

---

# Growth and Diversity for Local Ports

---

French case studies

---

March 2013

---

A port is not a business like any other. It is rooted in a territory with which it lives and develops in symbiosis. The territory's activity feeds that of the port, and *vice versa*. The correlation is so real that in France, regional ports are levers for territorial development in the hands of local authorities.

Although they all belong to the same maritime area, French Channel ports have contrasting situations. The six ports studied: Calais, Dieppe, Cherbourg, Caen, Saint-Brieuc, and Saint-Malo, handle types of traffic that vary in volume and nature.

That said, French regional ports share the same mix of activities between cross-Channel traffic, dry bulk goods, fishing, and sailing. In addition, all the ports have taken up positions in respect of the challenge of marine renewable energies.

### FISHING

Fishing is a traditional activity in the ports studied, and forms an integral part of their identity. Moreover, it is indispensable for activities that involve the processing of seafood installed close to ports.

Due in particular to European directives that regulate removals from the marine environment, traditional fishing is experiencing stagnation, and even a fall in the size of catches. Although it is proving impossible to

increase the amounts produced, the ports studied are looking for ways to support the activity by maximising its economic spin-offs.

That can take the form of showcasing the activity by setting up traditional markets in town. In addition, the grouping together of stakeholders in the sector to form a cluster enables them to come together and synergies to be created.

Thanks to investment in modern facilities, some ports are managing to maintain fishing activities whilst developing their offer in relation to vessel maintenance. Showcasing and developing those services is also profitable for the sailing industry.



---

## PLEASURE-BOATING

Providing a berth for pleasure boats is an important activity for most of the ports studied. The demand for anchorages is higher than the supply, so the activity provides them with a steady income, without the risk of seeing that income decline. Furthermore, offering a berth to pleasure-boaters who are stopping over enables the margins of that activity to be increased. In addition, it enables and provides support for local commercial activity, since pleasure-boaters enjoy high purchasing power.

However, the development of that activity is subject to limitations, since port infrastructures cannot be expanded *ad infinitum*. Nonetheless, some ports have found original solutions to work around the problem. In particular, there is a strong potential for the development of dry marinas. In that matter, it is Dieppe that has proved to be the most innovative. The port has succeeded in converting an

obsolete facility, a type of dry dock, into a high-performing dry marina that offers all the services expected by pleasure boaters.

Marinas cannot always extend their facilities, but they can improve their quality of service. That takes the form of setting up clusters bringing together stakeholders in the sailing sector: business owners, providers or vessel maintenance and repair services, etc.

In parallel, offering berths to cruise lines is part of the same challenges as sailing. Cruise ships have become giants of the seas, so only a few ports have the nautical capacity to welcome them. In the ports studied, only Caen and Saint-Malo have a significant level of cruise-ship activity.

The challenges linked to the development of sailing in the Channel are covered in full by the Marina 2020 initiative.

---

## THE CHALLENGE OF MARINE RENEWABLE ENERGIES

The exploitation of Marine Renewable Energies (MREs) offer strong potential for diversification for regional ports, as well as development for their territories. The challenge is enormous.

By 2020, 23% of French energy production will have to come from green energies, including sea-based wind energy.

In order to derive the fullest benefit, stakeholders are seeking to structure their sectors. Thus, French ports are setting up partnerships amongst themselves. In Bretagne, the ports of Saint-Malo and Saint-Brieuc are part of Bretagne Pôle Naval. In Haute-Normandie, the ports of Dieppe and of Le Havre make a common offer. In Basse-Normandie, Ports Normands Associés is using the advantages of



its two ports to make an end-to-end logistics offer.

The idea here is to offer a full range of services during the complete life cycle of the wind field.

During the construction phase of fields, wide-ranging logistics resources must be brought into play. Large specialist vessels must carry the wind turbine's components to the area, then set up the turbine. Accordingly, the construction phase calls for extended port facilities, to include strengthened quays, deep-draught basins, and a large ground surface area. In France, those capacities are the privilege of large sea ports like Brest and Le Havre, as well as the port of Cherbourg-Octeville. However, regional ports can also play a supporting role in setting up farms. For example, they can provide transport for certain raw materials, or accommodation for construction teams.

However, it is particularly during the exploitation phase that regional ports can benefit from offshore wind farms. Their installations are set adjacent to the farms and offer a good response to the operators' expectations. Thus, those ports are first-choice land

platforms to ensure the exploitation and maintenance of farms.

Furthermore, although the exploitation and maintenance activity is less intense than the construction phase, it lasts for at least two decades. To be chosen as a service platform for a wind farm thus ensures sustainable revenue for regional ports, as well as significant spin-offs for the local economy.

The Interreg IVA 2OM project for Pooling Offshore Maintenance Operations covers in detail the problem of wind farms at sea. On completion, the project will offer a complete toolbox to public authorities as well as professionals in the field of setting up and exploiting wind farms. For that reason, we leave it to project leaders to further explain the challenge.

Together with the exploitation of sea winds, technical development also enables sea currents to be used to produce electricity. Cherbourg-Octeville is the only port with a position as regards wave energy. Through that initiative, Ports Normands Associés highlights cutting-edge regional skills in underwater technologies.

---

## CROSS-CHANNEL ACTIVITY

Cross-Channel activity, whether it relates to passengers or to goods, is vital for ports and for their labour pool. Over the last three decades, that activity has experienced a decline in terms of volumes and margins alike. In consequence, port authorities are

seeking more to consolidate existing traffic than to develop new traffic. Furthermore the activity is strongly supported by public authorities, which invest in companies that are in charge of the service or in road infrastructures.

---

## REDUCING THE ENVIRONMENTAL FOOTPRINT AND IMPROVING PORT PERFORMANCE

All the French ports studied have added a pro-active environmental policy to their priorities. That pro-active stance takes the form of concrete improvement actions across the activities covered by the ports, whether in terms of pleasure-boating, fishing, or goods transport.

As for logistics organisation, regional ports offer improvement strands that allow for a more effective and a higher degree of collaboration between the stakeholders of the Supply Chain. Those innovations have a positive impact on the environment and on logistics performance alike.

---

## THE CONNECTION TO THE ONE-STOP PORT SHOP

All the ports studied have rolled out or intend to roll out the one-stop port shop. Also called the Cargo Community System (CCS), the IT solution is the ringleader of a port's logistics performance.

The platform allows the intelligent, secure exchange of information between public and private stakeholders, in order to improve the competitive positioning of port communities. Therefore, it is a solution that strengthens and improves collaboration between all stakeholders in port logistics: shipping agents, loaders, warehousemen, land hauliers, shipping companies, port authorities, port control and safety.

In addition, the CCS is fully interconnected with French customs systems. That enables rapid customs clearance of goods. Moreover, by aggregating data on movements and the changes of status of goods, the CCS provides real-time traceability of the entire logistics chain.

Accordingly, gains linked to using the CCS are process simplification, document dematerialisation, a reduction in operation-processing time, and better integration.

Today, 95% of French sea freight, both container and conventional, is handled within the CCS. The system has been adopted by all large French

sea ports, river ports, some airports, as well as leading foreign ports.

By providing significant productivity gains in terms of costs and timescales, the one-stop port shop strengthens the competitive advantages of the regional ports studied.

---

## THE DIFFICULT RISE OF MULTIMODALITY

From the very beginning of this study, multimodality was identified as a lever in the service of port competitiveness and for improving the environmental impact of transport solutions.

Multimodality cannot be used to replace road transport with another means of transport. Multimodality is a radical change in transport organisation.

Road transport enables the direct carriage of a single load from the loading point to the destination. Therefore, it is an extremely flexible solution with a very simple method of organisation.

For its part, multimodality implies flow massification. Several flows coming from a number of loaders and organised by several stakeholders must be aggregated to form a river, rail, or sea service. Accordingly, setting up a multimodal service requires synchronisation between a number of stakeholders. The weakness of a single link can destroy the effectiveness of the entire chain. Furthermore, that massification requires there to be a significant need between the points served.

Multimodality, due to the significant fixed costs that it generates, also requires regular traffic to be profitable. Most flows managed by the ports studied are based on demand, on the tramping model.

In light of those contingencies, flow massification appears all the more to be the business of large sea ports, which offer regularity and adequate volumes.

With all the more reason, French transport infrastructures do not encourage the efficient transfer of traffic to a mode that is an alternative to road transport. On the one hand, French river infrastructures are highly developed, but are not yet sufficiently modern to respond to loaders' needs. As a result, in the Channel area, that mode can only be exploited along the Seine, between the port of Le Havre and the Paris metropolitan area. On the other hand, transporting goods by rail has suffered endemic decline in France. What's more, that mode induces very significant fixed costs that ports cannot bear, due to the weakness of the traffic available to be taken on.

In consequence, only the development of short-range maritime links can encourage modal transfer in French regional ports in the Channel area. That cabotage can be operated in two directions.

The first could be between Mainland Europe and the British Isles. However, a lack of demand means that none of the ports questioned felt that such a project was feasible. From cross-Channel links, the entirety of the flows is captured by ferries, which have speed and price as their main competitive advantages.

The second option consists of developing maritime links between ports themselves. It is that solution that some of the ports studied are seeking to develop.

---

## DEVELOPING PARTNERSHIPS WITH LARGE SEA PORTS

The majority of world trade takes place between three clusters: North America, Asia, and Europe. Those flows of traffic are essentially handled by superports that take on the role of intercontinental interfaces. Links between those gateways are provided by regular lines using veritable giants of the seas that can carry several tens of thousands of tonnes of goods.

Although the French regional ports studied cannot directly capture a part of those flows, they can benefit from collaborating with large seaports.

On the one hand, large ports must take up the challenge of land transport. Port infrastructures offer berths and handling to large-capacity vessels, but ports must also show themselves to be high-performing in the land interfaces. A maximum amount of goods must be able to enter and leave the port area as quickly as possible. That is because in a context of exacerbated competition between large ports, a port whose land links are experiencing congestion would lose market share. In consequence, large ports are seeking to develop intermodal connections with their hinterland. Unlike the case with river and rail transport, setting up a sea link does not require infrastructure work. Thus, it is a quick and effective solution to the challenge of multimodality.

On the other hand, regional ports wish to diversify their activities. Container flows are a good way of achieving that, since they are regular traffic flows. Moreover, the goods carried often have a value that is higher than that of traditional flows from those ports: solid bulk goods. Thus, they are

better able to absorb sea transport costs.

Regional ports and large ports therefore have convergent interests in the development of short-distance sea links. The term used here is *feeder*. The large port handles large intercontinental flows carried by giant vessels: the *motherships*. Thereafter, a part of that flow traffic is spread out to regional ports using adapted vessels: the *feeders*.

A container sea-shuttle service should be in place between Le Havre and Caen by 2013. Other ports are also planning that solution.

---

## TOWARDS A POOLED TRANSPORT OFFER

Cross-Channel links aside, the ports studied are above all responsible for handling solid bulk traffic. Sea transport is organised on a tramping basis, i.e. the vessel is chartered on demand. Although the solution is flexible in use, once the vessel has been discharged, it often leaves port empty. Those empty-vessel movements increase the cost of transport, and they have a negative effect on the number of vessels using the Channel as well as on the environment.

To become more competitive, it would be in the interest of ports and their stakeholders to minimise the distances covered by empty vessels. One strand of improvement consists of using a collaborative platform to bring together the needs of regional ports in respect of sea transport. In that way, stakeholders would have better knowledge of the sea traffic of regional ports, which in turn would encourage the pooled chartering of vessels.

---

## BY THEIR VERY NATURE, PORTS ARE MULTIMODAL PLATFORMS

Finally, it may seem obvious, but one factor must not be forgotten in the environmental impact of regional ports. Those ports are themselves indispensable tools in building sustainable logistics chains. Major

ports handle flows between the planet's major gateways, whereas regional ports allow those flows to be split and directed more closely to areas of consumption or production.

Without regional ports, all the traffic that they handle would be switched to road transport. That would result in increased carbon emissions, and bottlenecks affecting road infrastructures as well as major ports.

---

## THE DEVELOPMENT OF CLUSTERS

French Channel ports have not developed clusters in large numbers, in Porter's meaning of the term. That is mostly explained by the fact that France already has mechanisms that encourage collaboration between port community stakeholders.

