SUMMARY

- Air transport is a key enabler of economic activity in Spain, supporting 1.7 million jobs and contributing EUR 102.4 billion to the Spanish economy, which is equivalent to 9.2% of Spanish GDP (World Bank 2016).
- Spain has the 3rd highest level of air connectivity in Europe (measured by the IATA Connectivity Index\(^1\)). Air connectivity grew by 56% between 2013 and 2018. 121m passengers departed from Spanish airports in 2017.
- In order to facilitate the continued growth of aviation and maximize the value of air transport, Spain should:
  1. Implement a National Airspace Strategy to increase the capacity and improve the efficiency of Spanish airspace;
  2. Ensure sufficient and efficient capacity in the right place, controlling high airport charges and fees, supported by an improved legislative framework;
  3. Develop intermodality, including connecting Madrid and Barcelona to the national high-speed rail network; and
  4. Develop and foster the air cargo business.

\(^1\) The IATA Connectivity Index 2018 is a composite measure of the number of passengers transferred weighted by a destination measure in all Spanish airports.
ABOUT AIR TRANSPORT REGULATORY COMPETITIVENESS

The Air Transport Regulatory Competitiveness Indicators (ATRCI) is a framework that measures a country’s air transport regulatory competitiveness. Air transport regulatory competitiveness is defined as the set of institutions, policies, and factors that determine the economic benefits that the economy can derive from aviation.

Five key determinants of the ease of doing business have been identified, which contribute to the regulatory competitiveness of a country. These five determinants are the pillars that form the ATRCI and for which performance-based assessments have been made:

- **Passenger Facilitation** (visa requirements, open skies agreements, passenger information and border control processes). These measures support easier movement of persons around the globe and contribute to economic development and growth. Regulations that allow for easier and more secure movement of people and aircraft are therefore essential in unlocking the economic benefits of aviation.

- **Cargo Facilitation** (trade facilitation and e-freight). These measures enhance shippers’ experience by enabling the seamless cross-border movement of goods.

- **Supply Chain Competitiveness** (airport and passenger charges and taxes, airport and air traffic management charging process, fuel supply management, labour efficiency). The competitive, transparent, and reliable supply of services to airlines creates an environment in which passenger demand can be stimulated through more affordable air fares. Effective and clear rules create a stable environment which boost economic growth.

- **Infrastructure** (available runway and terminal capacity and slots). Air transport depends largely on available infrastructure and how efficiently congested infrastructure is utilized. Without sufficient capacity, airlines cannot enter the market, enhance air connectivity of the country and create seamless connections and short travel times. Effective infrastructure development and management acts as a facilitator of economic growth unlocking benefits that aviation creates.

- **Smarter Regulations** (regulatory framework, legal framework, regulatory implementation). Without stable, clear and transparent regulations, airlines cannot operate effectively and offer competitive ticket prices or air freight rates. A smart regulatory environment and a comprehensive aviation policy are key drivers of positive economic change.

### PERFORMANCE OVERVIEW

<table>
<thead>
<tr>
<th>Index Component</th>
<th>Spain</th>
<th>Regional average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Transport Regulatory Competitiveness Index</td>
<td>6.1</td>
<td>5.8</td>
</tr>
<tr>
<td>1st pillar: Passenger Facilitation</td>
<td>4.5</td>
<td>4.4</td>
</tr>
<tr>
<td>2nd pillar: Cargo Facilitation</td>
<td>6.0</td>
<td>6.1</td>
</tr>
<tr>
<td>3rd pillar: Supply Chain Management</td>
<td>7.2</td>
<td>7.2</td>
</tr>
<tr>
<td>4th pillar: Infrastructure Management</td>
<td>6.9</td>
<td>5.6</td>
</tr>
<tr>
<td>5th pillar: Regulatory Environment</td>
<td>4.9</td>
<td>5.1</td>
</tr>
</tbody>
</table>

Passenger Facilitation (1st Pillar) represents the weakest point of Spanish competitiveness. While visa rules are relatively open, Spain has not adopted innovative solutions to improve passenger experience consistently or effectively with low performance in the implementation of automated and digitalised solutions. As the border is the initial point of contact for an arriving visitor to Spain, these factors are important in creating a favourable first impression.

Similarly, Spain also scores low for the application of Smart Regulation principles in rulemaking (5th Pillar) – see more on page 3.

Spain scores lower than the European average for the overall Air Trade Facilitation (2nd Pillar). While Spain scores well for the implementation of paperless documentation in the cargo processes, however, significant work remains to be done in order for shippers of cargo to and from Spain to be able to benefit from full implementation of e-cargo digitalization processes and cross-border facilitation.

While Spain has one of its highest scores for Supply Chain Competitiveness (3rd Pillar), regional peers also score well for this indicator. However, Spain has demonstrated low performance in supply chain management (see more on page 3).

Finally, Spain also scores well on the Infrastructure (4th Pillar) reflecting the investment in airports during the 2000s and also the alignment of airport slots coordination with the World Slots Guidelines (WSG). However, Spain is not able to make best use of its airport capacity contributing to recent performance issues and potentially creating a much bigger problem for the future.

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2 Regional average consists of scores for 17 European countries: AT, BE, DN, DE, ES, FI, FR, GR, IT, NL, NO, PL, PT, RO, SE, CH, UK.

3 The values for the ATCI range from 0 (worst) to 10 (best). The index consists of 5 pillars and 17 indicators and 26 sub-indicators which are combined together using a simple average (sub-indicators are summed together to create a single value for the indicator). These aggregate values form an index score for the country.
KEY CHALLENGES OF AIR TRANSPORT REGULATORY COMPETITIVENESS IN SPAIN

Aviation brings significant benefits to the Spanish economy. However, there are still substantial barriers to the further growth of air connectivity which would help to unlock the economic potential of the country. The following page provides an overview of the key challenges of Spain’s air transport regulatory competitiveness.

