



# Logistics in Catalonia

June 2019

**Sector Snapshot**

## Logistics in Catalonia: Sector Snapshot

**ACCIÓ**  
Government of Catalonia



All content of this document is available under a Creative Commons license. Except otherwise noted, the reproduction, distribution and public communication is permitted provided you give appropriate credit, do not use the material for commercial purposes and do not distribute derivative works, according to these terms: <https://creativecommons.org/licenses/by-nc-nd/4.0/>

The use of trademarks in this document is for informative purposes only. Trademarks mentioned in this document are the registered trademarks of the companies, organizations or entities to which they belong and are not owned by ACCIÓ. This is a partial and illustrative representation, however, there may exist other companies, organizations or entities that have not been included in the study.

**Elaborated by**  
ACCIÓ Strategy and Competitive Intelligence Unit

**Collaboration**  
Port de Barcelona

Barcelona, June 2019

# Index

## 1. The logistics industry

Logistics activities: description

## 2. Catalonia, the best location in Southern Europe to set up your logistics hub

Catalonia's four main logistics assets

A major industrial area with a marketplace to match

Unparalleled distribution capacity

Integrated logistics hub

Logistics specialization

A success story: Amazon

## 3. Business opportunities in the logistics industry

Trends and innovation opportunities

International market opportunities for Catalan companies

Investment opportunities

# 1. Logistics industry



# Logistics activities: description

This sector is made up of players that **plan, implement and control the flow of goods, services and information** along with **its storage and warehousing**. Logistics sector companies **develop different activities**: from straight-forward distribution to the design and management of the whole logistics chain.

Today, **high competition in markets** and **customer requirements** due to **e-commerce** expansion have transformed **logistics** in a **critical component** in the **production-comercialization process**. A **good location** between **production** and **distribution markets** is also critical to **optimize transport costs**.



\*Depending on the outsourcing of logistics activities by the company, the logistics operator performs just one part of the process or the whole range of these activities.

Source: EIC (ACCIÓ) based on *Institut Cerdà, La logística com a factor de competitivitat*, 2018 and Port de Barcelona.

## 2. Catalonia, the best location in Southern Europe to set up your logistics hub



# Catalonia's four main logistics assets



## A major industrial area with a marketplace to match

Strong and specialised industrial ecosystem with the presence of international companies, highly open to the world and with rapid access to a large market.



## Unparalleled distribution capacity

An excellent geostrategic position allows for efficient intercontinental connections to Asia and the Americas and easy nearby distribution to Southern Europe and Northern Africa.



## Integrated Logistic Hub

Catalonia is the only location in Southern Europe hosting at once an international port and airport, and duty free and logistics zones with warehousing capacity in an area of 12 km.



## Logistics specialization

A leading ecosystem of specialized local and international logistics operators, providing value-added services to industries such as textile, chemicals, automotive, agro-food, pharma and e-commerce.

Source: ACCIÓ.



# A major industrial area with a marketplace to match (I)

## Catalonia

<p><b>7.6</b> MILLION POPULATION (2018)</p>	<p><b>37,605</b> INDUSTRIAL COMPANIES (2018)</p>	<p><b>€ 71,624</b> MILLION EXPORTS (2018)</p>	<p><b>9,282</b> INNOVATIVES COMPANIES (2016)</p>
<p><b>16.3%</b> OF SPANISH POPULATION</p>	<p><b>23.7%</b> OF SPANISH INDUSTRY</p>	<p><b>17,239</b> REGULAR EXPORTING COMPANIES (2018)</p>	<p><b>22.2%</b> OF SPANISH INNOVATIVE COMPANIES</p>
<p><b>20.1%</b> OF SPANISH GDP</p>	<p><b>8,642</b> FOREIGN COMPANIES (2018)</p>	<p><b>64.8%</b> OF CATALAN SALES ARE EXPORTED</p>	<p><b>23.3%</b> OF SPANISH R+D EXPENDITURE</p>

