-europe.org/component/attachments/attachments.html?id=1954

ACI EUROPE members facilitate over **90%** of commercial air traffic in Europe

**+10%** direct connectivity = **+0.5%** GDP

**272** airports have individually committed to reaching net zero $CO_2$ by 2050

**127** airports have pledged to decarbonise fully by 2030 or earlier

**214** European airports are actively engaged in airport climate action within *Airport Carbon Accreditation*

**-98.5%** airport passenger traffic decrease in April 2020 during the first COVID-19 lockdown

**€60bn** accrued in airport debt and liabilities during peak-pandemic (2021 vs 201)

More than half of the world's most congested airports are in Europe – with no end in sight

A handful of European airports received **€4.9bn** in state aid during the COVID-19 crisis. Airlines received over 7 times more at **€37.2bn**

In **2024**, European aviation may reach full recovery to pre-pandemic traffic levels

In **2032**, European airport revenues may be sufficient to meet capital expenditure and capital costs

**€360bn** needed in capital expenditure in Europe before 2040 to support decarbonisation and passenger growth

ACI EUROPE is the European region of Airports Council International (ACI), the only worldwide professional association of airport operators. We represent over **500 airports** in 55 countries. Our members facilitate over 90% of commercial air traffic in Europe. Air transport supports **13.5 million jobs**, generating **€886 billion in European economic activity (4.4% 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.

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