



# Logistics in Catalonia

January 2019

**Sector Snapshot**

## Logistics in Catalonia: Sector Snapshot

ACCIÓ

Government of Catalonia



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# 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-commercialization 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: EIC (ACCIÓ).



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

## Catalonia

**7.5**

MILLION  
POPULATION (2017)

**16%**

OF SPANISH  
POPULATION

**20%**

OF SPANISH  
GDP

**37,605**

INDUSTRIAL  
COMPANIES (2017)

**24%**

OF SPANISH  
INDUSTRY

**8,642**

FOREIGN  
COMPANIES (2018)

**€ 70,829**

MILLION EXPORTS  
(2017)

**17,091**

REGULAR EXPORTING  
COMPANIES (2017)

**65%**

OF CATALAN SALES  
ARE EXPORTED

**9,282**

INNOVATIVES  
COMPANIES (2016)

**23.4%**

OF SPANISH  
INNOVATIVE  
COMPANIES

**23.4%**

OF SPANISH R+D  
EXPENDITURE

## 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: EIC (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

**28.5%**

OF SPANISH FOOD & DRINKS EXPORTS

**32%**

OF THE PRODUCTION IS EXPORTED



### Automotive

**25.2%**

OF SPANISH AUTOMOTIVE EXPORTS

**65%**

OF THE PRODUCTION IS EXPORTED



### Pharma

**45.3%**

OF SPANISH PHARMA EXPORTS

**5%**

EXPORT'S GROWTH BETWEEN 2016 AND 2017



### Chemical and plastics

**49.3%**

OF SPANISH CHEMICAL EXPORTS

**43%**

OF THE PRODUCTION IS EXPORTED



### Textile and design

**33.4%**

OF SPANISH TEXTILE AND DESIGN EXPORTS

**6%**

EXPORT'S GROWTH BETWEEN 2016 AND 2017



### ICT

**34.9%**

OF SPANISH ICT EXPORTS

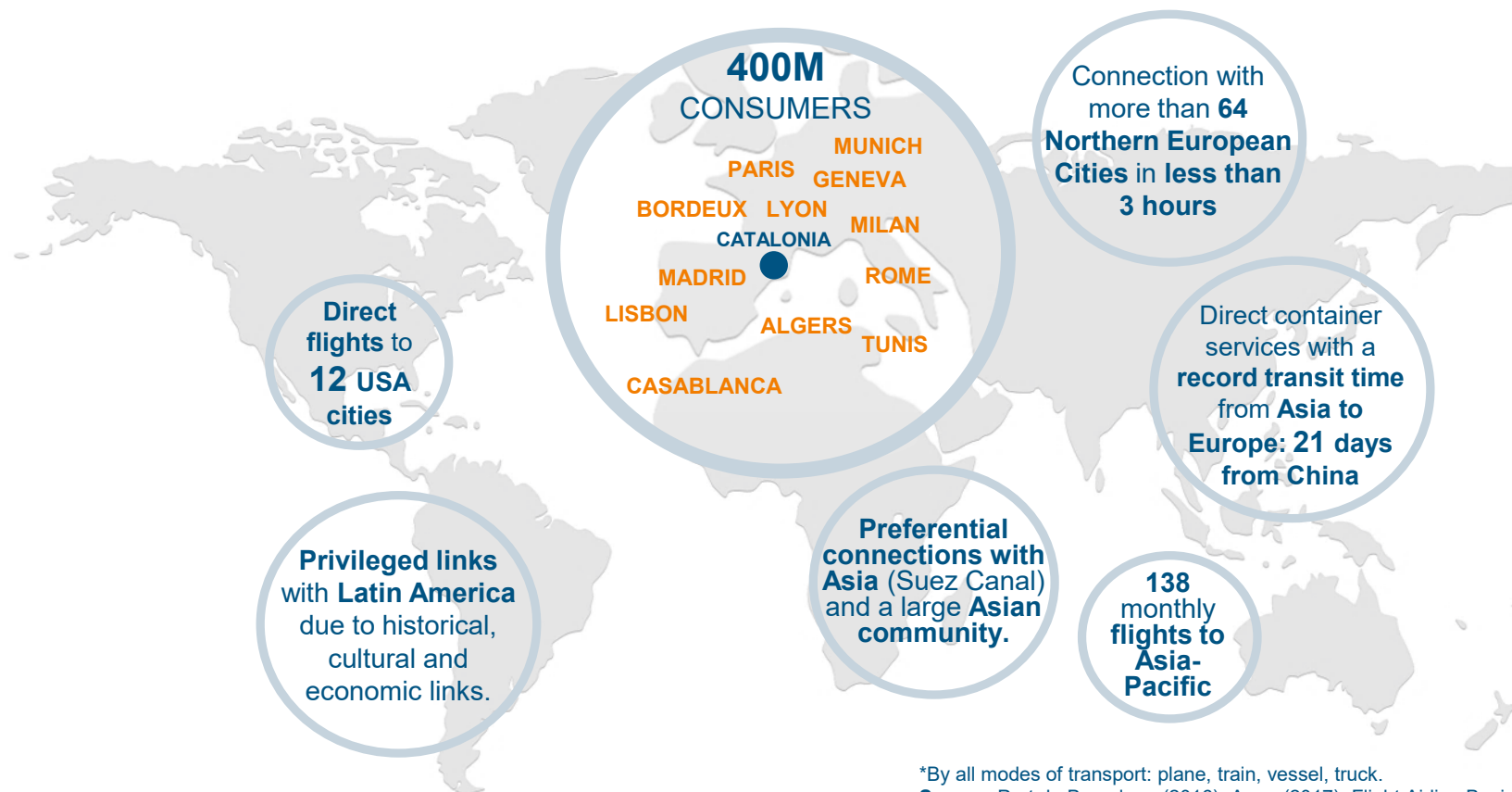
**35.9%**

OVER TOTAL ICT EXPORTERS COMPANIES ARE REGULAR

Source: EIC (ACCIÓ) based on ICEX

## 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.



## 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 2016, Air Cargo in Barcelona achieved its higher traffic volume with **132,800 tonnes**, an **increase by 13%** from 2015 due to **implementation of new air routes**.