### Top international companies in Catalonia



### Leading Catalan sectors for logistics



Food and drinks



Automotive



E-commerce



Pharma



Electronic products



Steel products



Chemical and plastics



Textile and design

Source: ACCIÓ based on ICEX, INE, IDESCAT and Port de Barcelona







# A major industrial area with a marketplace to match (II)

A strong industrial base combines with an international and open trade approach



## Food and drinks

**27.9%**

OF SPANISH FOOD & DRINKS EXPORTS

**32%**

OF THE PRODUCTION IS EXPORTED

## Automotive

**22.7%**

OF SPANISH AUTOMOTIVE EXPORTS

**65%**

OF THE PRODUCTION IS EXPORTED

## Pharma

**43.7%**

OF SPANISH PHARMA EXPORTS

**77.3%**

OF CATALAN EXPORTS OF LIFE SCIENCES

## Chemical and plastics

**47.2%**

OF SPANISH CHEMICAL EXPORTS

**42%**

OF THE PRODUCTION IS EXPORTED

## Textile and design

**32.1%**

OF SPANISH TEXTILE AND DESIGN EXPORTS

**6.6%**

OF CATALAN EXPORTS

## ICT

**34.9%**

OF SPANISH ICT EXPORTS

**35.9%**

OVER TOTAL ICT EXPORTERS COMPANIES ARE REGULAR

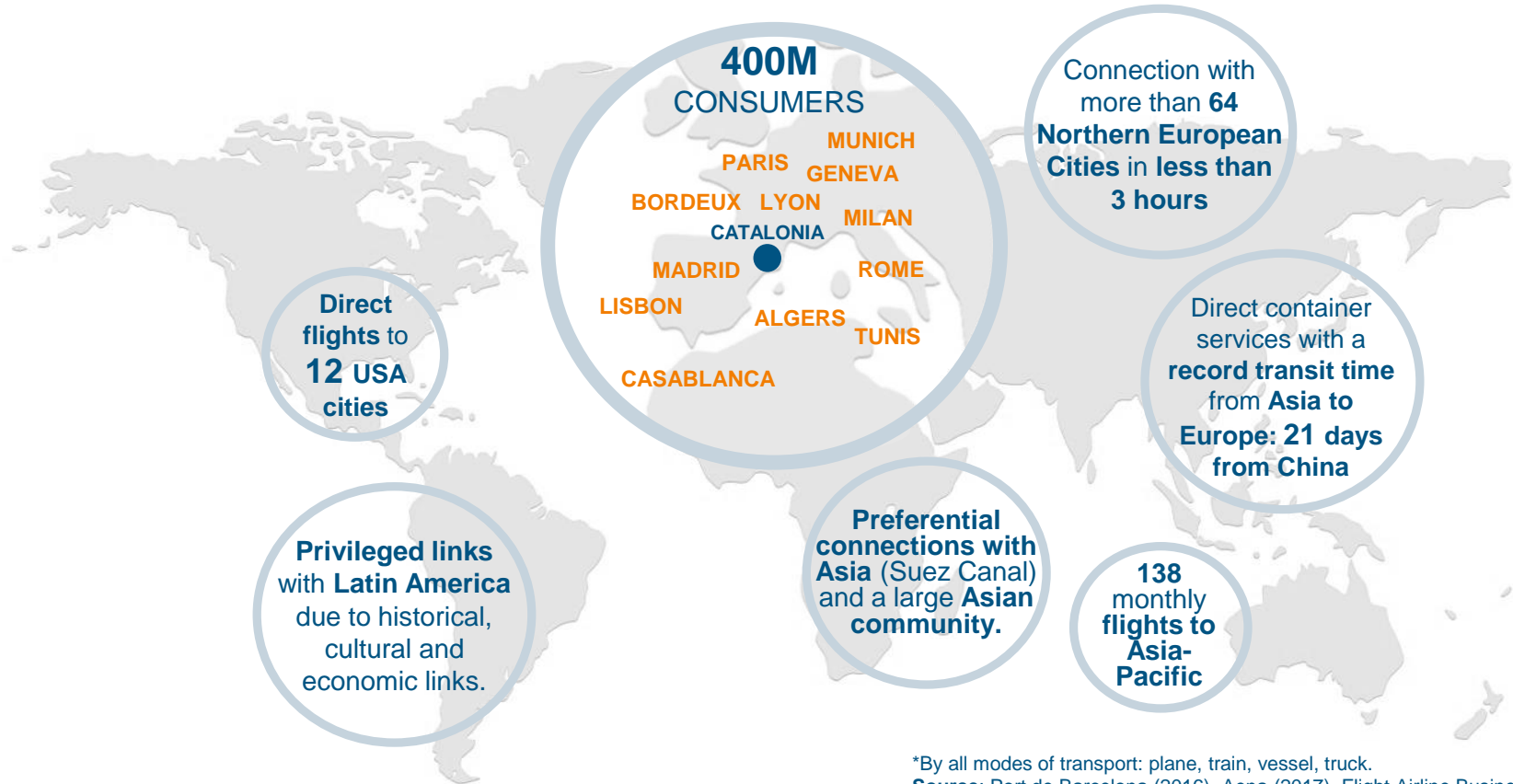
Source: EIC (ACCIÓ) based on ICEX

Nota: The data of Catalan exports on Spanish exports have been calculated with the data from 2014 to 2018 in each case.



# Unparalleled distribution capacity

Catalonia's excellent geostrategic position allows for efficient intercontinental connections to Asia and the Americas and easy fast distribution to Southern Europe and North Africa. The logistics network can reach **400M consumers** in Europe and the Mediterranean/Africa in less than **48 hours\***.



\*By all modes of transport: plane, train, vessel, truck.  
 Source: Port de Barcelona (2016), Aena (2017), Flight Airline Business (2017)

# Integrated logistics hub (I)

Southern Europe's largest intermodal logistics hub.

Catalonia is home to **two of the main ports in the Mediterranean**, a **high-speed train station**, an **awarded international airport** and **highways seamlessly connected to the rest of the European road system**.