Port management is either delegated to Chambers of Commerce and

Industry, or to local public bodies. By their very nature, French port authorities maintain close links with their stakeholders. Here, ports are managed much more as tools in the service of the economy rather than as businesses. Furthermore, port owners, i.e. local authorities, allocate significant levels of funding to consolidate and develop port areas. In



addition, French ports are in competition with one another, but they do not define themselves as competitors but as partners. Co-operation mechanisms exist between them.

Thus, at regional level, French ports are well equipped to create synergies with and for local businesses.

At national and European level, ports have set up bodies that allow them to collaborate and to make their voice heard to public authorities. For example there is the *Association des Ports Locaux de la Manche* (APLM)

and the *Bureau de promotion du Short Sea Shipping* (BP2S).

Clusters are structured around sectors: ship repairs, wind power, Supply Chain. France has developed its own idea in competition with that of a cluster. Within a defined area, a competitiveness cluster is a combination of businesses and of public stakeholders (training organisations, research centres, etc.) that put together a partnership aimed at creating synergies around common projects. It is a matter of formalising existing partnerships in a sector.

**N**ow as in the past, ports are levers of attraction for territories and regions alike. Their development proceeds symbiotically with that of their hinterland. When companies that use ports suffer, ports suffer. In contrast, a proactive port policy can initiate a beneficial virtuous circle for the economy of an entire region. Victor Hugo said that the sea was an area of rigour and of liberty. It is for port authorities to put forward development plans that are collaborative and innovative, then to be forceful in implementing those plans. Are problems not the disguise of choice for opportunities?

# CONTENTS

<b>Foreword</b>	<b>Erreur ! Signet non défini.</b>
Sea transport: a major stakeholder in the world economy	<b>Erreur ! Signet non défini.</b>
The hegemony of containerisation	<b>Erreur ! Signet non défini.</b>
Boosting the weight of shipping companies	<b>Erreur ! Signet non défini.</b>
The advent of Supply Chain Management	<b>Erreur ! Signet non défini.</b>
<b>French Channel ports: activity in 2011</b>	<b>16</b>
The French coastline .....	17
Exploiting halieutic resources	18
Sailing	19
Cruise-ship stopovers	20
Marine Renewable Energies (MREs)	21
Commercial ports	22
The importance of regional ports in the Channel area	22
The Channel: a highly competitive area	23
The import / export balance of regional ports	24
Cross-Channel passenger traffic	25
Goods traffic	26
The national development of traffic flows .....	26
Traffic flows of regional ports in the Channel .....	29
Solid bulk cargo .....	30
General goods .....	31
<b>French local ports in the Channel</b>	<b>34</b>
<b>The port of Calais</b>	<b>34</b>
The hinterland of the port of Calais	35
The Nord / Pas-de-Calais area .....	36
Calais urban area .....	39
The activities of the port of Calais .....	42
The activities of the commercial port .....	42
Cross-Channel links.....	43
Other goods flows .....	46
The other activities of the port of Calais .....	48
The management and development of the port	48
Governance .....	48
The outlook for development .....	50
Investments.....	50
Development plans .....	50
<b>The port of Dieppe</b>	<b>53</b>

Haute-Normandie Region .....	53
The town of Dieppe .....	55
The activities of the port of Dieppe .....	55
The activities of the commercial port .....	56
Cross-Channel links .....	56
Goods traffic flows .....	57
The other activities of the port of Dieppe .....	57
Sailing .....	57
Fishing .....	58
Governance .....	59
The outlook for development .....	59
Investment policy .....	59
Diversification in the maintenance of wind farms .....	61
Clusters in the Dieppe region .....	63
Vialog .....	63
Dieppe méca énergies .....	63
Dieppe navals .....	64
<b>Port Normands Associés .....</b>	<b>65</b>
Basse-Normandie Region .....	65
Ports Normands Associés .....	67
Presentation of the port of Caen-Ouistreham .....	67
Presentation of the port of Cherbourg-Octeville .....	68
A unique port authority .....	68
Managing the port of Caen .....	69
Managing the port of Cherbourg .....	69
The activities of Ports Normands Associés .....	70
Fishing .....	70
Sailing .....	70
Cruise-ship stopovers .....	71
Cross-Channel activity .....	71
Good traffic flows .....	72
The main flows of the port of Caen-Ouistreham .....	73
The main flows of the port of Cherbourg-Octeville .....	73
Diversification strands .....	74
<i>Merroutage</i> between Cherbourg and the United Kingdom .....	74
Marine renewable energies .....	75
Building and maintaining wind farms at sea .....	75
Developing hydrokinetic turbines .....	76
Setting up a sea link between Caen and Le Havre .....	77
<b>Breton ports .....</b>	<b>79</b>
The port of Saint-Malo .....	81
The activities of the port .....	83
The goods traffic flow .....	84

Cross-Channel activity.....	85
Fishing and pleasure-boating .....	86
The port of Saint-Brieuc .....	87
<hr/>	
The activities of the port.....	87
The commercial port.....	87
Pleasure-boating.....	93
The fishing port .....	94
Ship repairs.....	94
Development plans .....	95
Extending the commercial port .....	95
Collaborative plans .....	95

## TABLE OF ILLUSTRATIONS

### Illustrations

Illustration 1: Artist's impression of the Calais 2015 project.....	51
---	----

### Maps

Map 1: Location of the main ports of the Channel façade.....	16
Map 2: The European Backbone.....	35
Map 3: Location of the port of Calais and of the Channel Tunnel .....	40
Map 4: Location of the ports of Haute-Normandie, and gross tonnages in 2011 .....	54
Map 5: Location of the port of Dieppe .....	55
Map 6: Location of planned wind farms in France in 2013.....	61
Map 7: Location of Basse-Normandie Region.....	65
Map 8: Location of Basse-Normandie .....	65
Map 9: Location of the 20 leading businesses of Basse-Normandie Region .....	66
Map 10: Location of terminals of the port of Caen-Ouistreham.....	67
Map 11: Location of Bretagne in North-Western Europe .....	79
Map 12: Location of Ille et Vilaine <i>département</i> .....	81
Map 13: Location of Côtes d'Armor <i>département</i> .....	87

### Tables

Table 1: Length of coastline by region .....	17
Table 2: Regional numbers of sea fishermen and proportion of national numbers in 2011 .....	18
Table 3: Distribution of marinas and facilities in 2011.....	19
Table 4: Cruise ships sailing to / from a port in 2011 .....	20
Table 5: French ports' tonnages by maritime façade and by type of port.....	22
Table 6: Gross import and export tonnages of Channel area ports in 2011 .....	24
Table 7: French Channel ports' passenger traffic in 2011 .....	25
Table 8: French Channel ports' tonnages in 2011, set out by type of handling.....	28
Table 9: Gross tonnages of solid bulk cargo by types of goods in 2011 .....	30
Table 10: Traffic flows of general goods by port and set out by mode in 2011 .....	31
Table 11: Spread of jobs in transport and in logistics in Calais in 2010 .....	39
Table 12: The 10 leading businesses of the Côte d'Opale in 2012.....	40
Table 13: The port of Calais' gross tonnages in 2011 .....	42
Table 14: Frequency and duration of cross-Channel lines in 2011 .....	45
Table 15: The port of Calais' spread of investments in 2011 .....	50
Table 16: Businesses with 100 employees in relation to the port's activities (2011) .....	55
Table 17: The port of Dieppe's investments linked to cross-Channel activities.....	59
Table 18: The port of Dieppe's investments linked to pleasure-boating.....	60
Table 19: The port of Dieppe's investments linked to fishing .....	60
Table 20: Cruise ships calling at PNA ports in 2011 .....	71
Table 21: Caen and Cherbourg cross-Channel passengers in 2011 .....	71
Table 22: Tonnages of the ports of Caen-Ouistreham and Cherbourg-Octeville in 2011 .....	72
Table 23: Solid bulk cargo handled at Caen and Cherbourg in 2011.....	72

Table 24: General goods traffic flows at the ports of Caen and Cherbourg in 2011 .....	72
Table 25: Main businesses in the Saint-Malo area with links to the port.....	83
Table 26: Saint-Malo port traffic flows in 2011.....	84
Table 27: Main types of goods processed at the port of Saint-Malo in 2011 .....	84
Table 28: Saint-Brieuc port traffic flows in 2011 .....	88
Table 29: Main types of goods processed at the port of Saint-Brieuc in 2011 .....	88

## Graphs

---

Graph 1: Cruise ships sailing from a regional port in 2011 .....	20
Graph 2: Provenance of crude oil imported into France in 2011.....	23
Graph 3: Distribution of gross tonnage by sea area in 2011, except oil products .....	23
Graph 4: Traffic flows of the ports of North-Western Europe in 2011 .....	23
Graph 5: 2011 import and export tonnages of regional ports studied .....	24
Graph 6: Import / export balance of French Channel ports in 2011 .....	25
Graph 7: Distribution of passenger flows by Channel port in 2011 .....	25
Graph 8: Distribution of gross tonnage of French regional ports.....	29
Graph 9: Share of solid bulk cargo in total port volume in 2011.....	30
Graph 10: Gross tonnages of solid bulk cargo, by port and by type, in 2011 .....	30
Graph 11: Distribution of 2011 traffic flows in ports studied.....	31
Graph 12: Distribution of cross-Channel ro-ro tonnage by port in 2011 .....	32
Graph 13: French Channel ports' gross tonnages in 2011, in millions of tonnes .....	34
Graph 14: Changes in tonnages and in passenger numbers at the port of Calais from 1945 to 2007 .....	42
Graph 15: Distribution of the port of Dieppe's investments.....	61
Graph 16: Distribution of the port of Saint-Malo's traffic flows by geographical area in 2009.....	84
Graph 17: Distribution of the port of Saint-Malo's tonnages in 2011, in thousands of tonnes .....	84
Graph 18: Distribution of 2011 traveller traffic flows between the ports studied.....	85
Graph 19: The port of Ligu�e's gross tonnages between 2006 and 2011 .....	87



## Foreword

Considered as the main links of ever more complex logistics chains, the performance of ports is a key factor of the competitiveness of a country's economy. At a local level, ports give structure to the economy of a region

In France, 40 000 jobs rely directly on port activities, of which 30 000 relate to logistics providers who offer port services. The employment resulting from these activities is even more significant.

Yet, although shipping offer has experienced a strong development

during the last decades all over the world, the market share of French ports has gone down compared to big European ports who were quick to adjust to the containerization and massified sea transport. At the same time, traditional shipping activities such as fishing and shipbuilding struggle to survive.

## SEA TRANSPORT : A MAJOR STAKEHOLDER IN THE WORLD ECONOMY

Sea transport has been playing a leading role in the organisation of international trade for centuries. Today, this sector benefits from the boom of international exchanges linked to the globalization of markets. It is by far the most common mode of transport for international exchanges with 80% of total exchanged tonnage.

Technological progresses in the design of ships, in the packaging and handling of goods have speeded up the growth of this mode of

transport during the last decades, at around 4% in volume per year.

Considering it provides one fifth of international port traffic, Europe needs efficient port infrastructures. Given that about 90% of its foreign trade and 40% of its domestic trade is performed by sea, the performance of European ports is a key factor of success for the European economy as a whole.



## THE SUPREMACY OF CONTAINERIZATION

Within sea transport, 70% of world traffic is performed by only 14% of the ships, all container ships. Hence, it is essential for any economy to be fully equipped to receive this type of ships.

Thanks to the use of containers, the goods never experience direct handling during the transport, which allow to gain considerable amounts of money and time. Originally devised for sea transport, the container has now reached land modes of transport. Thus, road, river and rail transport providers have adjusted their production tools to handle this type of units. These transformations have led to the containerization of 75% of the goods travelling in Europe.

Places of interchange between sea transport and land transport, ports have had to adjust to multimodal transport. To maintain or increase their market shares, ports have considerably invested to be able to discharge faster a more important volume of containers, coming from even more bigger ships.

This race for higher investments has led to the creation of two different types of ports.

The first ones, essential links of the international transport chain, can receive any type of ship and any type of traffic. They have highly-developed expensive infrastructures and are linked to a dense logistics network thanks to efficient multimodal means of transport.

The second ones didn't have the financial or technical capacity to adapt to the container. They have consequently tried to attract other markets, by developing synergies with the economic activities of their hinterland. They have become regional ports whose role is to facilitate international trade for the economic regional stakeholders.

This study is largely focusing on these regional ports.

