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# The contribution of Athens International Airport to the Greek economy

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AN ECONOMIC IMPACT STUDY 2013



ATHENS UNIVERSITY  
OF ECONOMICS  
AND BUSINESS



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Dr. Yiannis N. Paraschis  
and Professor Gregory Prastacos

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# 01

## Address

**After more than 12 year** of operation, Athens International Airport remains one of the most important and sophisticated infrastructure works in Greece, with the shareholders – and the Greek State in particular - enjoying considerable financial benefits. However, beyond the shareholders' financial value, there has been substantial contribution by the airport community in job creation and economic development both at a regional and at a national level. At the same time, through actions of corporate responsibility there have been significant benefits from the operation of Athens International Airport in the fields of quality and safety of transport, environment, labour peace, etc.

Despite the economic recession, the Airport Company remains a healthy enterprise creating value to all stakeholders. In 2009, the Airport Company requested from a scientific team from Athens University of Economics and Business to measure the value created by the Athens airport to the Greek economy and to the local economy of the region. Since we consider that the value created by Athens International Airport to the Greek economy and society at large is enduring despite the current economic climate, we decided to request from the same scientific team to update the 2009 study.

The updated study proves that despite the reduced output due to the economic situation, the airport remains a very important – perhaps the most important - hub of economic value added and job creation in the country. The airport's contribution to job creation, tourism and to the economic development of Greece but also of the Mesogheia region is of greatest importance. At the same time, the relevant comparison with other European airports is indisputably positive which demonstrates the successful implementation of the business and operational model of Athens International Airport.

The communication of this study to all interested parties and to the financial, social and other stakeholders of the airport will help develop a common understanding of the overall economic and social value of Athens airport for Greece. Especially under the current circumstances, where healthy business clusters are not abundant, useful conclusions from Athens International Airport's business model could be extracted and used in the future planning of the transport and infrastructure sectors.

### **Dr. Yiannis N. Paraschis**

Chief Executive Officer  
Athens International Airport S.A.

**In the modern economic environment**, airports are increasingly considered as an important driver of socioeconomic growth for both the national economy and the local communities in which they operate. Their contribution is not limited to the direct impacts generated by their operation, but instead spans much bigger benefits created for the local companies, the associated state entities and the wider community that gain access to the generally high level of services and products developed at the international airports.

In this context, the present study measures the total economic impact of the Athens International Airport (AIA) to the Greek economy and to the local economy of the region. By following the best international practices and methods, the study presents and analyzes the economic results and related indicators generated by the operation of Athens Airport and compares them with the corresponding impact of other international airports in Europe and the US. In this way, the present study aims to be a useful tool for measuring the overall effectiveness and performance of the airport.

The study uses a novel econometric input-output approach to estimate the impacts from the airport's operation and updates the results of a previous study undertaken in 2009 by the same group of experts.

I want to thank AIA's CEO, Dr. Yiannis Paraschis, for entrusting us with the execution of this study, as well as all of his associates who have provided us with the necessary data and their co-operation. I hope that the results obtained will be of help to AIA, the local communities and the policy makers in order to design effective policies on transportation issues and overall socioeconomic development.