## Top international ports of Barcelona and Tarragona

- **4M passengers** and **95MT in goods traffic**
- Connection with **more than 825 ports** around the world with 100 regular lines connecting directly with 200 overseas ports
- **Short maritime transit times** and **high frequency** of ships reduce stock costs.
- The Port of Barcelona is the **3rd** most productive in Europe.
- Tarragona is the other international Catalan port; it also has an airport and an area of logistics activities with 100ha.



## Barcelona-El Prat, world class airport

- **100 airlines flying to 200 different destinations in 57 countries** around the world.
- **The Air Freight Facility with 47.1 hectares** is integrated in a unique logistics platform in Europe: an area covering a 7 kilometer radius and with **2,000 hectares dedicated to logistics**.
- In 2018, Air Cargo in Barcelona achieved its higher traffic volume with **172,940 tonnes**, an **increase by 11%** from 2017 due to **implementation of new air routes**.



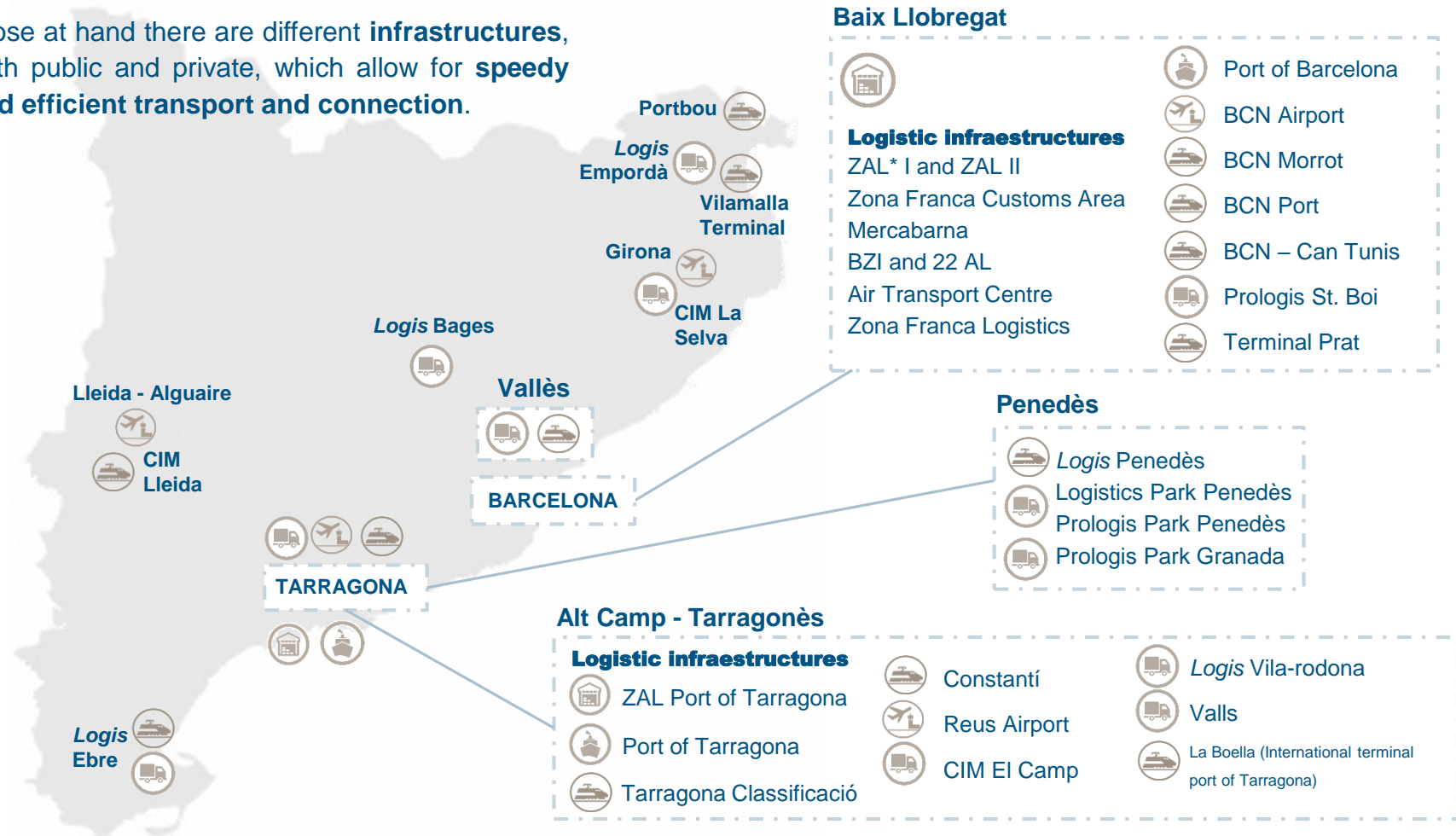
## An extensive rail network and road infrastructure

- Catalonia is the **main European region** in terms of **provision of road infrastructure** of four or more lanes (48.7 km/ 1,000 km<sup>2</sup>)
- **1st** Spanish region in both volume of **intraregional** and **international road freight transport**
- An **extensive rail network** with almost 1,800 km **connecting** the main cities in Catalonia with the rest of **Spain** and **France**, including 400 km of high-speed rail.