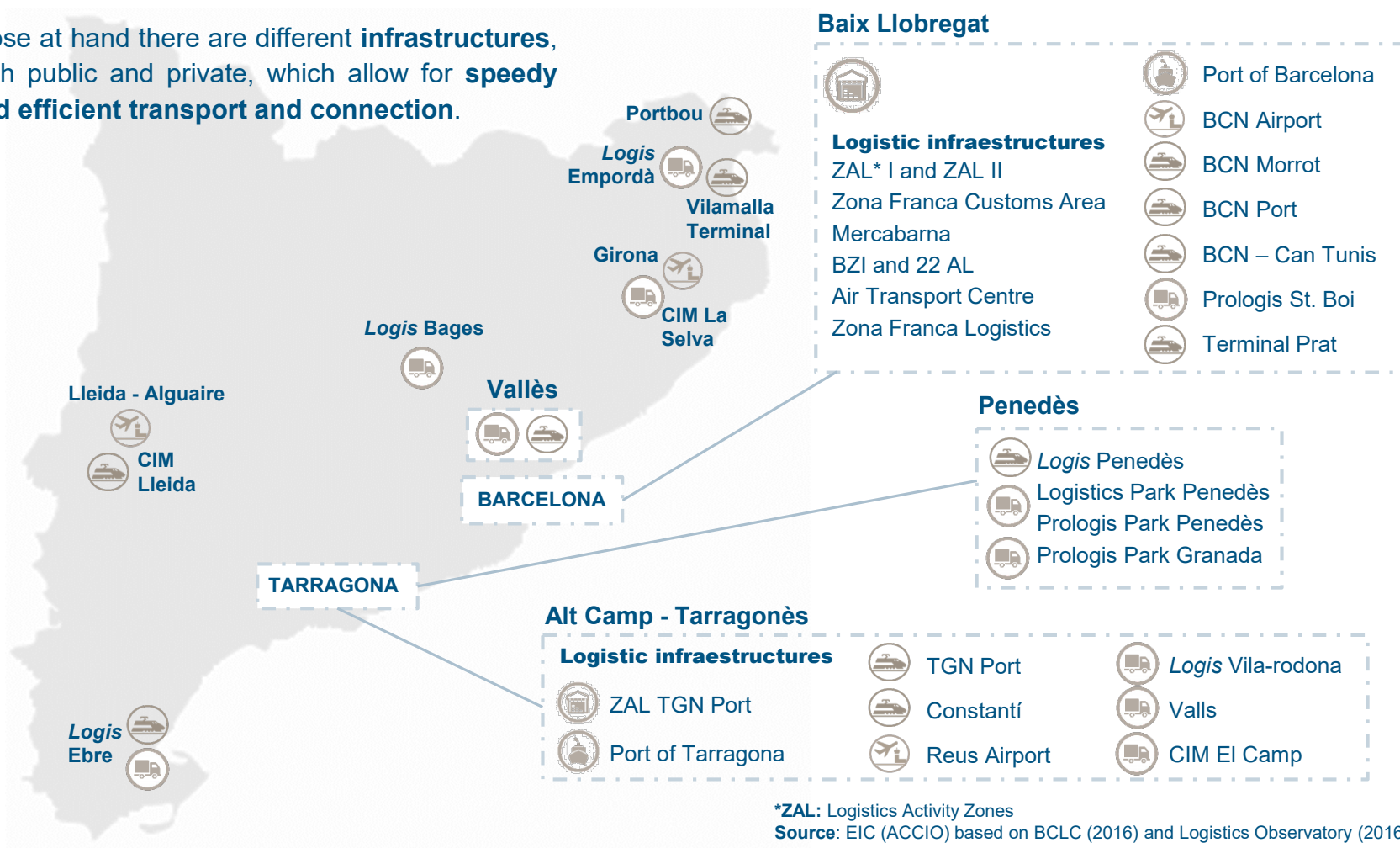
## An extensive rail network and road infrastructure

- 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.
- Only location with in Spain with **standard gauge for merchandises**.

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**.





# Logistics specialization (I)

## Multisector Logistic Operators (LO)



### Automotive LO



### Chemical LO



### E-commerce LO



### Electronics LO



### Food & Drinks LO



### Pharma LO



### Steel LO



### Textile 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: EIC (ACCIÓ) based on Port de Barcelona, 2016 and Orbis 2017.

## **Logistics specialization (II)**

### Attractive for foreign investors

Top international companies have located their logistics hubs in Catalonia



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#### The Catalan logistics industry registered:

2013-2017



**75** FDI projects



**€2.95 M** of capital investment



**7,692** jobs created

#### Catalonia has concentrated:

2013-2017

**37.5%**

OF THE FDI PROJECTS  
RECEIVED IN SPAIN

**37.8%**

OF THE CAPITAL INVESTMENT  
RECEIVED IN SPAIN

**40%**

OF THE JOBS  
CREATED IN SPAIN

**Source:** EIC (ACCIÓ) based on Port de Barcelona (2016), fDi Markets (2013-2017) and Orbis (2017).

# Amazon has selected Catalonia as its Southern Europe Logistics Hub

Recently Amazon carried out 7 investment projects in Catalonia with a total investment of **€268.22m and more than 3,725 direct jobs**, including one of the most important foreign investments recorded in our region in terms of investment and job creation.

**Primenow**

Amazon has established in Barcelona (Rosselló street) its first express delivery center in Europe in order to **reduce delivery times** and **include some fresh products** in their catalogue.

**amazonpantry**

A 28,000 m<sup>2</sup> logistics centre in Castellbisbal to handle shipments for Pantry Service. It allows Amazon to **distribute grocery items** among its customers **the same day** throughout Spain and Southern Europe.

January 2016  
Barcelona

October 2016  
Castellbisbal

October 2017  
El Prat

October 2017  
Martorelles

**fulfillment  
by amazon**

A new **logistics centre of 60,000 m<sup>2</sup>** to manage the growing demand from its European customers in **El Prat**, only 10 Km away from Barcelona.