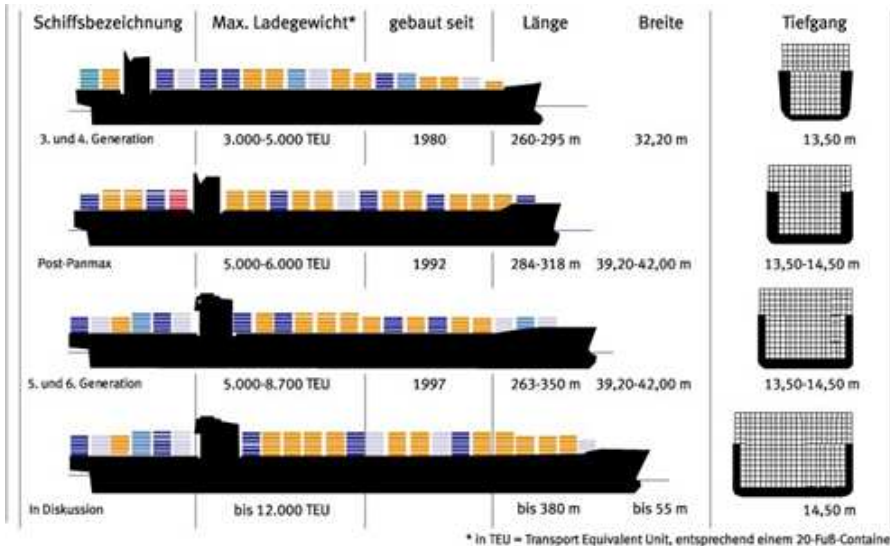


Figure 1: The outstanding increase in the size of containerships

---

## SHIPPING COMPANIES ARE BECOMING MORE AND MORE IMPORTANT.

Over the last decade, the shipping transport market has evolved from being very fragmented to highly concentrated. Today, 5 shipping companies hold more than 45% of the loading capacity of the world fleet.

Therefore, major operators like APM-Maersk, MSC and CMA-CGM have a strong influence in the development strategies of ports. Besides, these companies are engaged in a fierce commercial war, whose main weapon is sharp reduction of costs.

Yet, the cost to equip and operate a ship being still quite high, these companies cannot call at a port where less than 10% of the goods loaded on the ship is handled. Container flows are therefore concentrating in major ports at the cost of regional ports.

Besides, being more powerful allows these companies to impose their frame of reference in the assessment of port efficiency, which is based on three factors :

1. The cost of using port infrastructures
2. Port services offered to the ship and the good, their quality and their reliability
3. The port geographical situation

This third factor indicates a change in the way the role of ports is sensed. They are not considered anymore as isolated elements but more as a link of an integrated chain of operations which adds value to the goods : the Supply Chain.

---

## THE OUTBREAK OF SUPPLY CHAIN MANAGEMENT

Ports are the essential elements of the global transport service in which they are fully integrated. Not only are they dealing with transshipment of goods from a shipping means of transport to a land means of transport, but the ports are a strategic place where value can be added to the goods.

As such, the development of logistics areas nearby important

ports is essential. These areas, where the goods can be grouped, transformed, packed and conveyed to consumption places or exported, generate value and employment. To attract transport and logistics companies, these areas should be equipped with reliable land transport services.

## THE CHANNEL AREA : AN OUTSTANDING LOGISTICS CROSSROADS

The Channel is the main shipping route towards North-West Europe and represents a unique shipping area due to the density of traffic and the concentration of activities. The Channel is one of the busiest seas in the world with 20% of world traffic, 800 ships per day in the Pas-de-Calais strait and an average of 700 000 passengers per day between Great Britain and France.

Within this particular area, the French ports benefit from a unique geographical position. They are the first ports of continental Europe reached for imports on the way to Asia. Thanks to its closeness with Great Britain, the port of Calais is a privileged link to the European continent. Rouen is as well the closest shipping port from Paris.

However, the French ports don't seem to make the most of these advantages. When asked the name of the biggest French port, the answer is quite often Antwerp. This understatement emphasizes that half of the goods which arrive in France by sea are unloaded in a foreign port.

This lack of interest from shipping companies and shippers as regards French ports has various reasons :

1. Repeated social conflicts paralyzing port operations have damaged for a long time the image of French ports. On the one side, shipping companies, experiencing fierce competition, cannot afford to have a ship, with high operating

costs and expensive goods aboard, stuck at wharf for entire days. They would put at risk the durability of their activities and of the commercial relations they have forged with the loaders. On the other side, production and consumption flows have tightened. Maintaining low stocks requires to respect transport deadlines and therefore to be able to count on efficient and reliable port operations.

2. The significant volume that the Northern Range ports are handling enable them to fully use their production tool and therefore to make substantial economies of scale. French ports couldn't manage to achieve such a level of productivity. This resulted in the re-routing of all traffics towards the northern ports, reinforcing still the advantage obtained with the massification of flows.

3. The ratio import/export of French ports is, like the country's economic balance, largely import orientated. Yet this situation represents another disadvantage which will unfavorably impact their competitiveness. A shipping company will choose to call at ports that have an import/export ratio as balanced as possible in order to make their regular shipping lines more profitable. When the lines are import orientated, they generate an important return flow of empty containers, that have to be relocated for future imports. These operations

can generate an increase in freight rates up to 50%.

In a situation of fierce competition, French ports have to get their

markets back. An in-depth work will have to be performed together with an efficient organisation of port places.

## THE GOVERNING OF PORTS IN FRANCE: THE STATE STRONGLY INVOLVED.

Historically, the French State has always been strongly involved in the organisation and management of French ports and still largely contributes to the development and funding of transport infrastructures.

Two different types of port status had previously been created by the French State : the “port autonomes” and the “ports d’intérêt nationaux”. The first ones managed by ad hoc public companies and the second ones managed directly by the State.

Since the 1980’s, France has gone through several decentralization waves. The various decentralization laws have led to the transfer of

powers and authorities from the central State to independent local authorities. This shift in the State organisation has been followed by shifts in the governing of ports. Consequently, local authorities are increasingly contributing to the funding of the investments of both the ports and their servicing.

The supervision of the central State on the ports has therefore lessened, even if the State remains a key stakeholder in the development of French ports. From now on, port management belongs to various stakeholders, that one needs to be properly acquainted with to be able to assess their action.

---

## THE FRENCH LOCAL ORGANIZATION

Amended in 2003, the Constitution states that the organisation of the Republic is decentralized. The public authority is shared between the central authority and various local levels that are the regions, the departments, the municipalities and the association of municipalities. Thanks to decentralization, local authorities have become major public stakeholders of local economic life.

There are three levels of local authorities in France.

The 36 000 municipalities represent the oldest and smallest level within the French local organisation. The

municipalities are autonomous in their decisions and can freely conceive and elaborate town planning regulatory documents. They play therefore an important part in the development of ports. Besides, they are often in charge of the management of marinas.

The 96 departments located on the mainland were created after the French Revolution. The departments are in charge of welfare and education as well as land-use planning. In this regard, they participate in the management of fishing seaports and in the organisation of transport planning at department level.

The regions are the most recent elements, they have gained the position of local authority in 1982. The economic development is the region main field of action. Since the law of August 13th 2004, the region is in charge of coordinating, on its own area, the actions of local authorities and of their associations as regards economic development. The region acts as the local stakeholder in charge of supporting the projects coming from the State or the European Union.

In particular, the region has the authority to organise the system of aids to companies and the decision whether to grant them or not. The municipalities, associations of municipalities and departments can also implement their own economic aid systems with prior agreement from the region.

The region is also in charge of land-use planning. It is due to formulate the mid-term orientations for sustainable development on its area, that is to locate large facilities, infrastructures, services of general interest... the region has also been

managing the “port autonomes” since January 1st, 2007 and coordinates road and rail transports in non-urban areas.

By the law of February 27th 2002, new competences, that were belonging to the State, are transferred to the regions. From that date, the regions have the responsibility of the development of local ports.

In the same way as local authorities, other public entities are in charge of the management and development of local ports.

The Chambers of Commerce and Industry (CCI) are public institutions, placed under the supervision of the State. The CCI represent the interests of Industry, Commerce and Services towards public authorities. They bring the main stakeholders together, contribute to the economic development of their area and support companies.

The local authorities often hand the management of port infrastructures down to the Chamber of Commerce and Industry in charge.

---

## LEGAL CLASSIFICATION OF PORTS IN FRANCE

The decentralization law of 2004 and the law of July 4th 2008, both dealing with port reforms, have significantly modified the way French seaports are organised. From now on, the law makes a distinction between two types of ports : the “Grands Ports Maritimes (GPM)” and the “Ports régionaux (PR)”.

The « Grand Port Maritime » status, replacing the « Port autonome » status, has been granted to seven large ports in France : Dunkerque, Le Havre, Rouen, Nantes St-Nazaire, La Rochelle, Bordeaux and Marseille. These ports are state-owned bodies, set up on vast port sites. They develop their activities within a self-owned area. They

handle more than 80% of shipped freight traffic in France. Big shipping companies and handling operators are also increasingly getting involved in the development strategies of the “Grands Ports Maritimes”.

Prior to the law of January 3rd 2007, a second legal port group was operating in France: the “ports d’intérêt national”. Since then, this legal denomination disappeared and the 17 “ports d’intérêt national” have been transferred to 13 local authorities. The status of “port

d’intérêt national” has been replaced by a status sui generis, that of “port régional” (PR).

To sum up, the major ports, the “Grands Ports Maritimes”, are controlled by the State. All the other ports fall under the responsibility of the local authorities, who usually hand down port management to Chambers of Commerce and Industry (CCI).

---

## THE OWNERSHIP AND MANAGEMENT OF THE « PORTS RÉGIONAUX » (PR)

The « ports régionaux » (PR) are directly or indirectly managed by the public sector; they can be managed either by a local authority, or directly by a public body. In some particular

cases, a private provider can be responsible for the port management, but only when commissioned by the State or a local authority.

---

## THE MANAGEMENT OF MARINAS

After the enforcement of the 1983 decentralization laws, the municipalities were given the competences to create, set up and operate marinas.

The departments and the regions are still responsible for the pleasure boat facilities belonging to the ports they are in charge of, trade ports or fishing ports. They are free to choose the way they want to manage their ports : public management (by the State) or local

management (by the Chamber of Commerce and Industry). The manager of the marina has public duties : he has to offer a continuous service, to respect the equality between users, apply French and European regulations and comply with the demands of specifications.

2/ Distribution of the 179 marinas according to authority in charge

---

## THE MANAGEMENT OF FISHING PORTS

---

The departments are in charge of the management of fishing ports. In the same way as the marinas, when the infrastructures dedicated to fishing activities are located in a larger port, therefore they lie with the managing authority.

Most of the ports targeted in this study are “ports régionaux”, the management of their infrastructures linked to fishing activities is supported by the region or by its manager.

---

## THE MANAGEMENT OF TRADE PORTS

---

The management of the “ports régionaux” is handled by several operators: the owner of the infrastructures and the authority in charge of the operational management of the port.

Within the “ports régionaux”, port authority is handled by the relevant local authority. Nevertheless, safety and security matters are still under the responsibility of the State.

The Chambers of Commerce and Industry are usually in charge of the management of the ports through concession contracts. A new public entity is often created, a joint

syndicate, in order to manage the port. The management of the latest is shared between local authorities and the Chamber of Commerce and Industry.

However, although public sector is strongly involved in port management, the private sector is also important in terms of added value and supply of port services like steering, towing and mooring services, or ship supply services. Together with services to the goods, the more important of which is port handling when charging or discharging goods from the ships.





# THE ACTIVITY OF FRENCH CHANNEL PORTS IN 2011

This study focuses on CAMIS perimeter regional ports: Calais, Dieppe, Caen-Ouistreham, Cherbourg-Octeville, Saint-Brieuc Le Légué, and Saint-Malo.

Although Picardie Region is committed to the CAMIS project, none of its ports was selected for this study due to a lack of sufficient goods flows.

terms describe the same type of port because all so-called regional ports are characterised by the fact that they handle a significant volume of goods.

The terms “regional port” and “commercial port” will be used to describe the same type of port. Those



Map 1: Location of the main ports of the Channel façade

The fourth-largest port in France in terms of tonnage in 2011, the port of Calais occupies a distinct position amongst French ports. Situated on the Dover Strait, it is continental Europe’s closest port to Great Britain. Furthermore, the global traffic flow of goods through ports in mainland France (other than Large Sea Ports) was 73.4 million tonnes (Mt) in 2010, with Calais accounting for 37.8 Mt. Thus, the port of Calais alone handles

almost half the total traffic of regional ports.