Source: CIMALSA, Flight Airline Business (2017), Port de Barcelona (2016).

# Integrated logistics hub (II)

Close at hand there are different **infrastructures**, both public and private, which allow for **speedy and efficient transport and connection**.



\*ZAL: Logistics Activity Zones

Source: ACCIO based on BCLC (2016) and Logistics Observatory (2016)

# Logistics specialization (I)

## Multisector Logistic Operators (LO)



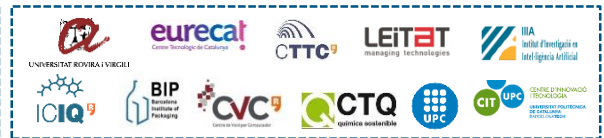
## Supporting institutions and associations



## Congresses and trade fairs



## R&D Centers



Note: The use of these trademarks is for informative purposes only. Trademarks mentioned in this document are the registered trademarks of the companies to which they belong and are not owned by ACCIÓ. This is a partial and illustrative representation of companies that form part of the logistics ecosystem in Catalonia; however, there may exist other companies that have not been included in the study.

Source: ACCIÓ based on Port de Barcelona, 2016 and Orbis 2017.

# Logistic leaders choose Catalonia

Between 2016 and 2020, Catalonia was the main Logistic FDI destination in Spain

<p><b>99</b> FDI projects</p> <p>▲ 90.4% 2011-2015</p> <p><b>29.6%</b> of the FDI projects into Spain</p>	<p><b>2,626.0</b> Capex (M€)</p> <p>▲ 41.1% 2011-2015</p> <p><b>25.3%</b> of the capex into Spain</p>	<p><b>9,903</b> Jobs created</p> <p>▲ 71.2% 2011-2015</p> <p><b>28.2%</b> of the jobs created into Spain</p>
---	---	--

Data for 2016-2020

Main countries in origin of investments



Over 77 companies have invested in Catalonia's logistic sector over the last 5 years.

