

BENEFITS OF AIRPORTS & AIR CONNECTIVITY

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UNIQUE DRIVERS OF COMPETITIVENESS AND SUSTAINABLE PROSPERITY FOR EUROPE

DATA, FACTS & ANALYSIS

INTRODUCTION

By halting almost all international and domestic travel, the COVID-19 pandemic has laid bare the crucial importance of air connectivity for the peoples of Europe and the economy. The fact that air connectivity is what binds our continent together, unites our societies and also links us to the rest of the World is undisputable. Ultimately, it means that air connectivity is essential to **our European way of life**. It is - more than ever - about being **united in our diversity** and **connected beyond borders**.

Yet, in many parts of Europe, air connectivity now tends to be taken for granted or even questioned. In particular, its societal value has been undermined by the climate crisis and the fact that aviation is indeed a hard-to-abate sector when it comes to its green house gas emissions. But if achieving net zero is a non-negotiable imperative, embraced by the whole aviation sector, this transformation must go hand-in-glove with safeguarding the unique economic and social benefits of air connectivity.

This is why ACI EUROPE commissioned **SEO Amsterdam Economics** to conduct an extensive study on **'The Economic and Social Impact of European Airports & Air Connectivity'**. This publication provides a synopsis of its main data, facts and analysis – as well as some real life illustrations of the far-reaching, positive impacts of airports and air connectivity. Those impacts are about GDP, jobs and livelihoods, of course. But it is no longer enough to speak of those metrics alone when assessing the true value of air connectivity. A range of other important societal benefits are equally crucial to ensuring a good quality of life for Europeans, and further strengthen **cohesion, fairness** and **territorial equality**. The study done by SEO Amsterdam Economics clearly shows a strong relationship between levels of air connectivity and poverty reduction, quality education, gender equality and life satisfaction – highlighting the multi-faceted ways that aviation improves the lives of Europeans.

Taken together and along with our resolve to decarbonise and becoming more sustainable, all these benefits mean airports and their associated aviation activities **are unique drivers of competitiveness and sustainable prosperity for Europe**.

As ever, our objective at ACI EUROPE is to contribute to informed and effective strategies and decisions for Europe – and I hope this publication and the SEO Amsterdam Economics study will provide food for thought – and further action – for our policy makers and regulators.

Olivier Jankovec Director General of ACI EUROPE

The full study: 'The Economic and Social Impact of European Airports & Air Connectivity' is accessible here:

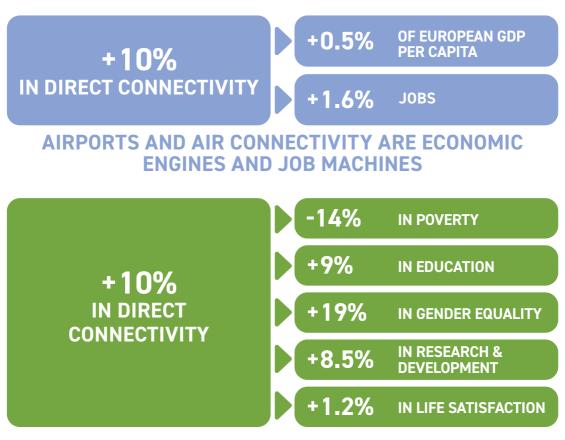
https://www.aci-europe.org/index.php?option=com_attachments&task=download&id=3098:Full-Report-Economic-Impact-ACI-EUROPE-airports-and-air-connectivity

BENEFITS BY THE NUMBERS EUROPEAN AIRPORTS & AIR CONNECTIVITY GENERATE

€851 BILLION IN GDP
5%
0F EUROPEAN GDP
14 MILLION JOBS
6%
OF TOTAL EUROPEAN JOBS

TOTAL CONTRIBUTION TO THE EUROPEAN ECONOMY

The total economic impact of European airports and the air connectivity they enable is comprised of their **direct, indirect, induced and catalytic impacts**. Each of these is detailed in the following section of this publication.