**fulfillment  
by amazon**

A **30,000 m<sup>2</sup> new logistic center** in **Martorelles**, closely located to key points such as the airport, the port of Barcelona or the AP-7 highway.

## DELIVERY STATION

A smaller station to strengthen Amazon's delivery network in the area.

## LOGISTICS CENTRE

A new **logistics centre of 51,000 m<sup>2</sup>** in Barberà del Vallès to strengthen the logistics in southern Europe. It will be Amazon's **2<sup>nd</sup> biggest centre in Catalonia**.

## SELLER SUPPORT HUB

A **seller support** centre in Barcelona to **assist the SMEs** in **Southern Europe** providing multilingual support to France, Spain and Italy.

## R&D CENTER

A research and development centre in Barcelona **focused on machine learning technologies** to forecast customer demand, translate product information and develop automatic speech recognition.

3rd Quarter 2017  
Barcelona

1st Quarter 2018  
Barcelona

Future investment  
Barberà del Vallès



# 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.

## 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.

### 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.

### 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.

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

# International market opportunities for Catalan companies



## AUSTRALIA

The efficiency of the logistics industry in Australia is vital to the country's productivity and well-being. Its economic competitiveness is closely related to the quality of infrastructures that link and transport goods and services to national and foreign markets. Australia will face population growth, an increase in internal and external demand for products, and those technological changes that present new opportunities for companies in the sector.



## CHINA

The Chinese logistics industry has progressed a great deal in various fields, including express electronic commerce technology, infrastructures abroad and its logistics network. As IoT, exchange platforms, big data and geolocation technologies are implemented, the logistics industry is changing dramatically, influencing its future development. China is, therefore, a strategic location in which logistics and distribution companies can innovate and develop their business.



## SINGAPUR

Singapore is Asia's main shopping destination and also over a third of Singapore's households will earn more than USD 150,000 annually in 2018, causing a subsequent increase in the demand for consumer products.



## ÍNDIA

Retail is India's largest industry and currently accounts for more than 10% of the country's GDP. With the world's second largest population, a middle-class of 600 million people and an increase in urbanization, household incomes, customers in rural connected environments and consumer spending, India is one of the best countries for investment in retail and e-commerce.



## VIETNAM

It is expected that the Vietnamese retail market will have a positive evolution as regards foreign investments and sales. In addition, thanks to economic growth and the increase of the middle-class population, there will also be an increase in local consumption. Therefore, companies that invest in the retail sector will find a country in which to produce and export, and where there is also an important marketplace of local consumers.

## ASIA - OCEANIA

## EUROPE



## FRANCE

Having a brand presence in France means getting visibility around the world. The ACCIÓ office in Paris has extensive experience in opening points of sale in different sectors with assessment services, competitive analysis, commercial premises research, organisation of premises preparation, selection of personnel, etc.



## PANAMÀ

Mass consumption and restaurant distribution channels in Panama are receptive to Catalan gourmet and mass-market food products. The ecosystem values the incorporation of new products: there is a market for fresh produce (sweet fruit), gourmet products and dietetic/bio foods. The presence of expatriate communities in Panama City has encouraged distribution groups to expand their portfolios with products of European origin.



## ISRAEL

Israeli companies offer IoT industrial solutions in various fields such as process optimization, cyber security, logistics optimization, robotics, health and safety, sensors and platforms. The Israeli IoT ecosystem provides a great opportunity for companies looking to implement advanced solutions.



## SOUTH AFRICA

South Africa is known as the gateway to southern Africa. It is a market where large distribution chains play an important role, some of them with a strong presence in other African markets. The mass market sector has experienced significant growth in recent years, stimulated by the rise in size of the middle class and the variety in consumer tastes.