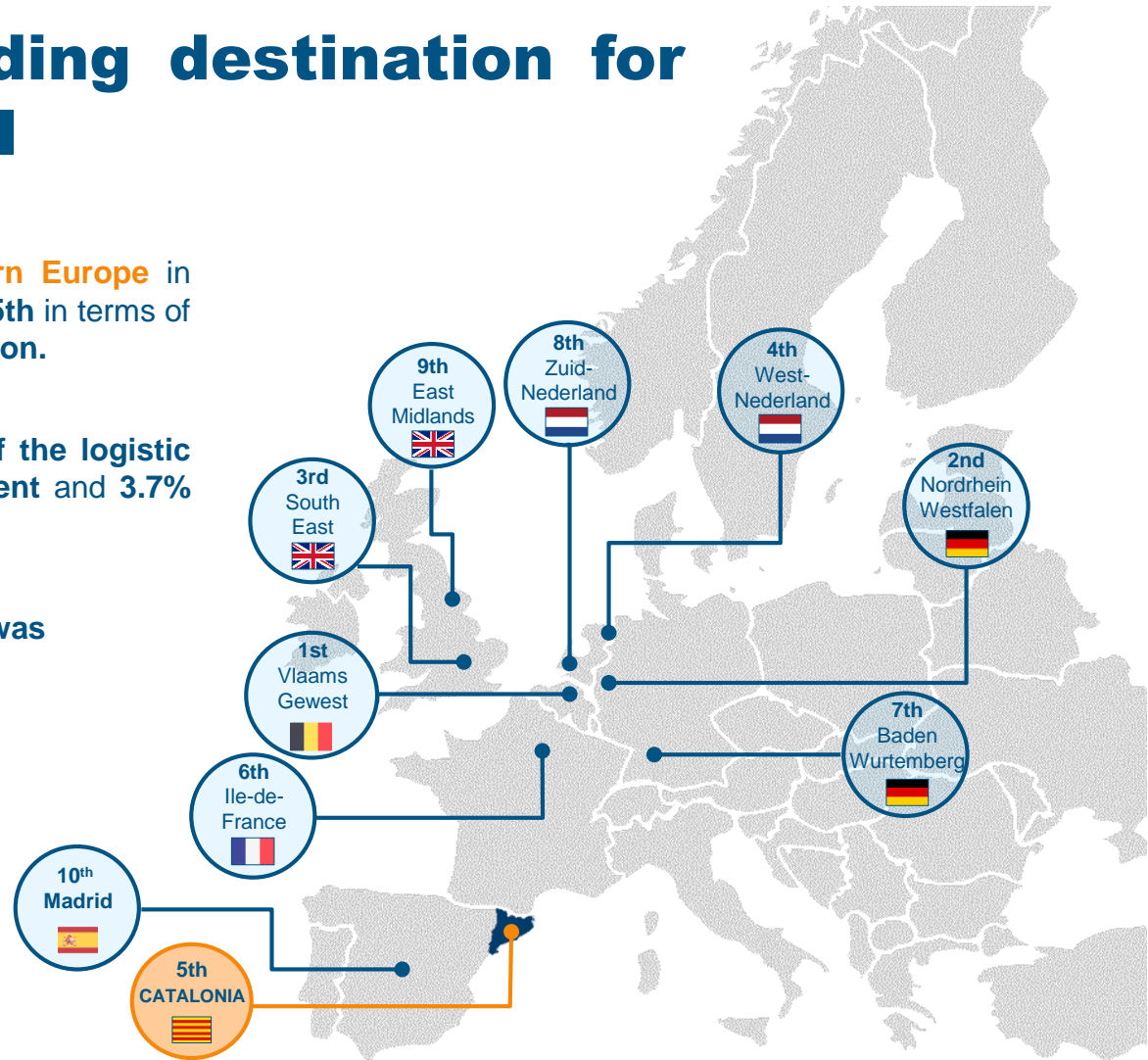


Companies investing in Catalonia during the period 2016 - 2020

**Note:** The investments made in the logistic sector (Transportation & Warehousing) and activities in other sectors (Logistics, Distribution & Transportation) have been considered.  
**Source:** ACCIÓ based on fDi Markets, 2016 - 2020

# Catalonia, a leading destination for technological FDI

- Catalonia is the **5th region in Western Europe** in number of logistic projects, ranks the **5th** in terms of capital investment and **6th** in job creation.
- FDI into Catalonia accounts for **4.1%** of the logistic projects, **3.6%** of the capital investment and **3.7%** of the jobs created in **Western Europe**.
- Between 2016 and 2020, **Catalonia was the first FDI destination in Spain**.
  - **29.6%** of the FDI projects
  - **25.3%** of the capex.
  - **28.2%** of the jobs created.



Technological FDI into Western Europe regions by number of projects.

**Note:** The investments made in the logistic sector (Transportation & Warehousing) and activities in other sectors (Logistics, Distribution & Transportation) have been considered.  
**Source:** ACCIÓ based on fDi Markets, 2016 - 2020

