

## A diversified port

The Port of Barcelona is Catalonia's main transport and services infrastructure and a benchmark port in the Euro-Mediterranean area. Its area of influence stretches through the south and centre of Europe and North Africa and it is the logistics gateway linking markets as distant as the Far East and Latin America. With **around 100 regular shipping lines** connecting Barcelona with **more than 200 ports** in the five continents, Barcelona is Spain's principal port for international traffic. It is specialised in general cargo and high value added cargo such as consumer goods, electronics products and vehicles.

The Port in figures:

- The Port provides 32,000 jobs.
- Barcelona is Spain's leading port in terms of turnover and goods value.
- 77% of Catalonia's economic activity sectors are customers of the Port.
- The Port channels 71% of Catalonia's external maritime trade and 22% of the national total.
- The Port moved goods worth € 54 billion in 2013.

The last few years have witnessed a process of far-reaching concentration and specialisation of the terminals, which are privately managed and operated under a concessionary regime by companies in competition with each other. The Port currently has thirty goods terminals specialised in containers, vehicles, coffee and cocoa, metal products, solid and liquid bulks, and passengers.

Barcelona therefore has a highly diversified port, which we could almost describe as **five-in-one**: the commercial port; the energy port; the cruiser port; the logistics port; and the citizen's port, known as the *Port Vell*.

### Commercial port

Barcelona has two large container terminals (**TCB and BEST**), both of which were recently enlarged, with an overall capacity of 5 Million TEU (Twenty-Foot-Equivalent, the standard container unit).

Another type of strategic traffic for the Port is vehicles, which are managed by two specialised terminals: **Autoterminal and Setram**. The Contradic wharf houses the main terminals for solid bulks (cereals, soya bean, minerals, cement, etc).

Traffic with the Balearic Islands and Short Sea Shipping services (mixed passenger and ro-ro cargo) to various destinations around the Mediterranean are operated by two terminals: Terminal Ferry de Barcelona and Grimaldi Terminal Barcelona. The first one is run by *Acciona Trasmediterranea*, while the second (that came on stream in June 2013) is operated by the Italian company Grimaldi.

Furthermore, the **Port Nou** multipurpose terminal, serves shipping lines carrying vehicles, containers and special projects, such as the 'heavy lift'.



## Energy port

The Port of Barcelona also plays a leading role in receiving, storing and distributing the country's energy resources. The **Energy wharf** is one of the most important points for unloading and channelling natural gas in Spain, and also concentrates the reception and distribution of gasoline, gas oils and biodiesel for the automobile sector. In 2010, the company *Gas Natural* set up an 850 MW capacity combined cycle power plant to provide a sustainable response to the growing energy demands of the Port and the metropolitan area of Barcelona.

The Energy wharf has **the deepest liquid bulk berth** in the entire Western Mediterranean, and is fitted out to receive the largest tankers on the market, up to 275 metres long and weighing up to 175,000 tonnes. This berth makes the Port of Barcelona the main logistics distribution hub for petroleum products in the Mediterranean and North Africa.

This position has been further boosted by the enlargement works in two hydrocarbons terminals: **Meroil and Tradebe**. With an investment of € 110 million (50 million by Meroil and 60 million by Tradebe), these actions have increased the Port's capacity to handle petroleum products to 8 million tonnes per year.

## Cruiser port

With **2.5 million cruise passengers** a year, Barcelona is the **leading cruiser port in Europe** and the fourth turnaround port worldwide. It boasts **six passenger terminals** dedicated exclusively to cruisers, all of which are equipped with state-of-the-art services and prepared to service large vessels.

According to a study by the University of Barcelona, cruise activity in Barcelona generates **total turnover of € 796 million and contributes € 413.2 million euros a year to Catalonia's Gross Domestic Product (GDP)**. In particular, the arrival of cruise ships at the Port of Barcelona provides a **daily income of € 2.2 million in Catalonia** and helps to maintain **6,759 jobs**.

Security - a very important issue for the sector - , quality of service, and the attraction of Barcelona and Catalonia have led nearly all cruisers plying the Western Mediterranean to choose Barcelona as a stopover or turnaround port.

During the last decade, Barcelona Port Authority and the various operators have invested **€ 100 million** in building and improving cruiser infrastructures. *Creuers del Port de Barcelona*, which manages five of the Port's six terminals, has invested more than € 65 million in modernising and enlarging its facilities over the past few years. Likewise, the Carnival Group invested € 12 million on Terminal D (*Palacruceros*), which came on stream in 2007. This terminal was enlarged in 2014 and the Carnival Group has announced it is to build a new passenger terminal (Terminal E), starting in 2015, which will also be located on Adossat wharf, after Terminal D.