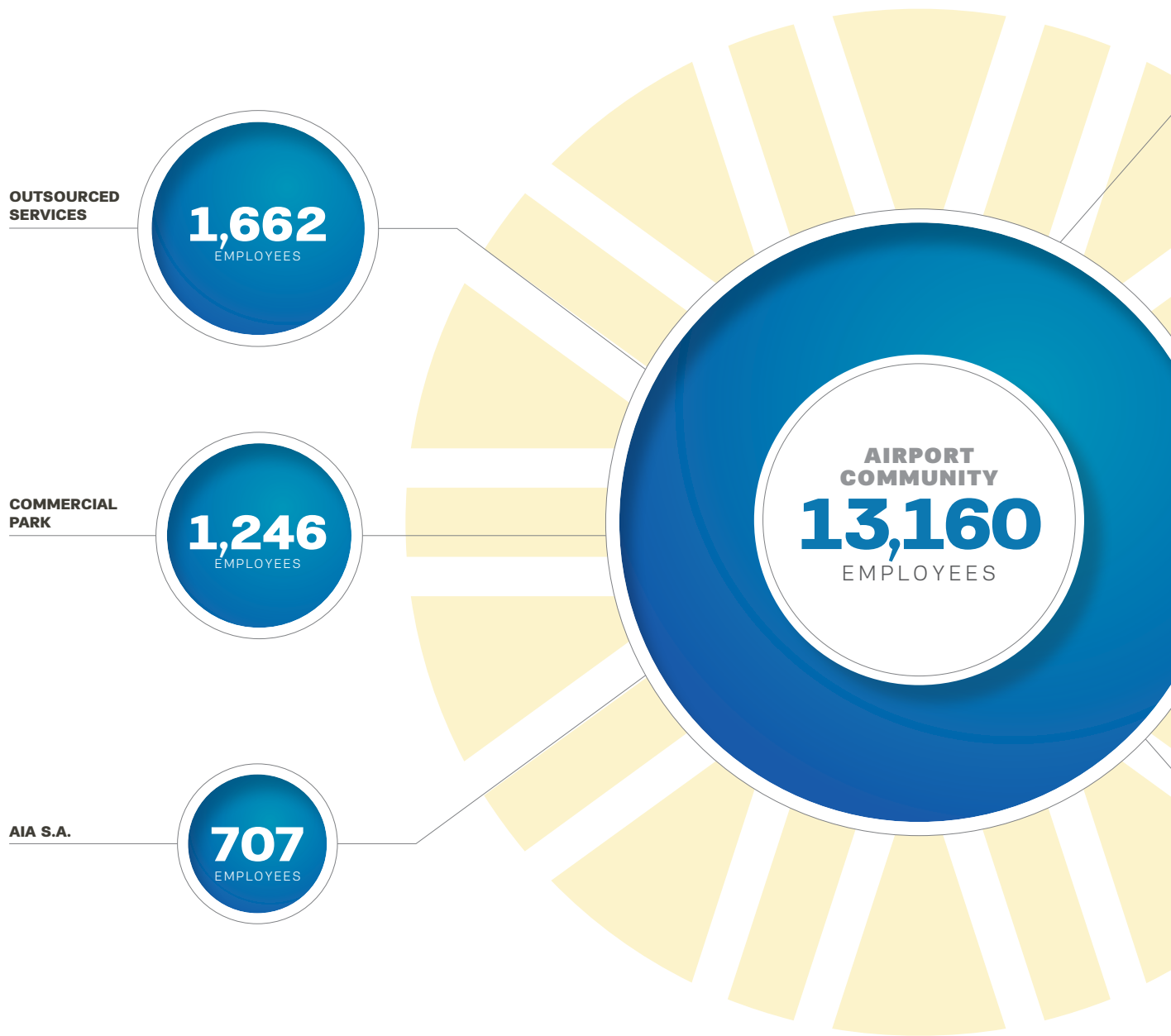
### **Professor Gregory Prastacos**

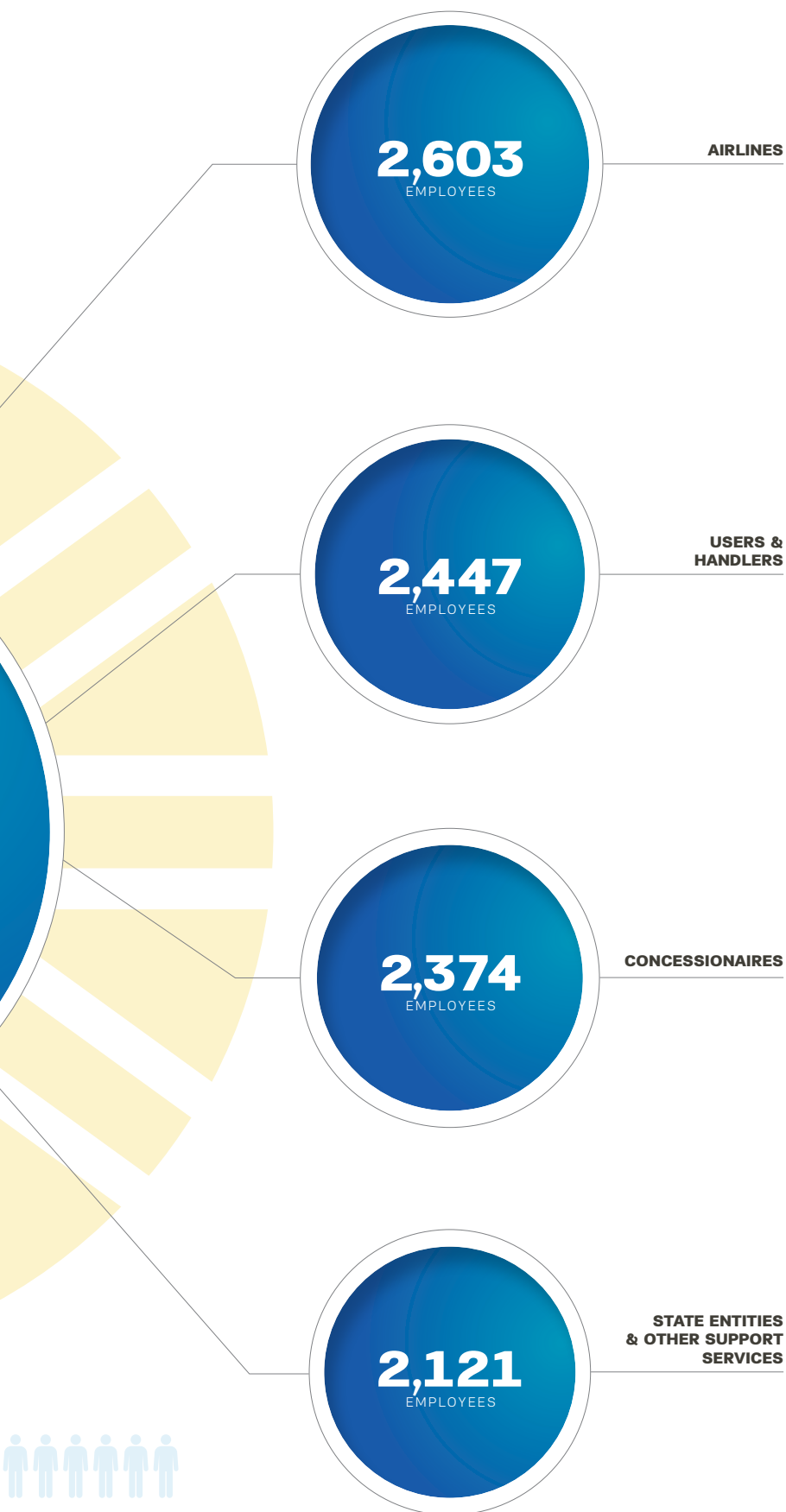
# 02

## Airport Community

The Athens International Airport (AIA) covers a wide spectrum of activities that relate to the main aviation work but also to other initiatives in the non-aeronautical sector. The Airport Community is composed of various entities, including AIA S.A., the airline companies that use the airport, other users and

handlers, the airport commercial park and agencies offering aeronautical, commercial and other support services. Overall, approximately 300 companies and state entities operate in the airport with more than 13,000 employees.





**AIA S.A.** is the company responsible for the construction, finance, operation, management and development of the airport of Athens.

**Airline companies** are the 64 carriers (in 2012) that directly connected Athens with scheduled services to 109 destinations in 47 countries. They constitute the biggest part of the airport community.