# Reference of training excellence in the logistics industry

## Universities offering bachelor's degrees and master's degrees related to logistics



### Degrees in...

Business Logistics

Management of companies in commerce and distribution

Nautical and maritime transport

Logistics and maritime businesses

Operations Management

Production in the supply chain

Supply chain management

### Masters in...

Supply management and logistics

Logistics operations management

Integral logistics, operations and supply chain management

Logistics and international trade

Logistics innovation

Operations management and integral logistics in a Lean Management environment

Logistics technology

### First-order centres for business studies and executives

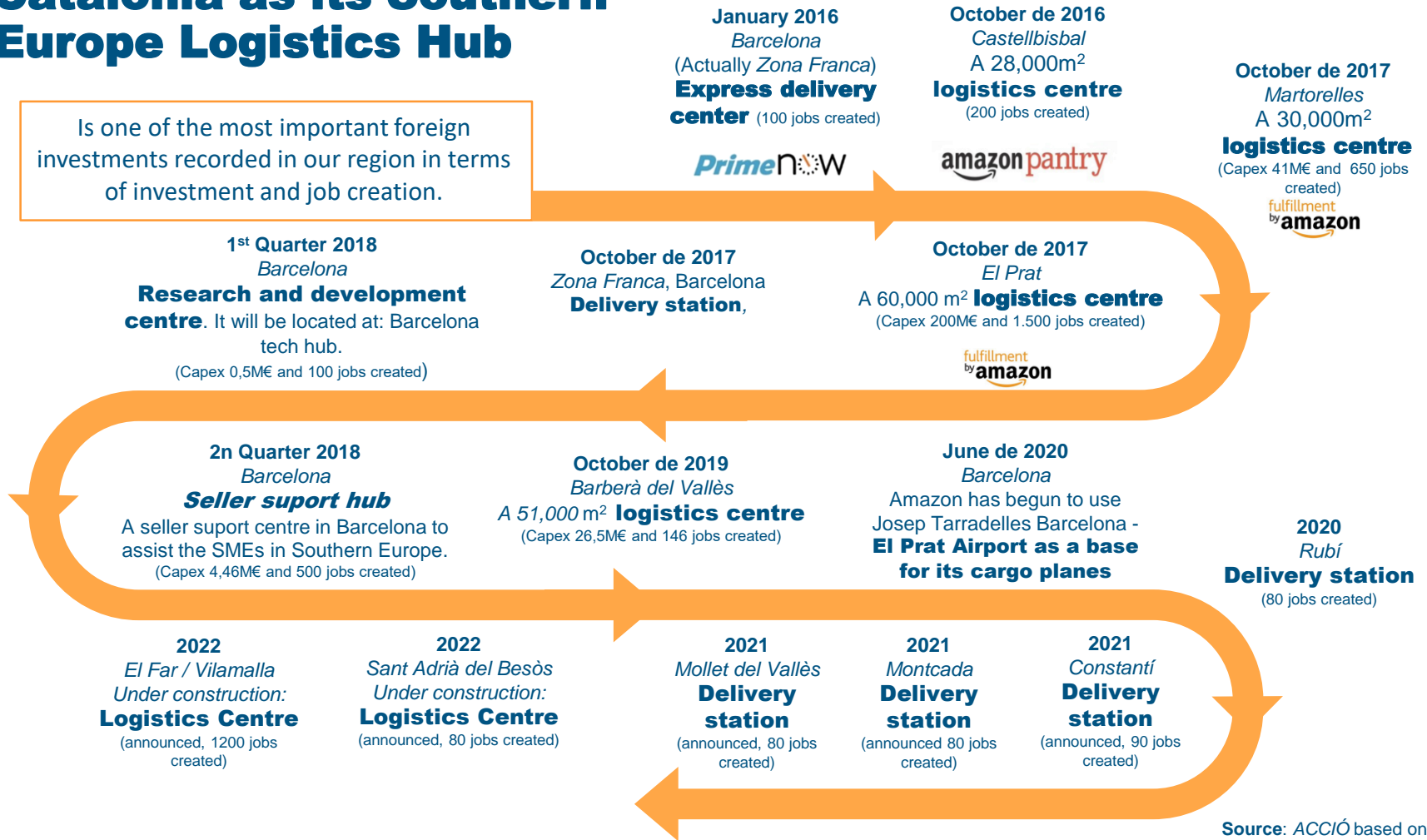


Font: ACCIÓ based on Secretary's Office for Universities



# Amazon has selected Catalonia as its Southern Europe Logistics Hub

Is one of the most important foreign investments recorded in our region in terms of investment and job creation.



Source: ACCIÓ based on press

# 3. Business opportunities in the logistics industry



# Trends and innovation opportunities

## SUPPLY

### DIGITALIZATION OF THE SUPPLY CHAIN

Digital transformation will bring a value of about \$4 billion to the logistics sector globally to 2025. The need for adaptation, with the growth of e-commerce, is increasing and, for this reason, the Digitization of the supply chain in an integrated way is essential, as is already being done in the Los Angeles port with the Digital Solution pilot project.

### SMART FACILITIES

The objective of working with intelligent facilities is to be able to perform more efficient delivery management. The main example is the logistics hub of Frankfurt Cargo City South, where work began with smart trailers. The goal is to achieve an automatic management of short-distance shipments through a future cloud-based platform.

### BLOCKCHAIN IN THE RAILWAY NETWORK

Data management is vital to improve the efficiency of the logistics sector. Faced with this challenge, the blockchain stands out as the most advanced methodology for data management in freight transport. Several applications have been identified such as the smart contract, the smart goods payment or the maintenance of assets and ownership history.

## STORAGE

### MACHINE LEARNING

Companies like Amazon have already begun applying Machine Learning to their operations, as is the case of the new centre in the Barcelona 22@ district. One of the things this system does is to analyse data to establish demand patterns in specific products, as well as to improve their Alexa service.

### SMART WAREHOUSES WITH ROBOTICS

The trend in the logistics sector, as well as in other traditional sectors, is the introduction of processes based on the implementation of 4.0 technologies. The goal is to turn the warehouses into smart spaces and, thus, to optimize the processes. Companies like Henkel have launched these automated logistics centres in Catalonia to become reference logistics hub in Southern Europe.

## LAST MILE DISTRIBUTION

### FLEXIBLE ORDER DELIVERY

In recent years, there have been several initiatives to adapt to the consumer in terms of product delivery, especially with regard to the online purchases. One of the most outstanding examples is the Amazon Key App. The system allows deliveries without the presence of the client, through an intelligent lock, which gives access to a car boot or home.

### SUSTAINABLE DISTRIBUTION

Currently, initiatives have emerged that seek distribution methodologies based on flexibility and sustainability. They focus on large cities with the aim of avoiding congestion and pollution. One example is the case of Geever, which creates small distribution points and delivers in reduced areas using non-polluting means of transport.