## Logistics port

The Port of Barcelona has led the field in developing logistics services linked to port activity. The Port of **Barcelona's Logistics Activities Area** (or ZAL) is a multimodal centre connected to all the transport infrastructures within a radius of less than five kilometres and offers its customers bespoke services, hiring out made-to-measure industrial units and covering all of their complementary needs through the Service Center. The ZAL also boasts a strategic location; its own Customs regime; integrated telecommunications service; economies of scale; and synergies among its companies.

Phase one of the ZAL, covering 63 hectares and set up in 1993, is now fully occupied. Phase two, offering a further 143 hectares dedicated to logistics activity, is almost completely sold and has outstanding customers such as Decathlon, Carrefour, Damm and others.

The more than 130 companies set up in the ZAL include some of the main national and international freight forwarders and logistics operators as well as several large multinationals requiring full distribution services. The ZAL can attend to the needs of companies wishing to bring together distribution and transport activities, providing added value to their goods. In addition to the logistics areas in the Llobregat delta area, the ZAL is one of the main factors helping the Port of Barcelona to become the main goods distribution platform in Southern Europe.

## Citizens' port (Port Vell)

The *Port Vell*, or Old Port, is the urban port open to the general public and is considered as a worldwide paradigm of port-city integration. It is a favourite spot for Barcelona residents and visitors alike, a fact borne out by the 17 million visitors that go there each year. The success of the *Port Vell* has contributed to popularising the Port of Barcelona and bringing it closer to members of the public and tourists, making them feel at home there.

The **70 hectares** of the *Port Vell* bring together the various leisure facilities and services, which we can divide into five separate areas:

- **The business area:** this is the World Trade Center Barcelona, an office complex that offers the most modern services for business, and the headquarters of the Desigual fashion brand, which opened in 2013.
- **The culture and education area:** here we find the Maritime Museum and the Museum of the History of Catalonia, two cultural references for the city; the El Far Consortium, which spreads maritime values; and the Barcelona Nautical Institute.
- **The shopping and entertainment area:** this includes the Maremàgnum shopping centre, the Aquarium sea life centre, the Grand Marina and W Hotel and a wide range of eateries.

- **The maritime and sports area:** this comprises three marinas - the *Reial Club Marítim*, *Reial Club Nàutic* and *Marina Port Vell*, and the *Marina Vela*, for sailing and sporting vessels, currently under construction; two swimming clubs, the *Club Natació Atlètic Barceloneta* and the *Club Natació Barcelona*; and the Foundation for Ocean Sailing.
- **Port and nautical activity:** the Fishermen's wharf, which is currently being refurbished to clean up the area and equip it with modern and efficient facilities, combining fishing and public use; a shipyard for repair and refit of yachts, called *Marina 92*; and a nautical centre specialising in the repair and upkeep of vessels of up to 35 metres, called *Barcelona Nautic Center*.

To teach Port Vell Port visitors more about the Port of Barcelona, work will soon begin to refurbish the institutional headquarters at the Portal de la Pau and turn it into a 'Port Center'. This project aims to provide information on port activity, its close relationship with the city of Barcelona, the main port stakeholders, and the future projects and challenges facing the Port that are relevant to Barcelona and Catalonia's social and economic reality.

## Beyond the Port: the hinterland

The Port of Barcelona serves customers located throughout the entire Iberian Peninsula, especially in the north-east and centre of the Peninsula, and customers in other European countries (France and Italy in particular) and Mediterranean states (especially Morocco, Algeria and Tunisia). The Port is thus the gateway to a vast hinterland extending throughout the Iberian Peninsula and beyond national borders to reach Europe and North Africa.

The activity of the Port and its services are therefore not restricted to the port precinct and nor do they end at the boundaries that define the wharves and its border with the city. The Port of Barcelona aims to take port services to maritime logistics operators and import and export customers within this large region and has therefore promoted a network of services and infrastructure at strategic points in this territory, in the form of inland goods terminals.

Conceived as a series of local infrastructures, the inland terminals help operators and shippers (importers and exporters) to create more efficient logistics chains and channel their products through Barcelona.

The keystones to this networked port are:

### The Zaragoza Goods Terminal (tmZ)

TmZ was created in 2001 as a service platform for operators and importers and exporters of Aragon, Navarre and Rioja. Today it is one of the key intermodal terminals in Spain with traffic well in excess of 100,000 TEUs and has become a logistics hub, serving not only the areas mentioned previously but acting as a waypoint to the centre of the Iberian Peninsula. The terminal is connected to the Port of Barcelona by several daily rail services and to other Spanish logistics nodes.