## AFRICA

Source: 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

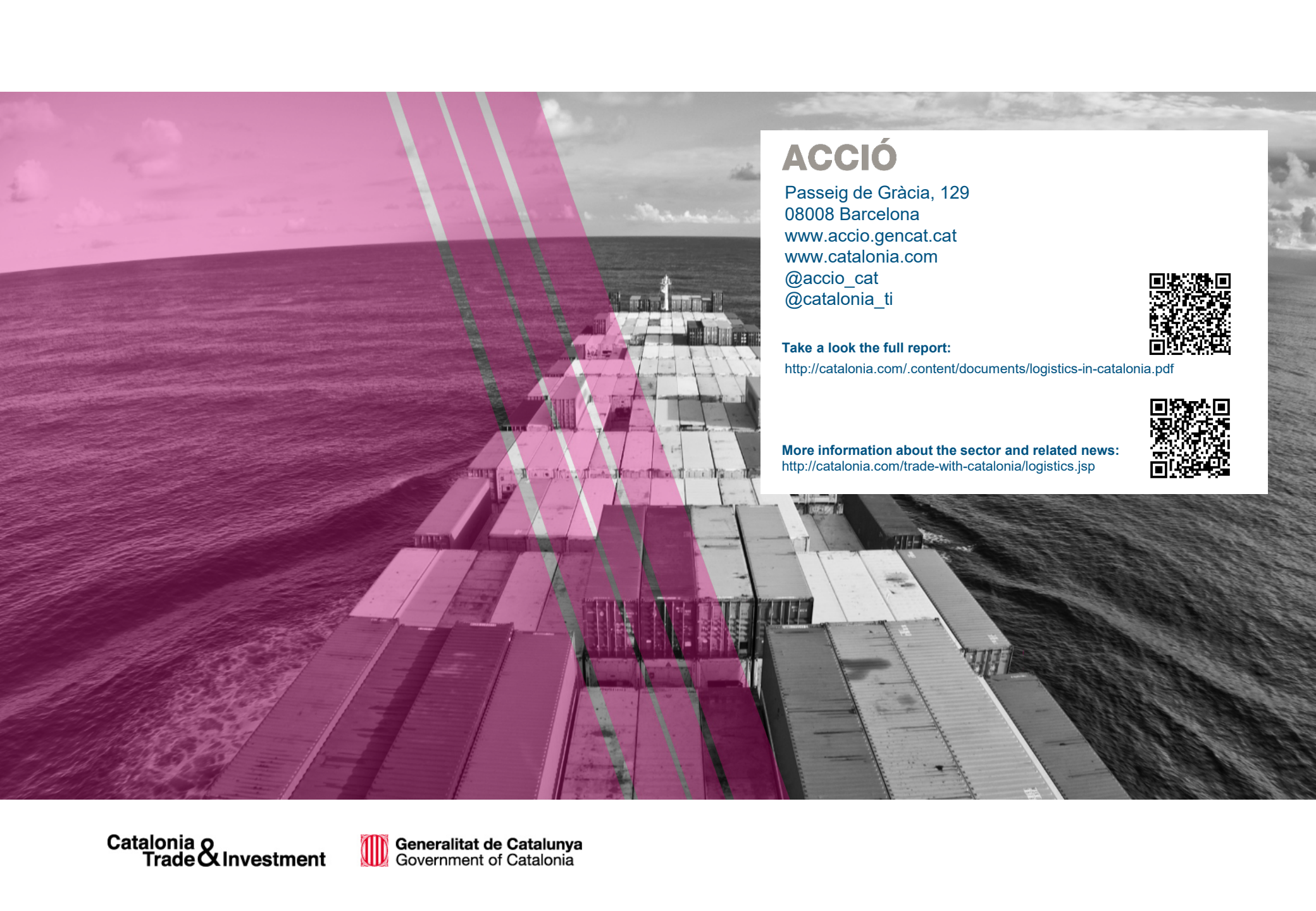
**Last mile distribution** is increasingly more frequent due to the increase in e-commerce. Currently, there are more than 80 companies established at the Barcelona Airport, such as Cargolux or Delta Cargo, managing air cargo installations that promote e-commerce. Mainly in sectors such as food and textiles, 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: EIC (ACCIÓ)



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