**Users and ground handling companies** are the companies that are granted the right to provide groundhandling services in the airport of Athens. They constitute the second major part of the airport community.

**Concessionaires** are the companies in the airport terminal's shopping mall that spans on 9,000 square meters with 39 concessionaires and over 110 points of sale. The concessionaires constitute the third major part of the airport community.

**State entities and other support services** refer to services provided in cooperation with or exclusively by State entities (HCAA, customs, public health services, post services, fire safety, emergency and ambulance services, police).

**Outsourced Services** include the significant number of companies providing security, cleaning, maintenance and related services.

**Commercial Park** is the airport's commercial park that occupies approximately 130,000 square meters and includes four large big-box retail stores. In addition, with a total of 50,000 square meters of indoor area, the new exhibition and conference centre "Metropolitan Expo" is the largest and most modern complex of this sector in Greece.

# 03

## Methodology & Objectives of the Study

Today, airports are considered as important drivers of economic and social growth at both the national level as well as the level of the local communities in which they operate. Besides the obvious transportation benefits, airports substantially contribute to local enterprises, to various national organisations, as well as to the consumers in general.

The objectives of this study were to identify and measure all the impacts from the operation of the Athens International Airport to the Greek economy and to the Mesogheia region in terms of job creation, wealth generation, economic development, as well as any other multiplier effects.

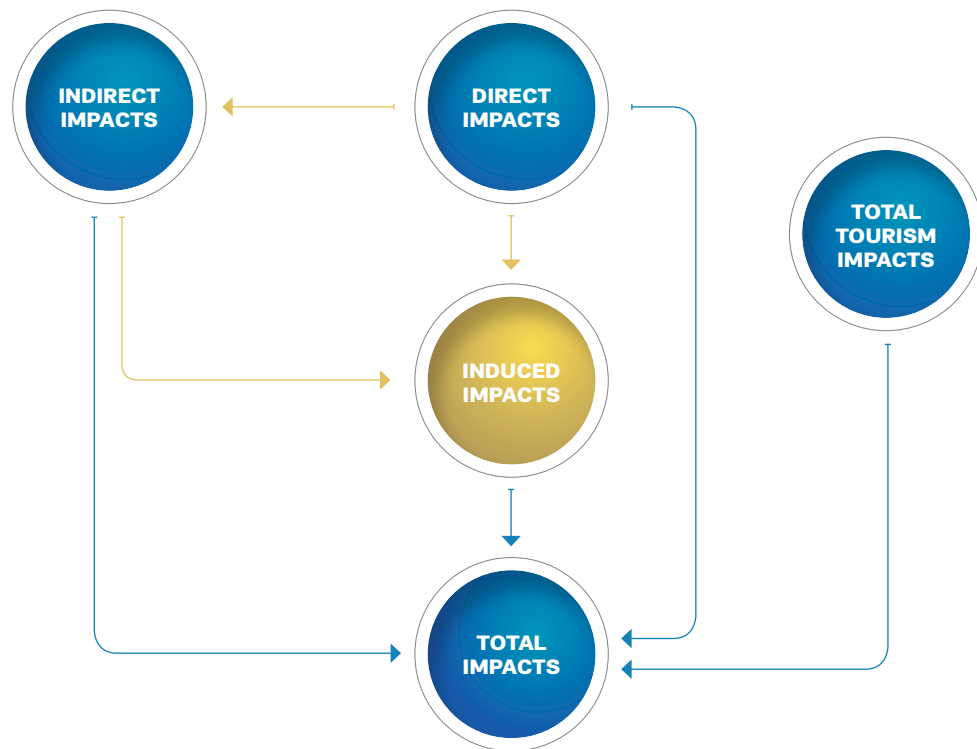
By following the best international practices, the scientific team developed and implemented a novel Econometric Input-Output model to assess the economic impact of the airport. Data was primarily drawn from AIA databases, the Hellenic Statistical Authority, the Bank of Greece, as well as from other reputable and reliable studies of foreign airports and international organisations.