## **Dry ports of Coslada in Madrid, and Azuqueca de Henares and Yunquera de Henares in Guadalajara — Terminal Marítima Centro (tmC)**

The dry ports of Coslada and Azuqueca de Henares are the base for bringing maritime transport closer to customers and for boosting the competitiveness of the major logistics and consumption hub represented by the Autonomous Community of Madrid, the centre of the country and the connection with the other Iberian Peninsula markets.

The Port has invested in the dry ports of Coslada and Azuqueca de Henares and has recently increased its stake in the company *Puerto Seco de Azuqueca de Henares* to develop services that suit the needs of operators and freight agents and to increase the competitiveness of the area's offer of maritime and port services.

Furthermore, to ensure the expansion of the activities necessary for logistics operators and shippers in the Henares corridor, along with other local partners, the Port has recently helped set up the company *Terminal Intermodal Marítima Centro, S.L.* that will be responsible for developing a new infrastructure with multimodal facilities in the municipality of Yunquera de Henares (Guadalajara province). With an investment of € 40 million, the future facility, which will add around 22 new hectares of land, will be equipped with complete wagon terminals and intermodal transport units (ITU), and transport of vehicles, steel products, bulk solids and chemicals.

All of these actions contribute to increasing the flows of goods from/to the centre of the peninsula, an area with great development potential, through the Port of Barcelona.

### **The Navarre Intermodal Terminal (TIN)**

TIN is a railway terminal located in the town of Noain, near Pamplona. The new terminal was opened in February 2013 and has regular rail services operated by BEST that connect it with the Port of Barcelona.

### **The Toulouse Goods Terminal (tmT)**

TmT brings the Port of Barcelona's services closer to its customers north of the Pyrenees (Midi-Pyrenees and Aquitaine). Since 2010 it has included a Logistics Activities Area (the ZAL Toulouse), a logistics and services platform facilitating international maritime trade to the region's importers and exporters via the Port of Barcelona.

### **Perpignan St Charles Conteneur Terminal (PSCCT)**

Located in Perpignan, PSCCT is one of the main logistics and distribution centres for fresh produce from southern Europe. Its facilities also serve the logistics operations of all kinds of goods starting and/or ending in Europe and requiring the Mediterranean route.

The Port has a 5% stake in the company that manages the Saint-Charles Container Terminal, which has regular rail connections with northern, eastern and south-eastern France.

In addition to these infrastructures, the Port has an active presence in other European and Mediterranean hinterland markets through its permanent representation or through regular specific missions.

## Multimodality: motorways of the sea and railways

The Port of Barcelona brings together the largest offer of logistics and transport services in the Iberian Peninsula and Southern Europe. The interconnection of all the modes of transport (port, airport, motorways, and railway) within a 5-kilometre radius, and its location in an environment offering the best services to the transport and logistics sector make the Port one of the main commercial, transport and distribution centres in the Mediterranean area.

### Motorways of the sea

Short Sea Shipping (SSS) services are mixed ro-ro and passenger shipping lines that connect ports of different countries and make it possible to shift heavy goods traffic from the roads to the maritime mode. Barcelona is the only port in the Spanish State with regular, well-consolidated and high-quality SSS lines. It operates daily services linking Barcelona with several destinations in Italy such as **Genoa, Civitavecchia (Rome), Livorno, Savona, and Porto Torres**. The Port also operates regular services with **Tangier and Tunis**.

The Port of Barcelona has made a firm commitment to SSS as a sustainable model of transport. SSS involves significant improvements for logistics companies, is economically more competitive than road transport and represents a substantial environmental improvement since it helps to keep more than 120,000 lorries off the roads each year).

In this regard, we should point to the excellent performance of the short sea shipping (SSS) lines connecting Barcelona with Italy (in particular with Genoa, Civitavecchia, Porto Torres, Savona and Livorno), which have recently experienced growth of up to 20%.

The Port of Barcelona set up the European School of Short Sea Shipping in 2006 to promote SSS traffic. This innovative training method allows course participants (practitioners from the logistics sector and hauliers or students) to gain a direct knowledge of the workings and the advantages offered by this particular kind of transport. The courses are organised on board SSS vessels plying the routes between Barcelona and Genoa or Rome.

### A commitment to railways

Rail traffic at the Port of Barcelona has increased considerably over the last few years, due mainly to investments in rail infrastructures made by the Port Authority and to the growing supply of services from private operators. The Port's share of rail transport increased from 2.6% in 2006 to 12% in 2014. The Port Authority aims to achieve a rail share of 20%.



For container transport by land, the Port has regular rail lines with **Madrid, Zaragoza, Lyon, Bilbao, Lisbon, Lleida, Burgos and Vitoria-Jundiz**, among other places.