AIRPORTS AND AIR CONNECTIVITY SUPPORT PEOPLE, COHESION AND THE EUROPEAN SOCIAL MODEL

1. ECONOMIC IMPACTS

Europe's airports play a crucial role in the economy, far beyond their own remits and just being places where planes take off and land. Their significance extends into multiple layers of economic activity, spreading from the aviation eco-system into the wider economy at local, regional, national and continental levels in a variety of ways.

This derives from the intrinsic and unique value of air connectivity, which makes **airports key strategic assets for Europe's economy and its competitiveness.**

Direct, Indirect and Induced Impacts

First, let's consider the *direct impact* of airports. Within the aviation sector itself, airports are hubs of activity, creating jobs and generating income for those who work there - from check-in staff, airline crews and traffic controllers to security personnel, people employed in retail or food & beverage outlets and management teams. But the influence of airports doesn't stop at their gates.

€121 billion in GDP and 1.8 million jobs are <u>directly</u> related to European airports.

WHAT ARE THE DIRECT JOBS?

Airport operator 22.04%



Ground handling **18.03%**



Airline crew **17.91%**





Airports depend on a vast network of suppliers for everything from fuel and aircraft parts to furniture, food, cleaning material and security screening machines. These suppliers, in turn, benefit from the demand generated at airports, leading to job creation and value addition in these supporting industries. This is known as the *indirect impact* of airports on the economy.

The <u>indirect</u> economic impact of European airports amounts to **€89 billion in GDP** and **1.1 million jobs**.

But the ripple effects continue even further.

The employees who work at airports and within the airport activities' supplier network spend their wages on goods and services within the economy – such as housing, food, entertainment and multiple consumer goods. This spending also supports a wide range of businesses and contributes to economic growth. Economists refer to this as the **induced impact** of airports and air connectivity, where the initial spending in one area of the economy leads to further economic activity and job creation in other areas – ultimately boosting the overall GDP and employment levels.

A further **€120 billion in GDP** and **1.7 million jobs** relate to the <u>induced</u> impact of European airports

Catalytic Impacts

Beyond these *direct, indirect, and induced impacts*, airports and the connectivity they enable are indispensable for many other economic activities – and thus significantly contribute to wider economic growth. This contribution can be thought of via 4 main channels in particular: **tourism, trade, investment** (in particular Foreign Direct Investment) and **productivity**.

The ability to facilitate and support wider economic activity is really what sets airports and the associated aviation activities apart from most other **sectors** – and results in what is called by economists as *catalytic impact*.

European airports also contribute to the economy through their <u>catalytic impact</u>, which for tourism alone amounts to €174 billion in GDP and 3.5 million jobs, to which €346 billion in GDP and 5.9 million jobs need to be added for other activities.

This broader influence, where the presence of an airport boosts various economy sectors, is estimated through econometric analysis of the economy, to identify the additional supplemental benefit, which can also be thought of as **the multiplier effect, that comes from access to airport connectivity**.

This catalytic impact is arguably the most important positive effect. It does make **airports and air connectivity critical for the competitiveness of the European economy and its global position**.

AIR CONNECTIVITY & TOURISM

Air connectivity is essential to bring visitors to and within Europe. In most cases, the time involved in getting from A to B via any other mode of transport – when available – would simply rule such trips out before the financial expenses involved are even considered.

Visitors travelling for leisure spend money on hotels and other forms of accommodation, restaurants, shops, museums, and a vast range of attractions – supporting local economies. These activities tend to be relatively labour-intensive, offering opportunities for workers with a diverse range of experiences and qualifications.

AIR CONNECTIVITY & PRODUCTIVITY

Productivity matters more than ever for Europe – with the recently published report from Professor Mario Draghi on the 'The Future of European Competitiveness' pointing to the fact that with the EU's workforce set to shrink by 2 million workers per annum by 2040, the bloc will have to rely more on productivity to drive growth – which in turn requires raising competitiveness.

Increased air connectivity associated with productivity is in some ways an umbrella concept which encompasses the positive economic impact associated with trade and investment.