In 2005, Dieppe was ranked 18<sup>th</sup> amongst French commercial ports. Since the law on port decentralisation passed in 2007, the port has been managed by the Port of Dieppe Mixed Syndicate, which succeeded Dieppe Chamber of Commerce and Industry, the port’s historic management body since the 19<sup>th</sup> century.

The ports of Caen-Ouistreham and of Cherbourg-Octeville are ranked 11<sup>th</sup> and 12<sup>th</sup>, respectively. They are both situated in Basse-Normandie Region, and they have a characteristic that is unique amongst the ports studied on both the French and English sides. Local authorities have surrendered both the exploitation and the ownership of those ports to a single structure, a mixed syndicate called Ports Normands Associés. This single governing body for two ports set 100 km apart is a unique case in the entire Channel area. Its aim is to dynamise the performance of the two ports, and to respond to their development challenges of the region.

This study will also look at two Breton ports: the port of Saint-Malo and the port of Saint-Brieuc Le Légué. The port of Saint-Malo, ranked 17<sup>th</sup> in France, is the leading Breton passenger port and the 3<sup>rd</sup>-largest for

goods. It has been owned by Bretagne Region since 2007, and it is managed by the Pays de Saint-Malo CCI. The port of Saint-Brieuc Le Légué is ranked 28<sup>th</sup> in France, and it is the only *département* port studied. It is owned by Côtes-d'Armor *département* and is managed by the eponymous CCI.

Finally, it is remarkable that all the ports selected possess at least three activities: commercial traffic in goods, fishing, and sailing. With the exception of the port of Saint-Brieuc, all the ports have a cross-Channel ferry activity carrying passengers and freight, an activity that is vital for the economic dynamism of their regions. For that reason, it will be interesting to know how the ports manage their activities, any possible areas of incompatibility that may exist between them, and the development strategies that they have put in place.

## THE FRENCH COASTLINE

Table 1: Length of coastline by region and proportion of total for France or in the CAMIS coverage area

Région	Longueur du linéaire côtier (km)	% France	% zone CAMIS
Nord-Pas-de-Calais	232	4%	6%
Picardie	60	1%	2%
Haute-Normandie	167	3%	5%
Basse-Normandie	471	8%	13%
Bretagne	2 730	49%	75%
<b>Total France</b>	<b>5 550</b>	<b>100%</b>	
<b>Dont total étude</b>	<b>3 660</b>	<b>65%</b>	

Source: Observatoire du littoral

With a coastline 5 550 km long, mainland France enjoys one of the longest coastlines in Europe. It is spread over three areas: the Channel, the Atlantic, and the Mediterranean. The Channel area is the subject of the CAMIS project, and it alone occupies 65% of the length of the French coastline. Moreover, it is remarkable that Bretagne Region represents almost 50% of the length of the country's coastline, and 75% of the CAMIS project's French perimeter. That coastal preponderance affects fishing and pleasure-boating activities in the ports studied.

## EXPLOITING HALIEUTIC RESOURCES

Table 2: Regional number of sea fishermen and proportion of national numbers in 2011

Région	Marins pêcheurs	Part dans l'effectif national
<b>Nord-Pas-de-Calais</b>	1 103	4,9
<b>Haute-Normandie</b>	1 215	5,4
<b>Basse-Normandie</b>	2 205	9
<b>Bretagne</b>	6 371	28,3

By virtue of managing a turnover of one billion euros in 2010, the French fishing sector is ranked 4<sup>th</sup> in Europe and represents almost 93 000 direct and indirect jobs<sup>1</sup>. The French fleet is made up of 7 305 vessels crewed by 22 049 seafarers. Bretagne Region is the country's longest coastal façade, and is the largest labour pool for sea fishermen.

Source: French Ministry for Ecology and Sustainable Development

---

<sup>1</sup> Source: French Ministry for Ecology and Sustainable Development.

Due to its coastline and its nearness to the Paris region, the Channel Arc concentrates a significant share of French pleasure-boating and sailing capacity. Furthermore, several marinas have reached saturation point, the reason being that the number of pleasure boaters is increasing on a regular basis, whereas

it is almost impossible to build new ports. The Fédération Française des Ports de Plaisance (FFPP) estimates that France is currently short of 54 000 berths. In consequence, there is a five-year wait on average to be offered a berth in a French port, the record being held by Arcachon, which has a 30-year waiting list.

Table 3: Distribution of marinas and facilities in 2011

Région	Département	Nombre de ports	Capacité d'accueil
	<i>Nord</i>	1	450
	<i>Pas-de-Calais</i>	2	832
<b>Nord-Pas-de-Calais</b>		<b>3</b>	<b>1282</b>
	<i>Seine-Maritime</i>	2	1180
<b>Haute-Normandie</b>		<b>1</b>	<b>1180</b>
	<i>Calvados</i>	3	481
	<i>Manche</i>	6	4384
<b>Basse-Normandie</b>		<b>9</b>	<b>4865</b>
	<i>Côtes d'Armor</i>	12	7021
	<i>Finistère</i>	17	8905
	<i>Ille-et-Vilaine</i>	1	679
	<i>Morbihan</i>	13	9296
<b>Bretagne</b>		<b>43</b>	<b>25 901</b>
<b>Total</b>		<b>56</b>	<b>33 228</b>

Source: Observatoire des ports de plaisance, French Ministry for Ecology and Sustainable Development.

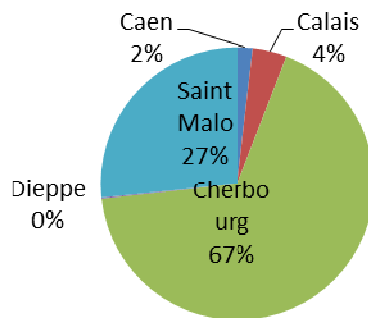
To offer a partial response to those challenges, ports continue to increase their facilities. Infrastructures are limited, and ports must strike a balance between pleasure-boating

and other activities, e.g. fishing and freight. For that reason, some ports have chosen to beach vessels on land.

## CRUISE-SHIP STOPOVERS

In order to assess the impact of cruise ships on ports' activity, we selected the total number of excursions made by passengers aboard cruise ships berthing at the port. Thus, a passenger who goes on two excursions during a stopover will be counted twice. We chose that indicator because it was a better reflection of the activity and the value generated by the cruise, rather than the number of stopovers.

Graph 1: Cruise ships sailing from a regional port in 2011



Here, too, the activity is mostly the preserve of large sea ports. They are the departure points for 79% of cruise-ship excursions in the Channel area. That is explained in particular by the giant size of passenger ships, which can carry up to 8 000 passengers. By way of comparison, the largest cruise

ship currently in use, the *Allure of the Seas*, has a gross tonnage that is 5 times greater than that of the *Titanic*. For that reason, such cruise ships can only call at ports that have nautical capacity and infrastructures that can receive large-tonnage vessels. Large sea ports are given over to very large commercial vessels, so they naturally have the facilities to receive giant passenger liners.

Table 4: Cruise ships sailing to / from a port in 2011

Port	Croisiéristes
<b>Calais</b>	4 248
<b>Caen-Ouistreham</b>	1 960
<b>Cherbourg-Octeville</b>	71 076
<b>Dieppe</b>	150
<b>Saint-Malo</b>	28 146
<b>Saint-Brieuc</b>	0
<b>Dunkerque</b>	0
<b>Le Havre</b>	353 506
<b>Rouen</b>	38 398
<b>Total</b>	<b>497 484</b>
<b>Dont GPM</b>	<b>391 904</b>
<b>Dont PR</b>	<b>105 580</b>

Source: French Ministry for Ecology and Sustainable Development.

Large sea ports aside, cruise activities are concentrated at two regional ports: Cherbourg and Saint-Malo.

Our economies are based on the search for infinite growth in a world with limited resources, and they are particularly energy-hungry. Ports are Europe's gateways to the world; by their very nature, they are essential for providing the continent's energy supplies.

In parallel with that historic activity, ports have fully committed themselves to the energy challenge with the exploitation of marine renewable energies. As is the case for fishing, sailing, or cruising, France once again

draws the fullest advantage from its extended maritime façade.

Some resources can be exploited on land or directly in the port area (photovoltaic energy, tidal energy, and wave energy), but the challenge is much greater at sea. In order to take it up, ports are positioning themselves as logistics platforms for building and maintaining wind farms or tidal-stream generators at sea.

## COMMERCIAL PORTS

### THE IMPORTANCE OF REGIONAL PORTS IN THE CHANNEL AREA

Espace	Total	Total hors produits pétroliers
<b>Atlantique</b>	<b>54 603 143</b>	<b>28 078 816</b>
GPM	47 476 281	22 220 870
PR	7 126 862	5 857 946
<b>Manche</b>	<b>187 709 081</b>	<b>132 549 032</b>
GPM	72 919 229	57 493 539
PR	114 789 852	75 055 493
<b>Méditerranée</b>	<b>93 769 879</b>	<b>33 037 160</b>
GPM	88 072 844	28 640 702
PR	5 697 035	4 396 458
<b>Total</b>	<b>336 082 103</b>	<b>193 665 008</b>

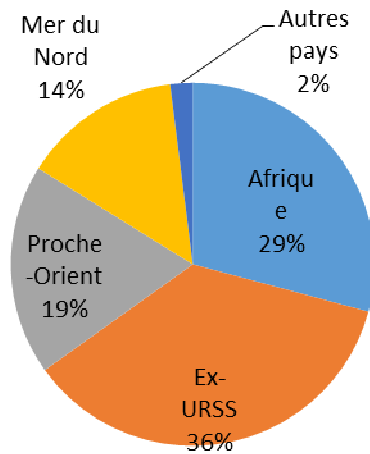
Table 5: French ports' tonnages by maritime façade and by type of port

The ports of the Channel area enjoy strategic importance for the French economy as a whole. Those ports alone account for 56% by volume of port handling in France. That predominance is accentuated even further if oil products are set aside, in which case the share handled by Channel ports rises to 68%. It is consistent to remove oil products from

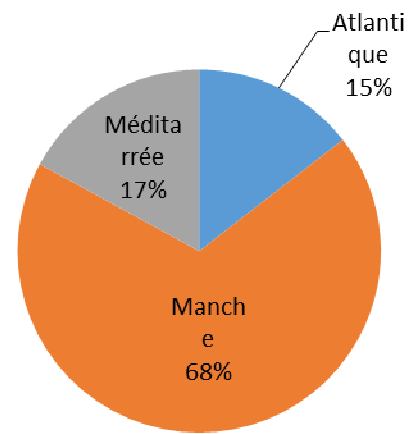
consideration, since those materials come from areas (the Middle East, Africa, the Caspian Sea) that are part of the Mediterranean area or that have access to it, and are served by the ports of Southern France.

Within the Channel area, it is also remarkable that regional ports handled the most goods by tonnage in 2011, accounting for 61% of tonnage.





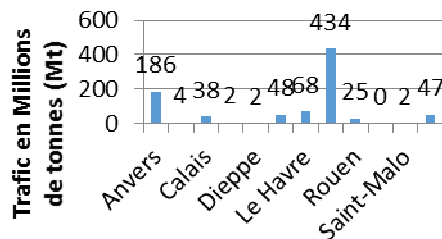
Graph 2: Provenance of crude oil imported into France in 2011



Graph 3: Distribution of gross tonnage by sea area in 2011, except oil products

## THE CHANNEL: A HIGHLY COMPETITIVE AREA

French regional ports in the Channel area are in direct competition with the major hubs of world sea transport: large French sea ports and the ports of the Northern Range.



Graph 4: Traffic flows of the ports of North-Western Europe in 2011

At French level, the 7 large sea ports concentrate 77.7% of national goods traffic. The situation is even more marked in the Channel area, where the three large sea ports of Dunkerque, Rouen, and Le Havre concentrate 75% of the traffic.

At European level, regional ports are in competition with the major gateway ports of the Northern Range: Antwerp, Zeebrugge, and Rotterdam.

Those major ports concentrate competitive advantages that lie beyond the reach of regional ports. For example, the massification of their flows allows economies of scale to be made. Furthermore, their central role in the global flow of goods enables them to attract investments to their port infrastructures as well as to the transport networks that serve their consumer basin. In addition, their geographical proximity to the Rhine Basin – one of the world's leading areas of production and consumption – provides them with a significant level of traffic.

In consequence, it is important to make clear the strategies that enable those regional ports to attract flows, even though major ports have greater commercial clout.