The works commissioned by the Port Authority have turned Barcelona into the first Spanish State port able to send and receive goods using the international rail gauge. Since January 2011, when the third track was laid on the conventional line, all the Port's container terminals have been offering direct rail services with Europe, making it possible to overcome the limitations of travelling on Iberian gauge tracks. Barcelona is the first port in Spain that is connected to continental Europe using international gauge tracks.

The Port has another rail service for new vehicles to Fuersterhausen, in Germany.

## Enlargement of the Port

The Port has recently completed the most ambitious enlargement process in its history. This huge works project has made it possible to increase its surface area and its capacity to attend efficiently and swiftly to the transport, distribution and logistics needs of its customers. These new infrastructures ensure the competitiveness and the internationalisation of the Catalan and Spanish productive sector.

As a prior condition for enlargement, in 2004 the mouth of the Llobregat river was diverted two kilometres south to enable the Port to build **the two fundamental parts of the enlargement: the New South seawall (4,800 metres long; 22 metres maximum deep; € 340 million in investment)** and the extension of the East seawall (2,025 metres long; € 225 million invested). 53% of these investments were funded by the European Union's Cohesion Fund.

The completion of these infrastructures in 2008, along with the coastal corrective measures, which involved creating a beach south of the diverted river course with an investment of € 26 million, generated a new sheltered water area in which the terminals are being built. The Port of Barcelona has doubled its surface area to **1,300 hectares** compared to 2000.

On the **Prat wharf**, the first of the enlargement area, the Port of Barcelona's new container terminal (BEST) was opened in July 2012 and covers 100 hectares, with 1,500 metres of wharf and a draught of 16.5 metres, and has a total annual handling capacity of 2.6 million TEUs. This facility, which is the most advanced semi-automated terminal in the Mediterranean, is managed by the multinational Hutchison Port Holding, the world's largest terminal operator, which invested more than € 300 million in phase one. The second phase of the terminal is now under way and, with an investment of € 150 million, will bring the terminal up to the dimensions and capacities mentioned above.

Along with other improvement works, the Port has enlarged the South Wharf (involving an investment of € 56 million), where the TCB container terminal operates, which covers an area of 81 hectares and has the capacity to handle 2.1 million TEU annually.

The investments made in the period 2000-2014 **total € 4 billion** and were performed by the public sector (infrastructure) and the private sector (facilities, equipment and cargo handling equipment). To finance these works, the Port of Barcelona has used various funding mechanisms: equity (cash flow), the EU Cohesion Fund and long-term debt (European Investment Bank).

## Quality and services

The Port of Barcelona has set efficient management and customer orientation as its top priorities, since they are key elements in an increasingly competitive and complex field like ports. One very important step in this direction is the new Quality Plan (Port of Barcelona Efficiency Network), which entails a programme of commitments approved through cooperation among the various players within the Port Community.

More than 70 companies have already been certified under the **Port of Barcelona Efficiency Network** quality label, in operation since May 2011. The companies that have received the quality label proving that they are accredited to develop their processes in line with maximum efficiency standards represent the main business areas within the Port Community - freight forwarders and customs agents, shipping agents, hauliers and terminals.

The Efficiency Network quality label emerged in response to the companies operating in the Port wishing to carry out an in-depth review of the objectives and contents of the Quality Plan set up in 1993. The Efficiency Network adapts the Port's former Quality Plan to new market needs, extending its scope of action and bringing in a new programme of commitments related to three key areas: reliability in operations, information and transparency, and cargo safety.

The plan uses efficiency indicators to measure the quality of the processes associated to the movement of goods through the Port, monitoring the large-scale compliance of the commitments established, and to obtain information to improve standards of service and to communicate the degree of reliability of the Port's operations and activities.

It is worth pointing out that the Port shares its methodology and experience in this field with several international ports, particularly in the Americas and Asia. The first ports to receive consulting advice from Barcelona on developing their ongoing improvement plans were the Mexican ports of Manzanillo and Veracruz. Other ports interested in the Barcelona quality model are: the port of Mumbai, India; the Colombian port of Cartagena de Indias; and the Brazilian ports of Santos, Paranagua, Vitoria and Imbituba.

## Principal magnitudes of traffic 2013-2014

TRAFFICS	Accumulated 2013	Accumulated 2014	Increase 2013/2014
Total traffic (in tonnes)	42.6	46.3	+9%
Containers (in TEU)	1.7	1.9	+10%
Passengers (in millions)	3.6	3.4	-4,6%
New vehicles (in units)	705.876	748.394	+6%
Railway traffic (in TEU)	154.522	189.553	+22,6%