Airports and their network of routes operated by airlines reduce transport costs and times – and increase options. In the simplest terms, this increases the chances that the right workers are doing the right job at the right time, equipped with the right tools and the right qualifications. All this, in turn, increases their productivity and therefore economic growth.

This is why the correlation between air connectivity and GDP is so symbiotic – as previously mentioned, **every +10% increase in direct connectivity yields an increase of +0.5% in GDP per capita**.

Total Impact

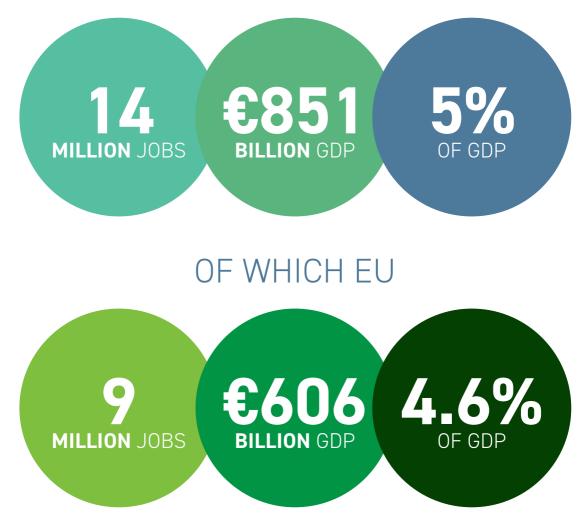
The total impact of Europe's airports and the connectivity they enable brings together their **direct**, **indirect**, **induced**, and **catalytic impacts**.

Overall, the <u>total impact</u> of European airports to the economy stands at **€851 billion in GDP**, which includes broader benefits from market access, innovation and labour productivity gains resulting from people using aviation for business, investment, trade, and services as well as tourism.

This involves **14 million jobs** across the economy.

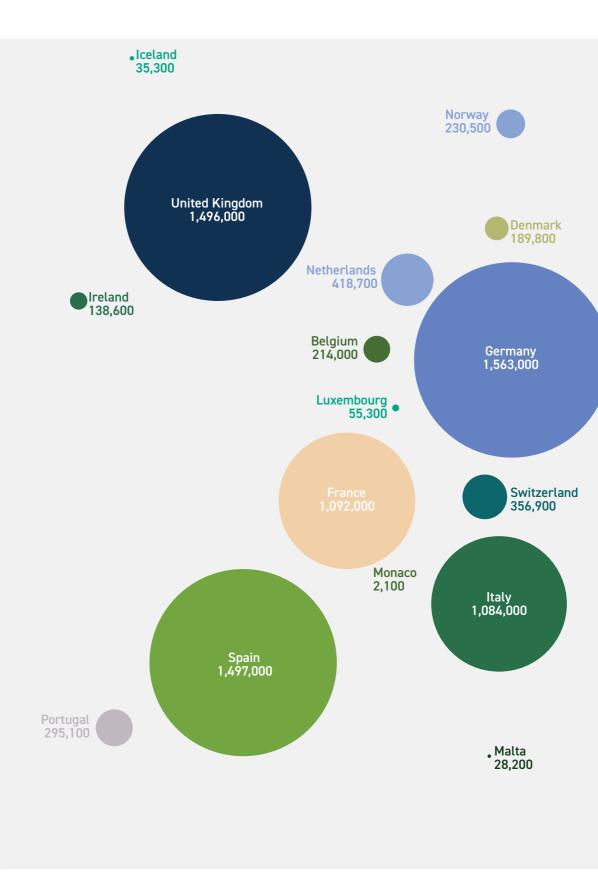
JOBS AND GDP ASSOCIATED WITH TOTAL ECONOMIC IMPACT OF EUROPEAN AIRPORTS

IN EUROPE



You can see in the following graph, the total economic impact of Europe's airports and air connectivity, expressed in terms of the number of jobs associated with the industry in each country. For more detailed country specific information on the total economic impact of European airports, including GDP data, check out Annex 1 at the back of this publication.