The data given below come – unless stated to the contrary – from the *Traffics des principaux ports maritimes français de 2000 à 2011* database of the French Ministry for Ecology, Sustainable Development, and Energy. Goods tonnages are given

gross, i.e. they include – in addition to goods tonnage – the tonnage of packaging and containers, as well as the tares of ro-ro units.

## THE IMPORT / EXPORT BALANCE OF REGIONAL PORTS

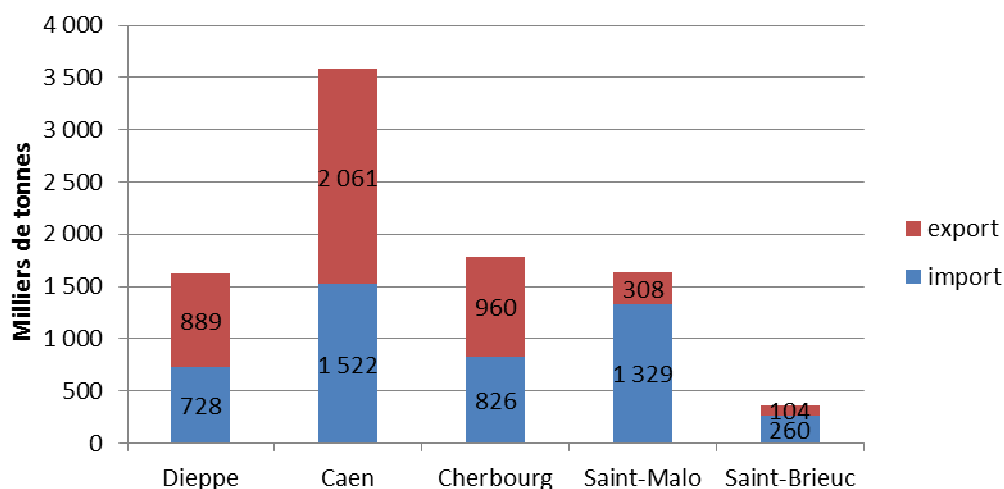
Table 6: Gross import and export tonnages of Channel area ports in 2011

Port	import	export	Total
<b>Calais</b>	17 561 532	20 898 936	<b>38 460 468</b>
<b>Dieppe</b>	727 941	889 096	<b>1 617 037</b>
<b>Caen</b>	1 522 108	2 060 662	<b>3 582 770</b>
<b>Cherbourg</b>	826 007	959 554	<b>1 785 561</b>
<b>Saint-Malo</b>	1 329 473	307 556	<b>1 637 029</b>
<b>Saint-Brieuc</b>	259 896	104 274	364 170
<b>Dunkerque</b>	31 816 864	15 705 715	<b>47 522 579</b>
<b>Le Havre</b>	50 236 589	17 324 909	<b>67 561 498</b>
<b>Rouen</b>	9 943 779	15 452 871	<b>25 396 650</b>
<b>Total</b>	<b>95 911 828</b>	<b>51 922 790</b>	<b>147 834 618</b>
<b>Dont GPM</b>	91 997 232	48 483 495	140 480 727
<b>Dont PR</b>	3 677 588	3 327 772	7 005 360

As has been previously stated, a port draws a major competitive advantage by striking a balance between import and export flows. Thanks to that, the port maximises the use of means of sea transport, thus avoiding vessels having to return empty. That makes the port more attractive to shipping companies, which will maximise use and the operating margin of the

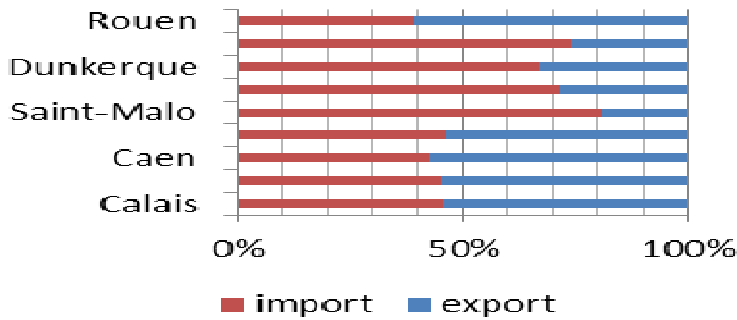
means of production. For loaders, that massification leads to a fall in freight rates. In addition, the port also optimises the use of its infrastructures, thus enabling it to make economies of scale. In consequence, striking the balance between import and export flows is a virtue for the whole logistics community.

Graph 5: 2011 import and export tonnages of regional ports studied



NB: In 2011, the port of Calais handled 38 460 468 gross tonnes of goods, of which 17 561 532 tonnes were imported and 20 898 936 tonnes were exported. Its traffic has not been shown in the graph above, since it is far higher than that of the other ports.

Graph 6: Import / export balance of French Channel ports in 2011



The balance of flows of all Channel ports is clearly skewed towards

imports, which alone generate 65% of flows. On the other hand, the situation is much more balanced when one looks only at regional ports. The latter handle 52% of their tonnage through imports, as against 48% through exports.

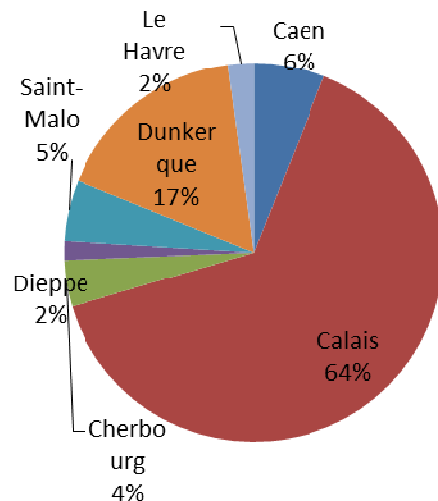
However, the situation is more contrasted when one considers each port individually. The ports of Cherbourg, Caen, Dieppe, and Calais are in a state of equilibrium, whereas the Breton ports have skewed import flows.

### CROSS-CHANNEL PASSENGER TRAFFIC

Port	Passagers	% total	% CAMIS
Caen	951 758	6%	7%
Calais	10 063 129	64%	79%
Cherbourg	625 024	4%	5%
Dieppe	258 612	2%	2%
Saint-Malo	814 283	5%	6%
Dunkerque	2 601 258	17%	
Le Havre	344 797	2%	
Rouen	21	0%	
<b>Total</b>	<b>15 658 882</b>		
<i>dont GPM</i>	<i>2 946 076</i>	<i>19%</i>	
<i>dont PR</i>	<i>12 712 806</i>	<i>81%</i>	

The distribution of passenger traffic is entirely to the advantage of regional ports, which embark or disembark

Table 7: French Channel ports' passenger traffic in 2011



Graph 7: Distribution of passenger flows by Channel port in 2011

81% of passenger who use a Channel sea crossing from France. The port of Calais is predominant in cross-Channel traffic, since it manages 64% of total traffic.

## GOODS TRAFFIC

The freight traffic of ports is made up of three segments, distributed according to the handling required by the goods. The first two segments cover solid and liquid bulk cargo. The third segment groups together all goods not sent as bulk cargo. From the time that goods have been prepared for transport, they will be classed as general goods.

Much more than the nature of goods, the determining factor is the way in which goods are transported. It is, therefore, a logistical classification of goods. For example, cereals transported in a bulk carrier are counted as solid bulk cargo. If those same cereals are placed in a

container, they are counted as general goods. Goods are classed in that way because they are handled differently, depending on whether they are liquid bulk cargo, solid bulk cargo, or goods placed in a transport unit. To sum up: if goods are handled directly, they are bulk cargo. If it is the logistics packaging containing the goods that is handled, then they are general goods.

At port level, handling operations are different depending on the type of goods. Those operations call for specific infrastructures and facilities as well as specially-trained teams. In addition, the goods will be loaded or unloaded by vessels having different characteristics.

## THE NATIONAL DEVELOPMENT OF TRAFFIC FLOWS

Due to the economic downturn, solid bulk cargo suffered a fall of 32% of traffic at national level between 2008 and 2009, only to rise by 21% in 2010. That resurgence is due to the dynamism of cereal exports, as well as the upturn in steel manufacturing. In volume terms, solid bulk cargo represents one fifth of France's exchanges. Three ports handle  $\frac{3}{4}$  of French traffic: Dunkerque for the raw materials required in steel manufacturing, Rouen for cereals, and Marseille.

Liquid bulk cargo accounts for half the volume of port traffic in mainland France. That activity, which is closely linked to national consumption of oil products, suffered a fall of 6% in the period 2008-2009. The final demand for hydrocarbons is the determining factor in that case. For the first time in the history of France, the consumption of oil products fell. Furthermore,

refiners modify and outsource their production units. Thus, some refineries have been closed (the Total refinery in Flandres), and others have seen units close (Raffinerie de Normandie, Donges refinery).

General goods concentrate just one small third of volumes exchanged, but they represent the majority of exchanges by value. Furthermore, one third of those goods is containerised. The traffic in those goods has also suffered a significant drop, by around 5% in volume. The leading container port in France, Le Havre, fell 4 places in world rankings, coming behind its direct competitor, Zeebrugge.

That fall in trade has led to a worsening of the position of shipping companies, as stated in the introduction. Since the economic downturn is global, companies have not been able to move their fleets to unaffected areas.

Next, companies that placed orders for new giant vessels tried at all costs to fill those vessels just as demand suffered a sharp fall. That accentuated the price war as well as mergers and acquisitions in the sector.

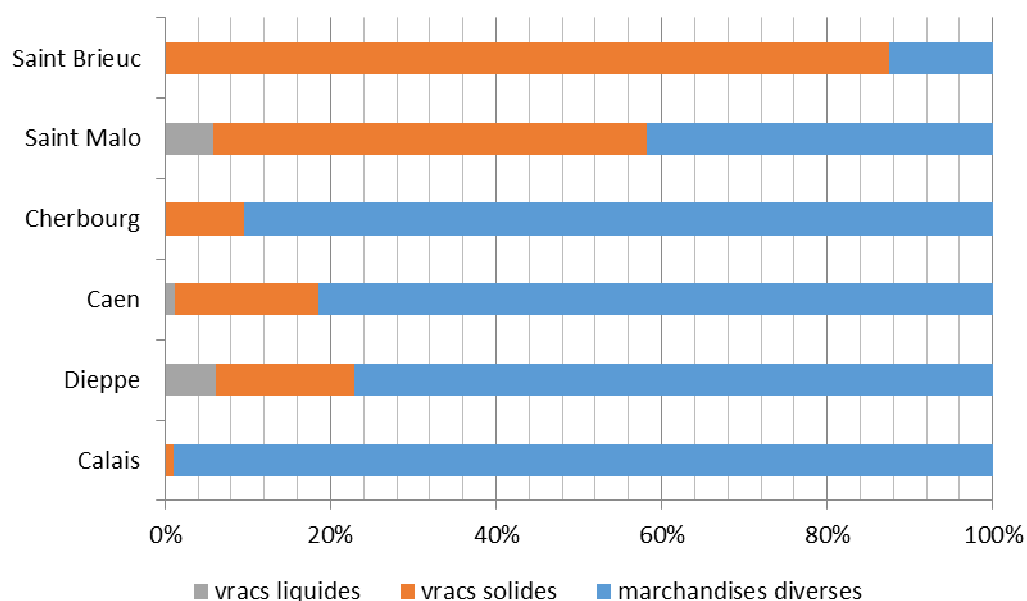
Thus, ports must attract – or retain the loyalty of – companies that, by their size, enjoy a stronger negotiating position, and that use it to secure prices from ports that are experiencing retrenchment. To respond to that challenge, ports must maximise their performance, which in turn increases competition between ports.