The Input-Output model measured the total economic impact of AIA as the sum of three separate but interrelated categories:

- Direct impacts which include employment/wages and overall income generated directly by the operation of the airport (AIA, airlines, concessionaires, passengers and visitors etc.).
- Indirect impacts which include employment and overall economic value generated by business outside the airport but directly linked to its operation (transportation, travel agents etc.).
- Induced/multiplier impacts which include multiplier effects caused by successive rounds of spending throughout the economy as a result of an airport's direct and indirect effects.

The Input-Output model further measured the total tourism spending, namely the total tourist traffic that was generated due to the operation of AIA and the related economic benefit.

**Study Methodology Framework**  
The next figure depicts the methodology framework of the study.



Finally, it should be noted that the study offers an initial assessment of the catalytic impacts of the airport, representing the effects from the employment and income generated in the economy by the airport's wider role in improving productivity and social welfare.

# 04

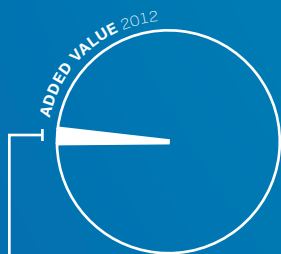
## Key Results



**43.5%**  
of the Added Value  
created in Mesogheia



**21.7%**  
of the jobs created  
in Mesogheia



**2.63%**  
of GDP



ADDED VALUE

€**5,100,000,000**  
€**716,000,000**



JOBS CREATED (PERSONS)

**99,987**  
**11,041**

 Impact to the Greek economy

 Impact to Mesogheia region

## Conclusions

### Benefits for the Greek Economy

The results of the study clearly demonstrate that Athens International Airport contributes substantially to the socioeconomic growth of the country producing at the national level an annual economic **added value of € 5.1 billion which corresponds to 2.63% of the Greek GDP** (reference year 2012). At the same time, operation of the airport has generated 99,987 jobs at the national level.

More specifically, in terms of **direct impacts** generated by the operations and activities conducted at the airport's site, added value created amounts to € 1.95 billion corresponding to 1.01% of Greek GDP. In parallel, new jobs created on the airport totalled 13,160 persons.

**Indirect impacts** refer to output generated by firms primarily off airport but whose activities are attributable to the airport to a great extent. In particular, to measure indirect impacts two main types of services were considered:

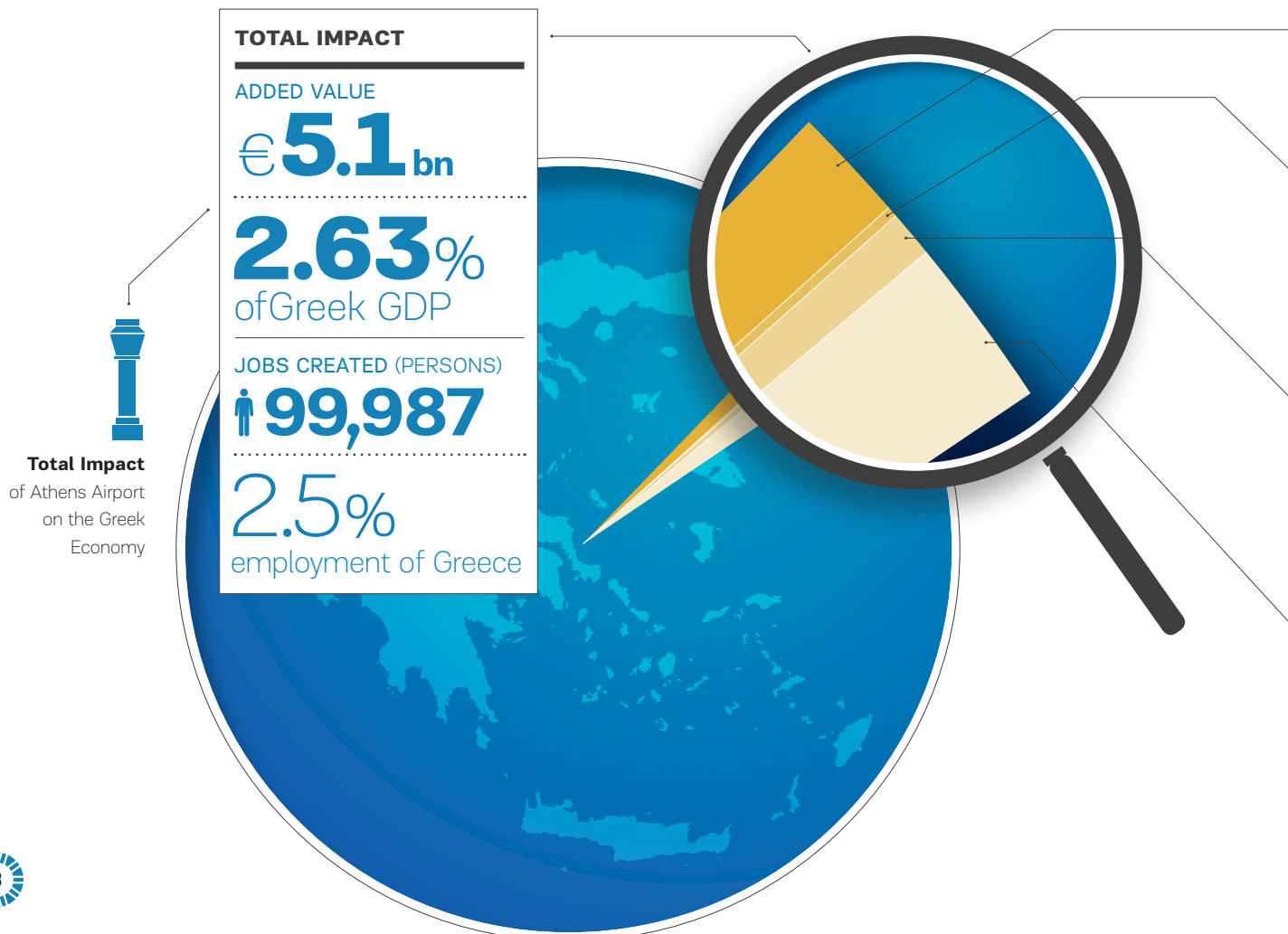
**A.** Transportation (Public transportation – suburban railway, metro, buses, taxis – as well as private and rented cars).

**B.** Travelling services – travel agents.

The added value of those units amounts to € 49 million. In terms of employment, 1,600 jobs were created in various transportation and travelling services related to airport's operations.

**Induced impacts** – as a multiplier effect of the direct and indirect activities of the airport - have also contributed significantly to the growth of the Greek economy. Specifically, economic added value increased by € 451 million which amounts to 0.23% of the Greek GDP while a total number of 13,436 new jobs were created.

The contribution of AIA to the increase of related tourist figures is of particular importance. The following infographic depicts the economic and social growth generated by the airport in terms of the **total**





**tourism spending.** More specifically, the capacity of AIA allows the service of a very large number of incoming tourists (living abroad) that visit Greece for leisure purposes. Based on the results of the study, total tourism spending generated an increase of € 2.65 billion, while at the same time 71,791 new jobs were created.

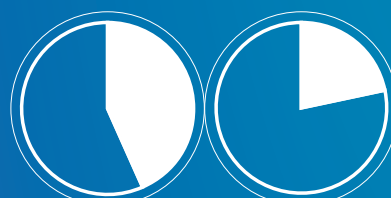
The **total economic impact** of AIA (2.63% of the Greek GDP) is definitely considered as very satisfactory, since it significantly exceeds the relevant benchmarks of other major European airports. To illustrate, we note that the corresponding percentage contributions of other major European airports to the national GDP of their country range from 1.4% to 2.5% (York Aviation, 2004 study for ACI). In addition, total number of jobs created by the airport – as compared to total number of passengers travelled - is approximately three times higher than the average number of jobs created in other European airports.