Professor Wouter Dewulf, University of Antwerp



"Aviation is a powerful catalyst for global progress, transforming barriers into opportunities and driving economic growth.

It not only connects people, businesses, and cultures across the world but also plays a pivotal role in local job creation and social welfare. An independent study conducted by the University of Antwerp in collaboration with UC Louvain on the impact of **Brussels Airport** clearly demonstrates these benefits. The research found that Brussels Airport is a critical economic engine, contributing **5.4 billion Euro to the local and national economies** and **supporting 64,000 jobs directly and indirectly in 2019**.

This confirms **the position of Brussels Airport as the second most important economic centre in Belgium**, after the Port of Antwerp-Bruges. The airport also acts as a gateway for tourism, bringing in millions of visitors each year, which in turn stimulates local businesses, cultural exchange, and community development.

Our study underscores **the essential role of aviation** in fostering sustainable economic growth, enhancing global connectivity, and enriching the lives of people worldwide."



2. WIDER SOCIETAL BENEFITS

Airports are not just economic engines. They also have **broader societal impacts** besides what traditional economic measures like GDP and employment can capture.

The role airports and associated aviation activities play in connecting people, businesses and communities influences various aspects of everyday life and thus **contributes to the overall development and cohesion of Europe**.

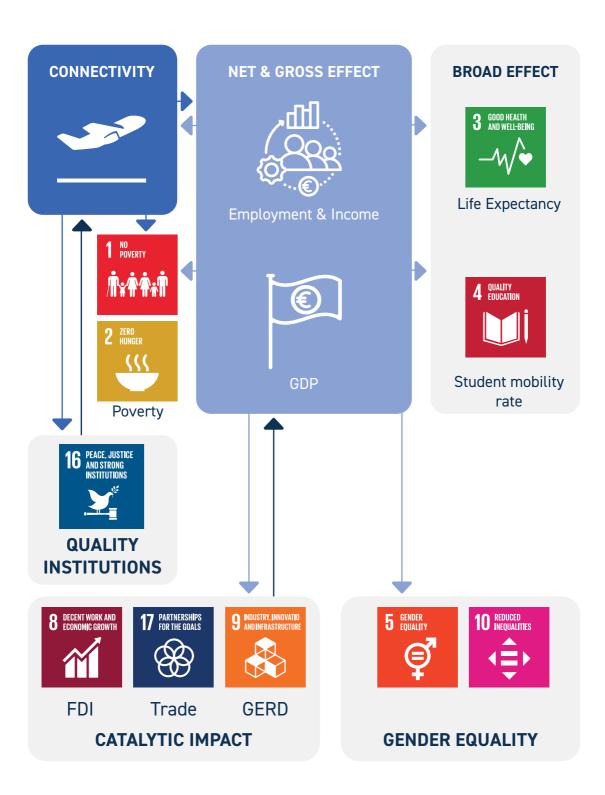
This is confirmed by the fact that the impact of airports and the air connectivity they enable correlates closely with several of the **United Nations' Sustainable Development Goals (SDGs**).

Airports, Air Connectivity, and the United Nations Sustainable Development Goals (SDGs)

From allowing young students to travel abroad for education, to the potential for small businesses to ship their products worldwide, to the life-saving transportation of medical supplies and patients themselves, there are many powerful examples of how airports contribute to the UN's Sustainable Development Goals.

From eradicating poverty and hunger to promoting gender equality, reducing inequalities, and fostering innovation in industry and infrastructure, **the role of airports is deeply intertwined with European and global efforts to create a more sustainable and equitable world**.

These examples, as well as the testimonies featured in this publication, highlight just a few of the ways airports contribute to achieving the UN's Sustainable Development Goals. In fact, **through their total economic impact, airports help advance several of the UN SDGs**. Airports do more than connect cities: they connect people to opportunities, businesses to markets, and communities to vital services.