Table 8: French Channel ports' tonnages in 2011, set out by type of handling

		tonnages bruts				part dans l'activité fret du port		
		vracs liquides	vracs solides	marchandises diverses	Total	vracs liquides	vracs solides	marchandises diverses
Calais	Entrées	0	267 377	17 294 155	17 561 532	0%	2%	98%
	Sorties	0	157 325	20 741 611	20 898 936	0%	1%	99%
	<b>Total</b>	<b>0</b>	<b>424 702</b>	<b>38 035 766</b>	<b>38 460 468</b>	<b>0%</b>	<b>1%</b>	<b>99%</b>
Dieppe	Entrées	9 150	211 289	507 502	727 941	1%	29%	70%
	Sorties	90 902	58 664	739 530	889 096	10%	7%	83%
	<b>Total</b>	<b>100 052</b>	<b>269 953</b>	<b>1 247 032</b>	<b>1 617 037</b>	<b>6%</b>	<b>17%</b>	<b>77%</b>
Caen	Entrées	42 290	230 523	1 249 295	1 522 108	3%	15%	82%
	Sorties	0	391 060	1 669 602	2 060 662	0%	19%	81%
	<b>Total</b>	<b>42 290</b>	<b>621 583</b>	<b>2 918 897</b>	<b>3 582 770</b>	<b>1%</b>	<b>17%</b>	<b>81%</b>
Cherbourg	Entrées	0	133 233	692 774	826 007	0%	16%	84%
	Sorties	0	37 357	922 197	959 554	0%	4%	96%
	<b>Total</b>	<b>0</b>	<b>170 590</b>	<b>1 614 971</b>	<b>1 785 561</b>	<b>0%</b>	<b>10%</b>	<b>90%</b>
Saint-Malo	Entrées	96 156	816 108	417 209	1 329 473	7%	61%	31%
	Sorties	0	41 650	265 906	307 556	0%	14%	86%
	<b>Total</b>	<b>96 156</b>	<b>857 758</b>	<b>683 115</b>	<b>1 637 029</b>	<b>6%</b>	<b>52%</b>	<b>42%</b>
Saint-Brieuc	Entrées	0	0	259 896	259 896	0%	0%	100%
	Sorties	0	0	104 274	104 274	0%	0%	100%
	<b>Total</b>	<b>0</b>	<b>0</b>	<b>364 170</b>	<b>364 170</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>
Dunkerque	Entrées	5 781 020	19 023 143	7 012 701	31 816 864	18%	60%	22%
	Sorties	2 281 912	4 765 646	8 658 157	15 705 715	15%	30%	55%
	<b>Total</b>	<b>8 062 932</b>	<b>23 788 789</b>	<b>15 670 858</b>	<b>47 522 579</b>	<b>17%</b>	<b>50%</b>	<b>33%</b>
Le Havre	Entrées	36 753 606	2 784 454	10 698 529	50 236 589	73%	6%	21%
	Sorties	4 634 088	273 062	12 417 759	17 324 909	27%	2%	72%
	<b>Total</b>	<b>41 387 694</b>	<b>3 057 516</b>	<b>23 116 288</b>	<b>67 561 498</b>	<b>61%</b>	<b>5%</b>	<b>34%</b>
Rouen	Entrées	6 562 873	2 265 687	1 115 219	9 943 779	66%	23%	11%
	Sorties	5 600 623	8 820 581	1 031 667	15 452 871	36%	57%	7%
	<b>Total</b>	<b>12 163 496</b>	<b>11 086 268</b>	<b>2 146 886</b>	<b>25 396 650</b>	<b>48%</b>	<b>44%</b>	<b>8%</b>
TOTAL	PR	238 498	2 344 586	44 863 951	47 447 035	1%	5%	95%
	GPM	61 852 620	40 277 159	85 797 983	187 927 762	33%	21%	46%
	<b>Total</b>	<b>62 091 118</b>	<b>42 621 745</b>	<b>130 661 934</b>	<b>235 374 797</b>	<b>26%</b>	<b>18%</b>	<b>56%</b>

## TRAFFIC FLOWS OF REGIONAL PORTS IN THE CHANNEL

Graph 8: Distribution of gross tonnage of French regional ports in the Channel by type of goods in 2011



*NB: Cross-Channel goods traffic is included under general goods.*

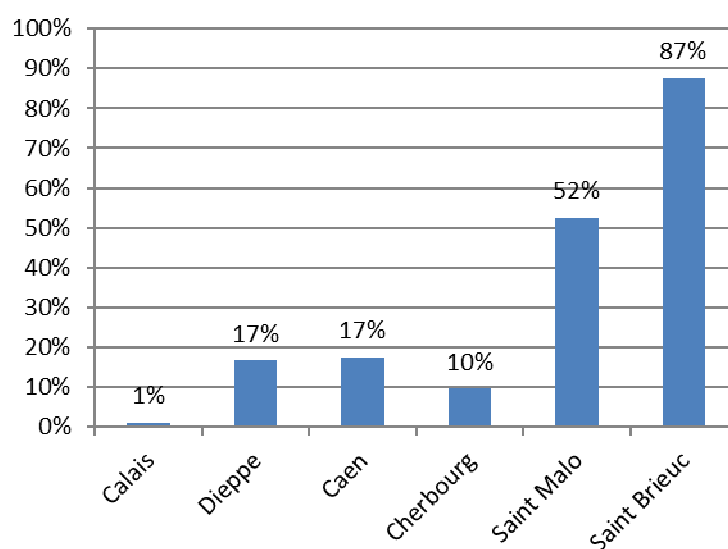
The trade volume of the regional ports studied is dominated by a single type of goods. General goods represent on average 78% of the volumes passing through those ports.

environmental impact of which reduces their acceptability to populations. Considering those factors, the study of those goods will not be taken any further.

However, two ports present more contrasting situations. The port of Saint-Malo has a 42% share of general goods, which is very much below average. That is explained by the significant share (52%) of solid bulk cargo in the port's traffic. The port of Calais presents the inverse situation. The near-totality of its volumes, i.e. 99%, is made up of general goods.

Liquid bulk cargo represent on average only 3% of the volumes of the ports studied, with no port having a share of more than 6%. In addition, liquid bulk cargo requires specific infrastructures that are as heavy as they are onerous, and the

## SOLID BULK CARGO



Graph 9: Share of solid bulk cargo in total port volume in 2011

The volumes of solid bulk cargo represent on average 19% of the total passing through the French regional ports studied. Regional ports handle only 6% of volumes in the area, with solid bulk cargo being handled mostly by large sea ports.

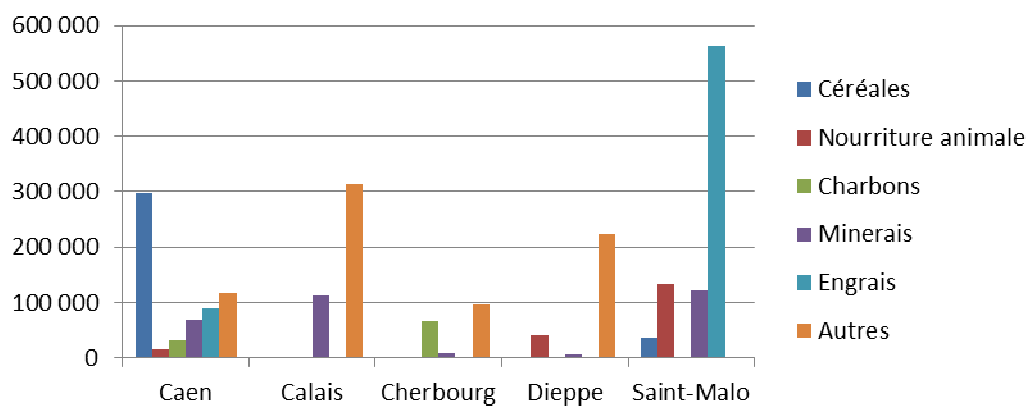
Volumes vary from one port to another, as does the nature of goods. Thus, Caen is the regional port for cereals, whereas Saint-Malo dominates in respect of fertiliser and animal feed.

Table 9: Gross tonnages of solid bulk cargo by types of goods in 2011

Port	Cereals	Animal feed	Coal	Minerals	Fertiliser	Other	Total
<b>Caen</b>	298 163	14 979	30 729	69 412	90 270	118 030	<b>621 583</b>
<b>Calais</b>	0	0	0	111 245	0	313 457	<b>424 702</b>
<b>Cherbourg</b>	0	0	65 703	9 295	0	95 592	<b>170 590</b>
<b>Dieppe</b>	0	41 088	0	5 973	0	222 892	<b>269 953</b>
<b>Saint-Malo</b>	36 930	132 108	0	122 392	564 299	2 029	<b>857 758</b>
<b>Total</b>	<b>9 844 503</b>	<b>613 396</b>	<b>9 395 824</b>	<b>11 661 249</b>	<b>991 765</b>	<b>7 770 422</b>	<b>40 277 159</b>
<i>Of which Large Sea Ports</i>	<i>9 509 410</i>	<i>425 221</i>	<i>9 299 392</i>	<i>11 342 932</i>	<i>337 196</i>	<i>7 018 422</i>	<i>37 932 573</i>
<i>Of which Regional Ports</i>	<i>335 093</i>	<i>188 175</i>	<i>96 432</i>	<i>318 317</i>	<i>654 569</i>	<i>752 000</i>	<i>2 344 586</i>

Graph 10: Gross tonnages of solid bulk cargo, by port and by type, in 2011





## GENERAL GOODS

The category of general goods covers all goods that are not carried as bulk cargo. It is subdivided into three sub-categories: containerised goods, goods carried by ro-ro means, and others.

Ro-ro mode is used for all goods transported by ro-ro means that allows those goods to be loaded onto or unloaded from a vessel without requiring other tools. It may be a

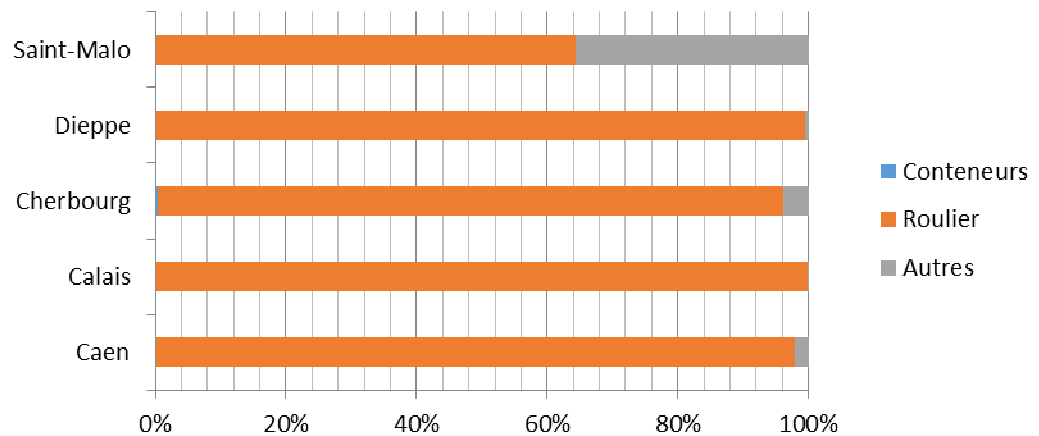
complete semi-articulated lorry, an unaccompanied trailer, or a MAFI chassis.

The “Other” category covers all goods that are not transported in containers or by heavy-goods vehicles. In particular, the category includes forest products, palettes, and “big bags”.

Table 10: Traffic flows of general goods by port and setout by type, in 2011

	Containers	Ro-Ro	Other	Total	% containers	% ro-ro	% Other
<b>Caen</b>	181	2 860 347	58 369	<b>2 918 897</b>	0%	98%	2%
<b>Calais</b>	0	37 987 840	47 926	<b>38 035 766</b>	0%	100%	0%
<b>Cherbourg</b>	4 797	1 549 075	61 099	<b>1 614 971</b>	0%	96%	4%
<b>Dieppe</b>	0	1 241 439	5 593	<b>1 247 032</b>	0%	100%	0%
<b>Saint-Malo</b>	0	439 095	244 020	<b>683 115</b>	0%	64%	36%
<b>Dunkerque</b>	2 386 955	11 831 337	1 452 566	<b>15 670 858</b>	15%	75%	9%
<b>Le Havre</b>	21 651 718	1 454 134	10 436	<b>23 116 288</b>	94%	6%	0%
<b>Rouen</b>	1 031 212	101 714	1 013 960	<b>2 146 886</b>	48%	5%	47%
<b>Total</b>	<b>25 074 863</b>	<b>57 464 981</b>	<b>2 893 969</b>	<b>85 433 813</b>			
<i>Of which Large Sea Ports</i>	<i>25 069 885</i>	<i>13 387 185</i>	<i>2 476 962</i>	<i>40 934 032</i>	<i>100%</i>	<i>23%</i>	<i>86%</i>
<i>Of which Regional Ports</i>	<i>4 978</i>	<i>44 077 796</i>	<i>417 007</i>	<i>44 499 781</i>	<i>0%</i>	<i>77%</i>	<i>14%</i>

Graph 11: Distribution of 2011 traffic flows in ports studied



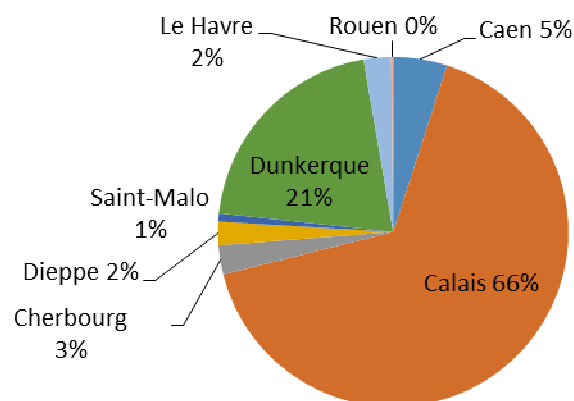
## CONTAINERISED TRAFFIC

Container traffic is the preserve of large sea ports, which handle almost all of that type of traffic. Le Havre alone handles 86% of the volume trans-shipped on the French Channel façade. In number, the only regional ports that have handled containerised traffic are Caen and Cherbourg, with 2 and 331 TEUs respectively.