### The Contribution of the Airport to Mesogheia area

At the local level, being the largest economic unit in the Mesogheia area, AIA was clearly shown to significantly contribute to the economic welfare of the region. The study indicates that the airport produces an added value of € 716 million, while, at the same time, it creates 11,041 jobs for employees living at the Mesogheia area. Also, the airport's economic impact represents 43.5% (€ 1,953 million) of the total added value produced at the geographical region of Mesogheia (€ 4,486.1 million), and 21.7% (over 13,000 employees) of the total personnel employed at Mesogheia (60,639 persons).

Based on these results, it is evident that AIA plays a significant role in the Mesogheia area and in the quality of life of its citizens being a key driver of the economic and social growth for the region.

DIRECT IMPACTS	
<b>ADDED VALUE</b> <b>€1.95bn</b> 1.01% of Greek GDP	<b>JOBS CREATED (PERSONS)</b> <b>13,160</b> 0.32% employment of Greece
INDIRECT IMPACTS	
<b>ADDED VALUE</b> <b>€50m</b> 0.03% of Greek GDP	<b>JOBS CREATED (PERSONS)</b> <b>1,600</b> 0.04% employment of Greece
INDUCED IMPACTS	
<b>ADDED VALUE</b> <b>€450m</b> 0.23% of Greek GDP	<b>JOBS CREATED (PERSONS)</b> <b>13,436</b> 0.33% employment of Greece
TOTAL TOURISM SPENDING	
<b>ADDED VALUE</b> <b>€2.65bn</b> 1.37% of Greek GDP	<b>JOBS CREATED (PERSONS)</b> <b>71,791</b> 1.76% employment of Greece



**43.5%**  
of the Added Value created in Mesogheia

**21.7%**  
of the jobs created in Mesogheia

**ADDED VALUE**  
Overall Contribution in Mesogheia

**€716,000,000**

**TOTAL JOBS CREATED (PERSONS)**  
Overall Contribution in Mesogheia

**11,041**



**Overall contribution**  
of Athens Airport  
to Mesogheia area

# 06

## Catalytic Impacts

The study also addressed the catalytic impacts of the airport's operation drawing data from studies of AIA, the Bank of Greece, the Hellenic Statistical Authority, as well as from a related study conducted by McKinsey & Company.

Catalytic impacts complement the results of the Input-Output model, placing particular emphasis on freight transport issues, as well as on issues related to the safety and quality of air transport services, the protection of the environment and the corporate social responsibility of the airport. More specifically, the catalytic impacts from the operation of AIA are the following:

- **Freight traffic:** The total air cargo traffic at AIA amounted to 76,423 tonnes (almost 88% of the total international freight traffic market, data of 2012).

- **Safety and quality of air-transport services:** AIA demonstrates satisfactory punctuality (e.g. continuous improvement of the average queuing time at check-in, passport control and speed of baggage delivery) and safety indicators (reduction of safety incidents),

while at the same time programmes for upgrading the quality of services offered in order to enrich the travelling experience are continuously implemented (data of 2012).

- **Protection of the environment:** AIA has in place an integrated environmental management system covering issues of noise, air quality, climate change, water, waste, natural environment and wildlife control. It is important to note that in June 2013 Athens airport received the Eco-Innovation award of the Airports Council International Europe (ACI Europe) for its environmental performance.

- **Promotion of corporate citizenship in the Mesogheia area:** AIA is widely recognised as a major infrastructure project by the residents of the Mesogheia region. It is also considered to significantly contribute to the overall economic growth of the local communities by spurring the creation of new companies and by generating additional jobs, while it is also recognised for its important cultural and humanitarian initiatives.

07

## Study Team

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