UN SDG 1 - No Poverty

Each +10% increase in direct air connectivity yields -14% of population living in poverty

Maintaining and increasing air connectivity is closely linked to poverty reduction. The direct relationship between air connectivity and GDP demonstrates how crucial airports and their associated aviation activities are to economic development. When air connectivity is safeguarded and improved, it secures and drives economic growth – leading to **higher income levels**, **better access to goods and services**, **improved overall infrastructure**, and **more job opportunities**.

These factors collectively enhance the standard of living, which in turn reduces poverty. These connections highlight how **airports play a vital role in lifting and maintaining communities out of poverty** – also fostering a more prosperous and stable society.

UN SDG 4 – Quality Education

Each **+10%** increase in direct connectivity yields **+9%** in quality education

Air connectivity is closely linked to educational quality, particularly through its impact on student mobility. **The more connected a country is, the higher the share of inbound students**, enriching the academic environment and fostering cross-cultural exchange.

A prime example of this is the **EU's Erasmus+ program**, which has enabled over 10 million students to study abroad since its inception. This program has thrived on robust and affordable air connectivity, allowing students to easily move between countries to pursue higher education. **The student mobility rate** (defined as the percentage of students from abroad among total tertiary enrolments) **tends to rise with better air connectivity**. This not only enhances the educational experience for students but also contributes to the global exchange of knowledge and ideas, making air connectivity a key driver of educational quality and international collaboration.

Increased air connectivity drives economic growth, which boosts GDP. This fosters scientific exchange on a global scale, collaboration between universities, and enhances the quality of education. As GDP rises, countries can invest more in education, infrastructure, and research – making them more attractive to inbound students. Additionally, a stronger economy provides more funding for scholarships and financial aid, creating more opportunities for international students. Overall, the indirect effect of air connectivity on inbound student numbers through GDP is driven by improved educational opportunities and a more favourable environment for learning innovation and employment.

UN SDG 5 – Gender equality



Each +10% increase in direct connectivity yields +19% in gender equality

Air connectivity plays a significant role in advancing gender equality by fostering greater cultural exchange and inclusivity. Aviation acts as a powerful force, exposing people to diverse cultures and perspectives, which enhances tolerance and respect for the other. This cultural exposure is key to creating a more equitable society where gender equality can flourish.

Studies have shown a positive relationship between higher air connectivity levels and gender equality in employment. As direct air connectivity improves, it opens up more job opportunities for women, particularly in global industries and international markets. By facilitating these interactions and opportunities, air connectivity helps break down barriers and promotes a more inclusive workforce, driving progress toward gender equality both in the workplace and beyond.

UN SDG 9 – Industry innovation and infrastructure



Each **+10%** increase in direct connectivity yields **+8.5%** in Research & Development

Air connectivity is an essential driver of industry innovation and infrastructure development. The link between innovation and air connectivity is well-established, with increased air travel facilitating greater human interactions and knowledge exchange across long distances. This enhances Research & Development, as evidenced by **the relationship between air connectivity and investment in innovation**, measured by Gross Domestic Expenditure on Research & Development.

Europe's airports often serve as catalysts for this innovation by fostering the growth of **airport cities**, **business parks**, and **innovation labs** that attract start-ups and technology firms. Major international airports across the continent have evolved into vibrant economic hubs, with dedicated spaces for research and development that drive industry advancements. This underscores how aviation supports the agglomeration of talent and ideas, leading to significant advancements in technology and infrastructure. By facilitating these connections, **air connectivity helps stimulate innovation** and contribute to economic growth through catalytic impacts that extend well beyond airports themselves and the activities traditionally associated with them.

UN SDG 3 – Good health and well-being



Each +10% increase in direct connectivity yields: +1.2% in life satisfaction

Air connectivity significantly contributes to overall well-being with **air travel playing a role in mental health and life satisfaction**. The surge in "revenge travel" following the COVID-19 pandemic revealed just how crucial getting away is for our mental well-being – in fact, this is **an integral part of our European way of life**.