The reasons for the hegemony exercised by large sea ports over transcontinental container traffic have already been stated, but there remains potential for regional ports to develop that activity. Regional ports can develop cross-Channel short sea shipping, or containerised cabotage links with a large sea port.

## RO-RO TRAFFIC

Graph 12: Distribution of cross-Channel ro-ro traffic by port in 2011



The port of Calais dominates French ro-ro traffic, with 66% of volumes. Thus, it occupies the same position as its British opposite number, the port of Dover.



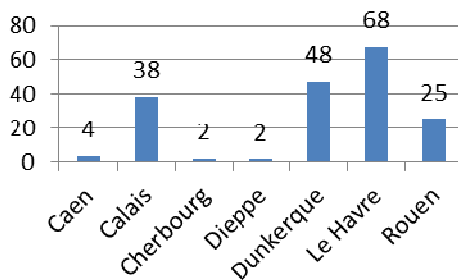
## Local Channel ports: activities, development, and diversification

THE PORT OF CALAIS

Like other regional ports that will be studied, Calais manages a range of activities: traffic of goods in bulk and in packaging, cross-Channel links for freight and passengers, pleasure boating, and handling cruise ships. However, the port is clearly set apart from others by its sheer number of unique features.

On the one hand, Calais handles traffic that is comparable with the traffic of large sea ports, with over 38 million gross tonnes of goods handled in 2011. However, where a large sea port derives a significant portion of its activity from containers, Calais handles 99% of its volumes with cross-Channel traffic.

Graph 13: French Channel ports' gross tonnages in 2011, in millions of tonnes



On the other hand, the port of Calais has a mode of governance that is similar to other regional ports. It is owned by a region, which delegates exploitation of the port to a Chamber of Commerce and Industry. That gives Calais the same mission as its opposite numbers: to support and develop the regional economy. However, Calais discharges that mission by being the leader in its core activity: cross-Channel links.

With 8 000 lorries trans-shipped daily, Calais handles the transit of one third of goods exchanged between continental Europe and the British Isles. In that respect, it is the 4<sup>th</sup>-largest commercial port in France.

Calais handles half the passenger traffic between France and the United Kingdom, which makes it the leading port in France and the 2<sup>nd</sup>-largest port in Europe – behind Dover – as regards passenger traffic. Each year, over 10 million passengers pass through its infrastructures.

Calais has no equivalent on the French side, but it does have one on the English side. Set 40 km away, on the opposite shore of the Dover Strait, the port of Dover has the same traffic flows and faces the same challenges as the port of Calais – to such an extent that 80% of Dover's traffic also goes through Calais.

The comparison between the two places does not stop there. They are both transit towns that are undergoing economic change, and that seek to revitalise themselves by taking advantage of their ports. In consequence, the two ports are so interconnected that their development can only be thought of as progressing in concert. It is well and truly a tandem situation between two ports.

The Dover Harbour Board has forecast a 50% rise in the number of heavy-goods vehicles in the course of the decade, so the port of Calais will be faced with the same challenge. To bring it to fruition, it will have to handle

larger vessels in greater numbers, and rebalance its modal spread to avoid its access routes being saturated.

The projects that will need to be carried out are opportunities to

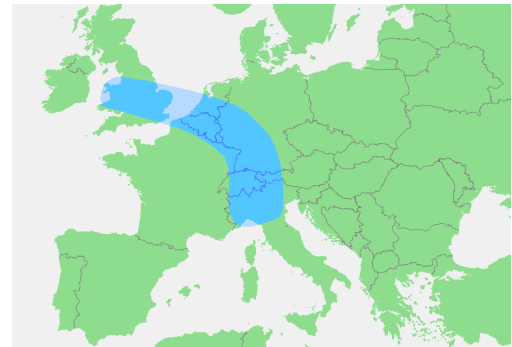
strengthen the links between Calais and its port. The port is the territory's interface with the world, and it is the economic driver of the town of Calais.

## THE HINTERLAND OF THE PORT OF CALAIS

### EUROPE / FRANCE

The Channel area is a place for passing through to North Sea ports, as well as for crossing between France and the United Kingdom. Set along its narrowest segment – the Dover Strait, the port of Calais is just 40 km from Dover.

Its proximity to the British Isles is an advantage that the port exploits to the full. At European level, Calais' location gives it even more assets. The port is set in the maritime interface of the European Backbone, between Great Britain and the continent. That area – which extends from London to Milan – is a densely-populated and highly-urbanised area. Also called the Blue Banana, it is no more or less than the economic heart of Europe.



Map 1: The European Backbone

That location enables the port of Calais, on the one hand, to be at the crossroads of large European goods flows and, on the other, to directly access dense, high-performing transport infrastructures. Thus, from Calais, a semi-articulated lorry can reach Paris in 1½ hours, Brussels in 1 hour, and London in 2 hours.

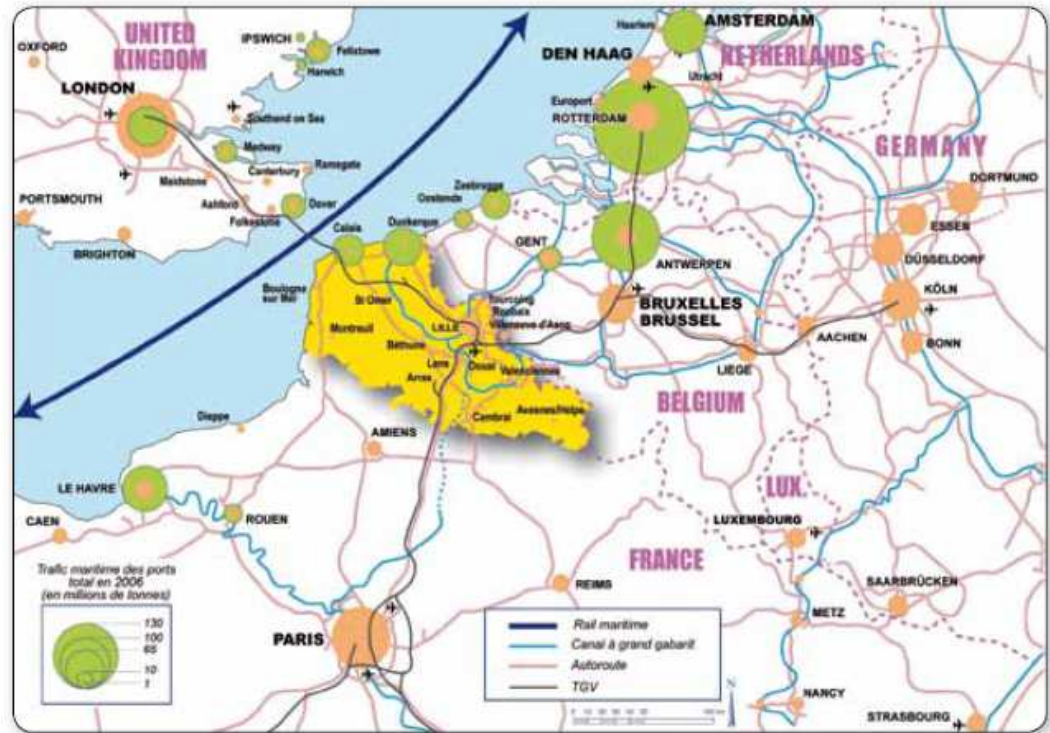


Figure 1: Location of the port of Calais

## THE NORD – PAS-DE-CALAIS REGION

### KEY FIGURES

- 4.02 millions inhabitants, i.e. 6.5% of the French national population
- In 2009, GDP of 96 839 million euros, i.e. 5.2% of French national GDP
- 4<sup>th</sup>-largest exporting region in France (nearly 30 billion euros' worth of exports)
- 5<sup>th</sup>-largest region for international set-ups in 2009
- The volume of exchanges between the region and the

United Kingdom accounts for 10% of its exchanges<sup>2</sup>.

## ÉCONOMY

---

Historically, the Nord – Pas-de-Calais Region's economy includes a significant share of activities linked to agriculture, industry, and trade. It has had to face up to the decline of coal mining and textile manufacturing, but it relies on strong skills like mail-order sales (La Redoute, 3 Suisses), large-scale distribution (Auchan), as well as transport and logistics. However, the region has dealt with endemic unemployment as well as a relative lack of training amongst its workforce.

Its skills, combined with its geographical position, encourage big names from industry and logistics to establish themselves in its territory. For example, Toyota has set up one of its main European factories in Valenciennes, and Amazon will set up a logistics platform covering 90 000 m<sup>2</sup> in Douai by 2015. Thanks to its reliable, fast connections, Nord-Pas-de-Calais Region also captures a significant share of British investments in France.

Nord-Pas-de-Calais Region is a major logistics territory. The sector there benefits from a strategic position and a significant level of transport infrastructures. More than twenty multimodal platforms have been set up in the region.

## INDIRECT EMPLOYMENT DUE TO THE PORT OF CALAIS

---

In Nord-Pas-de-Calais Region, 80 000 jobs are linked to road transport of goods<sup>3</sup>. To that figure must be added

---

<sup>2</sup> Directorate-General for Customs and Indirect Duties

---

<sup>3</sup> Source: Nord-Pas-de-Calais CCI file.

8 000 direct jobs and 2 500 indirect jobs linked to the activities of the ports of Calais and Dunkerque.

## TRANSPORT INFRASTRUCTURES

---

A crossroads between the British Isles and the continent, Nord-Pas-de-Calais is a region of exchanges and a communications nexus. In that regard, it enjoys fast motorway connections with the whole of Europe.

On its maritime façade, Nord-Pas-de-Calais region counts no less than 4 commercial ports.

The first, Dunkerque, is a Large Sea Port (LSP). It handles solid bulk cargo for the good running of the steel-making industry, plus minerals and coal, as well as a significant level of container activity. The second, Boulogne, is the leading fishing port in France. The third, Calais, has made cross-Channel traffic its core activity. Since 2007, the ports of Boulogne and Calais have been run by the same concessionnaire: the Côte d'Opale Chamber of Commerce and Industry.

To those three natural ports must be added a fourth: the Channel Tunnel. Acting as an interface between two regions separated by a sea, the Channel Tunnel can be studied as one would a dry port. The Tunnel enables the Dover Strait to be crossed by passenger trains (Eurostar), goods

trains, and piggyback shuttles between Calais and Folkestone. Those shuttles play a role that is analogous to that of cross-Channel ferries. On a daily basis, Eurotunnel provides 270 rail convoys, i.e. on average 50 000 passengers and 9 000 vehicles, i.e. 50 000 tonnes of goods. Because of that, the Channel Tunnel is the most heavily-used railway in the world.

Boring the Tunnel raised concerns that cross-Channel activity would simply disappear. Experience has shown that far from being opponents, the port and Tunnel services are in fact complementary. If an incident – such as a fire – occurs in the Tunnel, traffic can easily be re-directed to cross-Channel services. The opposite is also true: if sea conditions make any crossing impossible, transport can be carried out through the Tunnel.

Links between the region and the port of Calais are strong and diversified. In respect of its governance, the port of Calais has been owned by Nord-Pas-de-Calais Region since the 2007 law on port decentralisation. The region is in charge of developing transport infrastructures on its territory, so it creates synergies between the development of the port and that of the region. At the level of logistics, Calais is the door to the United Kingdom for the whole region. Finally, the port is vital for the development of businesses established in the region.