### AUTONOMOUS TRANSPORT

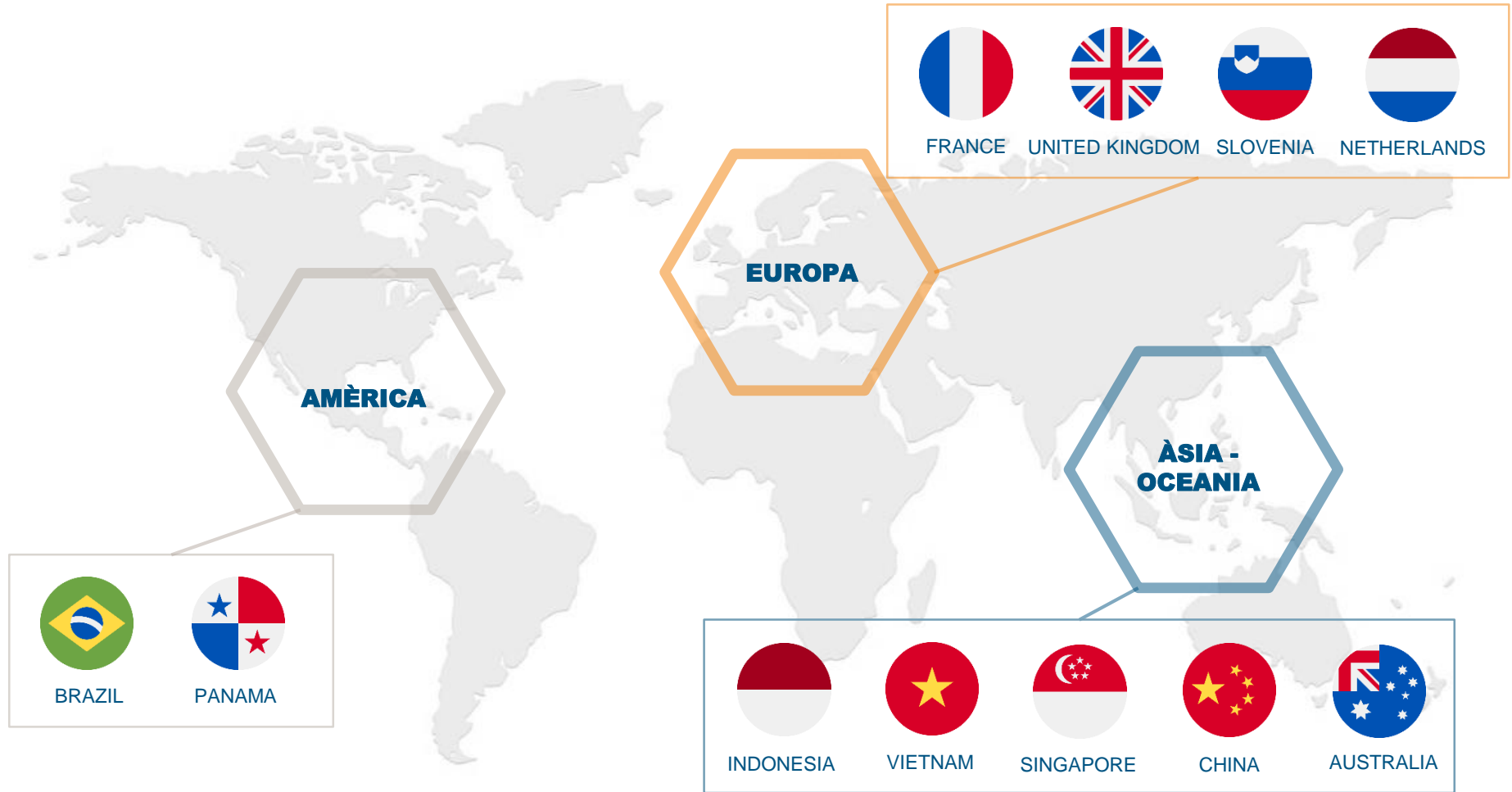
Automation and robotization are becoming very important in logistics and a growth in the use of autonomous vehicles is expected. This is the case of drones that can deliver faster deliveries, avoid traffic jams, do not harm the environment and give access to areas where the last mile distribution is poorly developed, such as rural areas.

### BIG DATA ANALYSIS VIA IOT

Reading data generated as a result of deliveries via mobile applications opens a window for optimisation in last mile distribution. It allows, via analysis of internal, traffic and road network data, to configure more efficient routes and thus reduce distribution costs and the need for fleets.

Source: ACCIÓ based on *Institut Cerdà, La logística com a factor de competitivitat, 2018.*

# International market opportunities for Catalan companies



Source: Global trade mapping, 2018 by ACCIÓ.

# Investment opportunities



## Automotive logistics

Catalonia is improving its infrastructures and this is an opportunity for automotive logistics operators. **Improvements in road transport** as the increase in truck capacity, the reduction of high occupancy road tolls and the harmonization of the calendar of traffic restrictions all cut logistics times and costs as opposed to other locations. In addition, the **liberalization of car stowage** and the **reduction of the port charges for automobiles create business opportunities.**



## Chemical logistics

Catalonia is the **key logistics location in the EMEA market** thanks to the efficiency and seamless of its infrastructures. **Rail transport's improvements** in recent years keep boosting the Mediterranean and Atlantic Corridors. In addition, both the **Port of Barcelona and Tarragona are specialized in the chemical industry**, thus offering the best conditions in moving and operating with chemical products.