"Project CAELUS, a 16-company consortium led by AGS Airports in partnership with NHS Scotland and NATS, aims to develop the UK's first national drone logistics network, transporting essential medical supplies across Scotland, including remote areas. Part-funded by the UK Research and Innovation Future Flight Challenge, it aligns with the government's vision for advanced air mobility. Since 2020, CAELUS has become the UK's most advanced medical drone initiative.

Without the development and innovation of European aviation, projects such as CAELUS would not be able to have such a profound impact. The advancements in drone technology, air traffic management, and regulatory frameworks across Europe have laid the groundwork for the integration of unmanned aerial vehicles into healthcare systems. The collaborative nature of European aviation fosters cross-border partnerships, ensuring that best practices and technological breakthroughs are shared. This not only accelerates technological adoption but also drives continuous improvements in safety and efficiency. As a result, initiatives like CAELUS ultimately improve patient outcomes and overall quality of life."

Fiona Smith, CAELUS Project Director





3. AIRPORTS & AIR CONNECTIVITY AND EUROPEAN STRATEGIC GOALS

The data and analysis from the **SEO Amsterdam Econom**ics study on **'The Economic and Social Impact of Airports & Air Connectivity'** provides undisputable evidence over the pivotal role of aviation for Europe's competitiveness and global standing.

They show that **aviation is a major driver of prosperity fuelling the wider economy, ensuring cohesion and social progress**. The scale and range of these benefits mean that any advancement or setback in sustainably maintaining and developing air connectivity comes with widespread positive or negative implications for Europe.

This is relevant for all countries and communities on a Pan-European level: applying as much from Portugal to Norway as it does from Iceland to Türkiye and Kazakhstan. But while some countries at the periphery of our continent recognise and seek to leverage aviation's formidable benefits via their development strategies, the European Union, its Member States, and the UK no longer do.

This largely results from **disjointed policies at various levels**, **a lack of effective support for decarbonisation** (many sticks, few carrots...) and **unaddressed infrastructure bottlenecks** both in the sky and on the ground.

That needs to change.

In many ways, the recently published **Draghi report** on **'The Future of European Competitiveness'** and **Letta report** on **'The future of the Single Market'** could not be clearer about that. These reports point to the urgent need for the EU to address its structural lack of competitiveness so as to preserve its social model, deliver on its green ambitions, and secure its future prosperity.

That aviation should be an integral part of these strategic goals - and thus included in **the EU industrial plan** called for by the Draghi report - is a no-brainer. That Plan should come with a **new aviation deal for Europe**. The time for European aviation is now – or never.



THE EU INDUSTRIAL DEAL: 3 PRIORITIES FOR AVIATION

1. <u>Enable effective aviation decarbonisation while</u> preserving the socio-economic benefits of air connectivity

- Introducing an Industrial Sustainable Aviation Fuel policy including EU financial support for both SAF production and deployment (incl. bridging the price gap with conventional fuels)
- Delivering the Single European Sky
- Preserving the ability of small regional airports to receive operating aid under the EU State Aid Aviation Guidelines beyond 2027 and allowing for decarbonisation aid for all airports
- Launching a dedicated EU Strategy for Intermodality

2. <u>Safeguard and reinforce the integrity of the single</u> <u>aviation market</u>

- Revising EU airport slots rules
- Confirming the freedom of airlines to provide services and establish anywhere in the EU
- Developing further the external dimension of the EU Single Market alongside visa facilitation regimes

3. Enable resilient, digitalised, and green airports

- Aligning EU and national energy policies with airports' green energy needs – with EU financing instruments effectively supporting related investments
- Providing EU financial support for aviation innovation covering Research, Development & Deployment under the next multi-annual financial EU framework, in particular through CEF and Horizon
- Developing a fully integrated EU testing and certification system for aviation security equipment – along with related EU funding

Niall MacCarthy, Cork Airport Managing Director, Chairperson of the Irish Tourism Industry Confederation (ITIC)

"As an island nation, our airport network is critical to our connectivity to attract tourists and investment to Ireland. As the country's second largest international airport, Cork Airport is an essential part of that infrastructure supporting 12,800 jobs and contributing over €1 billion to the local economy. On top of the employment and trade at the airport itself, a whole secondary tier of economic activity is enabled in the wider region.