Spain has high airport charges (adjusted for cost of living) in comparison to its regional peers (Chart 1). A higher ranking is an indicative of higher charges per GDP per capita. High charges represent additional costs for airlines and passengers and restrain further growth in air connectivity. Charges that are not cost-related are at odds with the ICAO guidelines on cost relatedness of charges. This is demonstrated in the analysis of the charging process where Spain scores 0 for cost relatedness of airport charges.

Spain has been facing severe issues with regard to congested airspace leading to delays and operational inefficiencies. As shown on Chart 2 nearly 2,000 flights were delayed at one of the biggest Spanish airports – Barcelona/El Prat. Looking at the performance of the European traffic controllers, Spanish ENAIRE accounted for 5.6% of all the delays (with French DSNA causing 33.5% delays, German DFS 25.7%, Dutch MUAC 8.4%, UK NATS 4.6%, Austrian Austro control 4.3%, Greek HCAA 2.8%, and Swiss Skyguide 2.2%). These delays create inefficiencies and represent additional costs for airlines and inconvenience for passengers. Capacity remains an area of challenge for Spain, a renewed focus should be on managing both en-route and airport delays. With continued growth forecast, this situation will only get worse unless action is taken in the short term to mitigate the impact to the travelling public. Liberalization of air traffic towers have delivered cost savings without compromising safety and further liberalization would be expected to deliver additional benefits.

Spain also scores poorly for both labour efficiency and the burden of regulations (Chart 3). Consequently, Spain has been facing issues with regards to bureaucratic processes and burdensome regulations that hinder the business environment and do not support further growth in air connectivity. Effective processes and practices for policy design and implementation, including stakeholder consultation and impact assessments, support the creation of a regulatory framework that achieves policy objectives within a competitive regulatory and legal environment and enable business to grow.

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4 Relative to GDP per capita, PPP (current US$)
5 Eurocontrol 2018.
6 ICAO's Policies on Charges for Airports and Air Navigation Services
7 Eurocontrol 2018.
FROM PERFORMANCE MEASURES TO RECOMMENDATIONS

With the objective to increase air transport connectivity, it is important that Spain’s aviation strategy creates an environment where existing businesses can flourish, and new business opportunities are created. Spain should therefore focus on:

1. **Airport and passenger charges and fees**
   Ensure sufficient and efficient capacity in the right place controlling high airport charges and fees supported by an improved legislative framework.

2. **National Airspace Strategy (NAS)**
   Implement a National Airspace Strategy to increase the capacity and improve the efficiency of Spanish airspace.

3. **Intermodality**
   Develop intermodal connectivity, including connecting Madrid and Barcelona to the national high-speed rail network.

4. **Cargo**
   Develop and foster the air cargo business by the successful implementation of the correct policies for facilitating a dynamic cross border open trade.

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**Chart 4. Forecast scenarios for passenger traffic, jobs and GDP footprint**

<table>
<thead>
<tr>
<th></th>
<th>Passengers</th>
<th>EUR GDP</th>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>122 m</td>
<td>€102.4 bn</td>
<td>1,707,483</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current</td>
<td>181 m</td>
<td>€152.5 bn</td>
<td>2,189,770</td>
</tr>
<tr>
<td>Upside</td>
<td>192 m</td>
<td>€161.9 bn</td>
<td>2,326,695</td>
</tr>
<tr>
<td>Downside</td>
<td>158 m</td>
<td>€133. bn</td>
<td>1,907,492</td>
</tr>
</tbody>
</table>

* Passengers are counted as departures, including connections. The passenger forecasts are based on the IATA 20-year passenger forecast (October 2018). Data on GDP and jobs are from Oxford Economics. GDP and jobs forecasts are from IATA Economics.

In 2017, 121.6 million of passengers departed from Spanish airports. The robust air connectivity is an enabler of economic activity in Spain creating 1.7 million jobs and supporting EUR 102.4 billion to the economy in 2016. In the next 20 years the number of departing passengers from Spain will increase by 49%. However, if Spain is able to implement the policies noted in this report, there is an upside potential to substantially increase this value and ultimately deliver wide economic benefits through the higher number of jobs and contribution to GDP.

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IATA Economics
Air Transport Regulatory Competitiveness Indicators
2019 Edition

The aim of the ATRCI
The Air Transport Regulatory Competitiveness Index is a framework that assesses the regulatory environment across countries and how governments facilitate or inhibit growth of the air transport sector through their regulations. The framework measures a country’s aviation regulatory competitiveness and offers a snapshot of where the potential gaps are in following the international best practice. It provides a guideline to build up a more efficient regulatory environment to unlock the economic benefits that aviation creates.

**Methodology**

ATRCI uses both quantitative and qualitative data that are normalized to 0-to-10. Qualitative data were collated based on an objective framework. Respectively, quantitative data are used from international organizations and partner organizations. Sources: Eurocontrol, United Nations World Tourism Organization, Verisk Maplecroft, World Economic Forum. All dates relate to 2018 unless stated otherwise.

**The index structure and computation**

The index consists of three levels of values which are combined together applying a simple average (if not stated otherwise). From the highest to the lowest level: Index value, Pillar values, Indicator values and Sub-indicator values. At the lowest level (sub-indicator) the values are summed to create one single value for an indicator. All indicator values within a pillar are then aggregated using an arithmetic mean in order to produce the Pillar score. At the highest level of aggregation (Index value), the score of the five pillars are combined applying a simple average to create one single value for Air Transport Regulatory Competitiveness Index for each country.

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8 ATAG 2018
9 Oxford Economics 2017