## Food and drinks logistics

One of the challenges of the food and drink industry is finding the **best and most cost-efficient means to move its products to market.** Transportation costs represent a significant portion of the final price of a product and thus it is important to **establish logistics centres in locations that can ensure access to consumers** and easy transport conditions thanks to a good network of infrastructures that enable **an optimal delivery of the products.**



## E-commerce

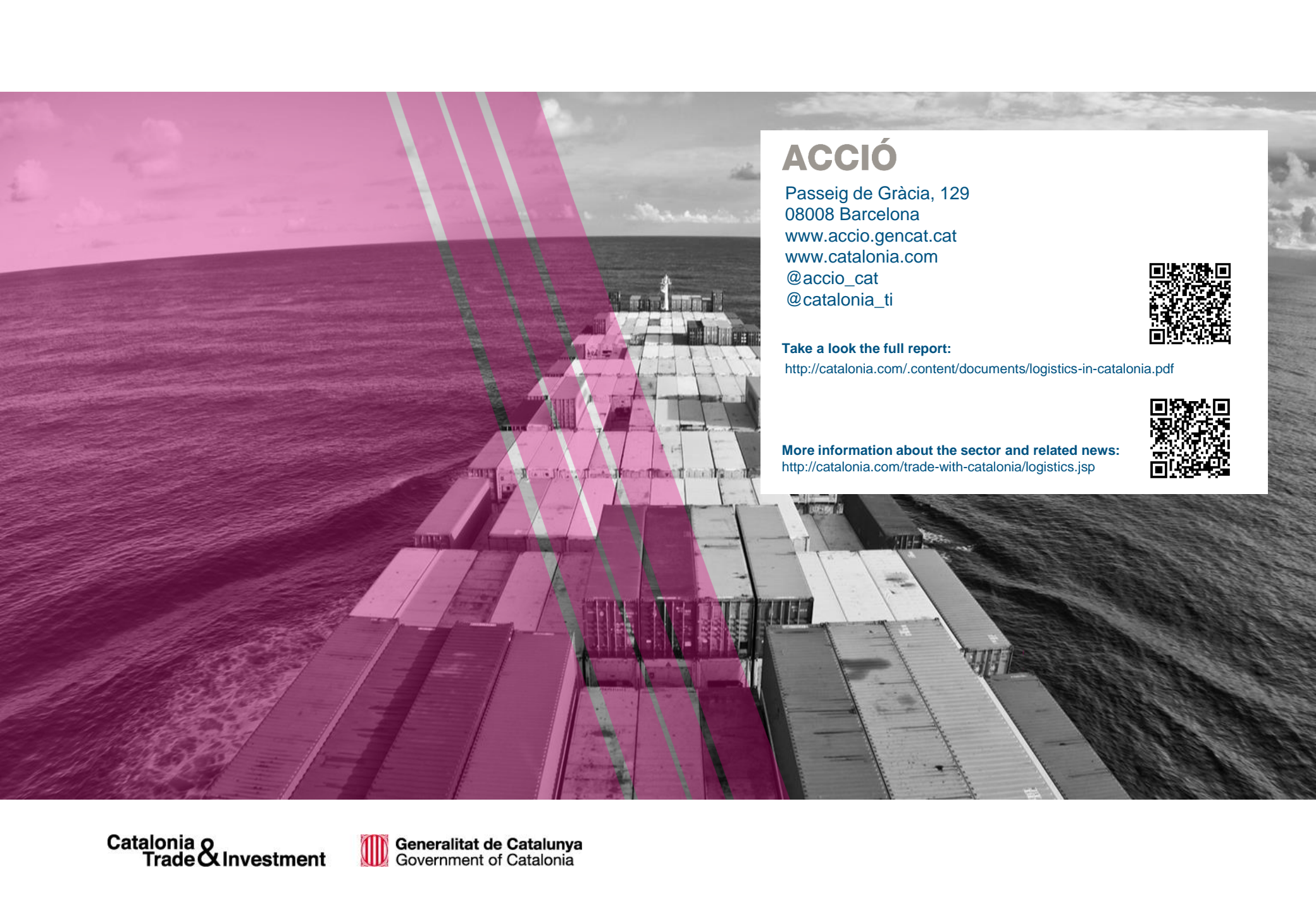
**Last mile distribution** is increasingly more frequent due to the increase in e-commerce. Currently, there are more than 80 companies established at the Barcelona Airport, such as Cargolux or Delta Cargo, managing air cargo installations that promote e-commerce. Mainly in sectors such as food and textiles, but also in others such as electronics, the development of **new forms of logistics management** is indispensable. Efficiency and cutting delivery times to the client are indispensable to optimize costs. To achieve this, **the location of storage spaces within urban centres is essential.**



## Textile and design logistics

The forms of production in the textile sector tend towards increasingly shorter chains, in order to a constant renew the offer. This tendency requires an optimization of the costs and transport times to points of sale and clients. **The specialization of Catalan infrastructures and the agile connection with Southeast Asia** make it **an ideal location to locate storage spaces and logistics centres.**

Source: ACCIÓ



# ACCIÓ

Passeig de Gràcia, 129  
08008 Barcelona  
[www.accio.gencat.cat](http://www.accio.gencat.cat)  
[www.catalonia.com](http://www.catalonia.com)  
[@accio\\_cat](https://twitter.com/accio_cat)  
[@catalonia\\_ti](https://twitter.com/catalonia_ti)



**Take a look the full report:**

<http://catalonia.com/.content/documents/logistics-in-catalonia.pdf>



**More information about the sector and related news:**

<http://catalonia.com/trade-with-catalonia/logistics.jsp>