It is an exciting time at Cork Airport. We will be expanding our facilities in the next number of years to provide more airside and terminal facilities to support strong growth and jobs and to grow our passenger numbers from 3 million to 5 million per annum. We recognise the interconnectedness of aviation with tourism, trade, and social cohesion in Europe."

Alessandro Leonardi, Deputy APOC Manager at Rome Fiumicino Airport

"Working in an Airport Operations Center (APOC) places us at the heart of aviation's most innovative advances. Here, we harness cutting-edge technologies like AI and data analytics to optimise operations and ensure the safety and efficiency of air travel. The aviation industry not only offers highly skilled roles but also fosters collaboration with leading organisations, providing professionals with the opportunity to grow in an intellectually stimulating environment. Aviation truly stands out in creating quality jobs that drive both personal and technological development."



ANNEX 1: sum of direct, indirect, induced, tourism catalytic & agglomeration catalytic impacts per country

COUNTRY	GDP (ALL IMPACTS) BILLION €	JOBS (ALL IMPACTS) 1,000
Albania	0.4	6.5
Armenia	0.6	10.7
Austria	20.5	256.9
Belarus	0.5	19.9
Belgium	18.9	214
Bosnia	0.3	6.4
Bulgaria	2.6	69.7
Croatia	3.3	47.1
Cyprus	2.7	44.3
Czech Republic	7.5	142.1
Denmark	17.1	189.8
Estonia	1.3	26.2
Finland	9.4	120.4
France	87.6	1092
Georgia	1.2	17.4
Germany	121	1563
Greece	13.8	286.8
Hungary	4.7	172.6
Iceland	2.7	35.3
Ireland	12.5	138.6
Israel	6.3	178
Italy	69.2	1084
Kazakhstan	1.2	50.9
Kosovo	0.1	2.1

COUNTRY	GDP (ALL IMPACTS) BILLION €	JOBS (ALL IMPACTS) 1,000
Latvia	2	45.8
Lithuania	1.6	37.8
Luxembourg	6.5	55.3
Malta	1.7	28.2
Moldova	0.2	8.5
Monaco	0.2	2.1
Montenegro	0.4	7.8
Netherlands	36.9	418.7
North Macedonia	0.4	4.5
Norway	25.1	230.5
Poland	14.1	502.2
Portugal	13.4	295.1
Romania	6	79.5
Russia	36.9	293.5
Serbia	2.1	24.7
Slovakia	2.6	46.4
Slovenia	1.4	30.5
Spain	82	1497
Sweden	20.5	242.5
Switzerland	36.1	356.9
Turkey	47.2	497.6
Ukraine	0.8	34.1
United Kingdom	106.8	1496
Uzbekistan	0.5	24.6

* Disaggregated country level impacts do not necessarily add up to regional totals because of rounding.

ACI EUROPE commissioned **SEO Amsterdam Economics** to consider the economic impact of European Airports. Released in October 2024, the resulting study individually quantified the **direct**, **indirect**, **induced** and **catalytic impacts** of European airports for each European country and for the EU27. The report also explores the **relationship between airport activity and social outcomes** – such as gender equality and quality of education – as well as global and local externalities.

The study drew upon hard economic data from a range of credible sources, as well as employment data received by an unprecedented 74 airports handling circa 85% of total flights in the 50 countries represented. Combined with a transparent and clearly laid out methodological approach, the study is focused very much upon how the economic impact figures are calculated, as well as the presentation of the final figures themselves.

"Benefits of Airports and Air Connectivity" provides a synopsis of the study's key findings. The full study is available in the Policy Library section of the ACI EUROPE website.

Released on **17 October 2024** at the **ACI EUROPE Airport Economics Symposium**, in Brussels.



ACI EUROPE is the European region of Airports Council International, the only worldwide professional association of airport operators. ACI EUROPE represents over 500 airports in 55 countries. Our member airports facilitate over 90% of commercial air traffic in Europe. 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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