## CALAIS URBAN AREA

### PRESENTATION

Calais is the most populous town of the Pas-de-Calais *département*, with 73 600 inhabitants. Calaisians work in the following sectors: business, transport, and general services (45.7%), as well as in public administration (34.9%)<sup>4</sup>. The city's unemployment rate of 17.16% was higher than the national average in 2012.

work in conjunction with the port, mainly with road hauliers. To that must be added road hauliers' suppliers: heavy-goods vehicle repairers, watchkeeping and security staff for parking areas, petrol stations, etc.

### THE ECONOMIC FABRIC

Table 11: Spread of jobs in transport and logistics in the Calais region in 2010

Sector	Numbers
Road transport of goods	2 929
Organising freight transport	861
Warehousing	560
Road transport of passengers	1 270
Transport ancillary services	718
Transport on water	581
Handling	414
Rail transport	141
Pipeline transport	7
Air transport	0
<b>totalT</b>	<b>7 481</b>

Source: Nord de France CCI

There is no freely-accessible study of the socio-economic impact of the port on its town and region. However, it is known that 7 500 employees work in the transport and logistics sector in the territory covered by the Côte d'Opale CCI, i.e. 15% of regional numbers.

On a local basis, about twenty transport and logistics businesses

<sup>4</sup> Source: INSEE

## MAJOR BUSINESSES

Table 12: The 10 leading businesses of the Côte d'Opale in 2012

Business	Sector	Numbers
<b>Arcelor Mittal</b>	Steel manufacturing	4 216
<b>Eurotunnel</b>	Transport	1 518
<b>Armatis Nord</b>	Customer relations	1 240
<b>Valeo</b>	Automobile	1 030
<b>TIM</b>	Public works engineering	843
<b>Continentale Nutrition</b>	Animal feed	798
<b>Delabi</b>	Agri-food	749
<b>Aluminium Dunkerque</b>	Steel manufacturing	613
<b>GTS Industries</b>	Steel manufacturing	607
<b>Ascometal</b>	Steel manufacturing	590
<b>Total</b>		12 204

Source: Nord de France CCI

## INFRASTRUCTURES



Map 2: Location of the port of Calais and of the Channel Tunnel

As has been stated, the port of Calais is in competition across its territory with the ports of Dunkerque to the north and with the Channel Tunnel a few kilometres to the south.

The port of Calais is connected to a multimodal network that is dominated by road transport. The cross-Channel terminal is directly linked to a high-performance motorway network made up of the A16, the A26, and the A25 on the continent, as well as the M20 and the M2 in Great Britain. Calais is less than three hours from large metropolitan areas: Paris, London, Lille, and Brussels.

That network enables daily traffic amounting to 30 000 vehicles to be absorbed, whilst current flows are of the order of 20 000 vehicles per day. Nonetheless, that network experiences bottlenecks at certain periods, by reason of traffic accidents, roadworks, or delays affecting the links with Dover. Furthermore, the network is sometimes used as an anarchic parking area, since port parking facilities can be temporarily saturated.

The port is connected to the French national river network, but the canals are obsolete and do not allow barges to pass that are large enough for transporters' current needs. There is indeed a structuring project in the region: the Seine-Nord canal plan, which is expected to link the Paris Basin with the ports of Northern Europe. Dunkerque may benefit from that new infrastructure, but no connection is planned for the port of Calais. In addition, that plan brings the port of Le Havre in direct competition with Antwerp and Zeebrugge, so it has come up against misgivings on the part of the Haute-Normandie community.

The only alternative solution to road transport for connecting Calais to its clients lies in rail transport. In that regard, boring the Channel Tunnel gave rise to a paradoxical situation. A

modern, high-performance network now passes close to the port, but the port's local access has not been modernised – so much so that the branch railway line serving the port crosses Calais town centre across a number of level crossings. That situation does not currently cause major problems, since the infrastructure currently handles two trains a day carrying new cars from the PSA Group to the port's ro-ro terminal. However, if the rail mode were to be developed, a solution bypassing the town would have to be found to as to secure acceptance by the population.

The port constitutes the economic lungs of the town. In a 50-kilometre radius, the port generates 12 000 direct and indirect jobs<sup>5</sup>. Meanwhile, the employment situation remains fragile in the Calais area, where unemployment rates remain high and where businesses are in difficulty in the steel-manufacturing and automobile sectors. Seafrance, a shipping company that provided services between Calais and Dover, even went bankrupt.

More than ever, the port's activity is indispensable to the dynamism of the economy of the whole region.

---

<sup>5</sup> *Commission Nationale du Débat Public (CNDP)*

## THE ACTIVITIES OF THE PORT OF CALAIS

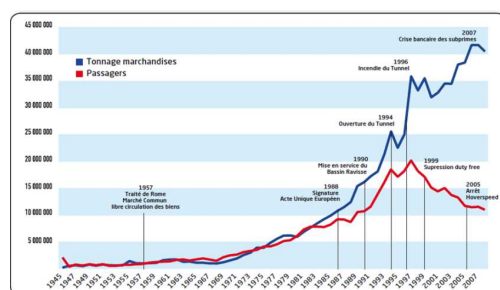
### THE ACTIVITIES OF THE COMMERCIAL PORT

In 2011, the port of Calais handled 38 460 468 tonnes of goods, putting it in 4<sup>th</sup> place amongst French commercial ports. At 37 987 840 tonnes, cross-Channel goods traffic accounts for 98.77% of the port's total traffic.

**Table 13: The port of Calais' gross tonnages in 2011**

	liquid cargo	bulk solid cargo	bulk	general goods	Total
<i>Inwards</i>	0	267 377	17 294 155	17 561 532	
<i>Outwards</i>	0	157 325	20 741 611	20 898 936	
<b>Total</b>	<b>0</b>	<b>424 702</b>	<b>38 035 766</b>	<b>38 460 468</b>	

To that are added the 10 063 279 passengers and 1 860 752 touring vehicles that used the cross-Channel terminal during the same period.



**Graph 14: Changes in tonnages and in passenger numbers at the port of Calais from 1945 to 2007<sup>6</sup>**

The ferry activity occupies a preponderant place in the port of Calais, which nonetheless also manages other flows. In the category of general goods, it handles the export of new cars, undersea cables, and bagged sugar. In solid bulk cargo, it handles the import of minerals for the

steel-manufacturing industry and the export of sugar for the agricultural sector.

In addition to its commercial port, the port of Calais also includes fishing and sailing activities.

The opening of the Channel Tunnel created a break in the changes of flows at the port of Calais. There was a possible concern that the Tunnel might cannibalise all the traffic – but that concern proved to be unfounded. Moreover, the port and the Tunnel have been able to strike a certain balance, and even find a certain complementarity. Rail infrastructure has captured passenger traffic thanks to the development of high-speed links between large metropolitan areas, but goods traffic has not continued to grow. Currently, passenger traffic at the port of Calais is experiencing a period of stability. Another fact illustrates that complementarity. At the beginning of 2013, the Eurotunnel Group – which manages the Channel Tunnel – applied for the port of Calais concession. If the application is successful, it will allow the Eurotunnel Group to manage the two infrastructures simultaneously and on a complementary basis.

Thus, even if England is no longer quite an island, sea transport continues to occupy a predominant place in its links with the continent. The port of Calais is England's main entrance to the continent.

<sup>6</sup> Source: CNDP of the Calais 2015 plan

## CROSS-CHANNEL LINKS

---

The Dover-Calais tandem provides transit facilities for almost one third of goods exchanged between continental Europe and the British Isles. Thanks to that traffic, Calais is ranked fourth amongst French ports for goods traffic.

Moreover, those two ports occupy the first and second places in world rankings for passenger traffic. Each year, nearly 10 million passengers cross the Channel between the two ports.

As has been stated above, Calais benefits from an exceptional geographical situation, high-quality road access, and proximity to the large consumption and production areas of North-Western Europe.

However, the port's success cannot be explained solely by external contingencies. Calais captures most of the cross-Channel flow – that is because Calais offers high-quality services to transporters. Calais dominates its market – but the port of Calais must take care to consolidate its position by ensuring its clients' loyalty and by conquering new

markets. Aware of that challenge, the port authority regularly invests in its infrastructures to guarantee a high level of service.

For example, a dynamic signalling system covering the freight area and the port's bypass was installed in 2010. By guiding vehicles from motorways to embarkation parking areas, it enables optimised flow absorption.

However, the port of Calais alone cannot guarantee that quality of service, which is the result of a strategy and of concerted action between the port and three shipping companies: P&O Ferries, LD Lines / DFDS Seaways, and MyFerryLink. Between them, they offer 50 departures a day to Dover, with a crossing time of 75 minutes.

Road hauliers are the other stakeholders covered by the cross-Channel activity of the port of Calais.

## STAKEHOLDERS IN CROSS-CHANNEL LINKS

---

### FERRY COMPANIES

#### P&O FERRIES

P&O Ferries is the shipping company that operates the largest number of vessels for cross-Channel trans-shipment. It holds the second place in the market, coming after Eurotunnel. The Calais-Dover link accounts for over 50% of its activity.

P&O Ferries exploits five vessels on the Calais-Dover line: the *European Seaway*, the *Pride of Canterbury*, and the *Pride of Kent*, to which the company – in 2012 – added two new-generation vessels: the *Spirit of Britain* and its sister ship, the *Spirit of France*, which represent an investment of 320 million euros. With 3 746 m of linear parking space, they are the largest ferries operated in the Dover Strait.

They can carry up to 1 750 passengers, 1 059 cars, and 180 semi-articulated lorries.

Handling those vessels – which allow an increase in handling capacity on the route – is an advantage for the port, but it also represents a challenge. In the long term, the growth in size of vessels can lead to bottlenecks affecting the port's nautical capacity.

#### LD LINES / DFDS SEAWAYS

The line was previously served by LD Lines, sole subsidiary of the Louis Dreyfus Armement shipping company. In September 2012, the shipping company entered into an alliance with DFDS, the largest sea-transport and logistics business in Northern Europe. The partnership aims at optimising the common operations of the two companies on the cross-Channel route.

At the end of July, the consolidated freight traffic of the two companies held an 18.7% market share in the Calais / Dunkerque-Dover Strait area, including the Channel Tunnel, and 32.2% in the Western Channel. For the entirety of cross-Channel traffic between Dunkerque and Roscoff, DFDS / LD Lines's market share stood at 19.5%, including accompanied and unaccompanied lorries<sup>7</sup>.

Since 17 February 2012, the *Norman Spirit* has operated on the Calais-Dover route, offering five crossings daily. A second vessel has been deployed on the route since April.

#### MYFERRYLINK

The company runs two vessels on the route. The vessels can each carry between 1 900 and 2 500 passengers as well as between 100 and 120 lorries. There are four crossings daily.

The company is the latest arrival on the market of links between Calais and Dover. Although the company is of recent creation (2012), it is made up of staff and employees from the firm Seafrance, which went bankrupt in that same year.

MyFerryLink is a co-operative in which employees are the majority partners. It fits out and operates vessels that it does not own. The two ferries were acquired by Eurotunnel. As was shown by the maritime economy weekly *Le Marin*, the relationship between the two entities is a complex one. MyFerryLink must pay rent to Eurotunnel for use of the vessels, whereas the rail operator compensates the company for all unsold places.

At first sight, it may seem surprising that the Channel Tunnel operator should invest in a service that is in direct competition with its own. That shows that as far as Eurotunnel is concerned, the two activities are complementary.

---

<sup>7</sup> Source: [lantenne.com](http://lantenne.com)

## ROAD TRANSPORT

Over the last two decades, goods flows in Europe have massively moved over to a just-in-time system. Removing stocks from the supply chains, combined with production areas being placed at increasing distances from consumption areas, have made it imperative to respect transport deadlines. Just-in-time has become the norm in the industry and across all forms of transport. Road hauliers, which provide most goods traffic in Europe, are thus subjected to strict imperatives in terms of deadlines. At the same time, the cost of road transport has fallen, making operators' margins weaker and more fragile. In consequence, road hauliers are seeking out services that offer them a high degree of reliability for the Channel crossing.

The Calais-Dover tandem offers the best assets.

Table 14: Frequency and duration of cross-Channel lines in 2011

Service	Frequency	Duration of crossing
<b>Calais-Dover</b>	50	1:20
<b>Dieppe-Newhaven</b>	4	4:00
<b>Le Havre-Portsmouth</b>	1	5:30
<b>Caen-Portsmouth</b>	3	5:45
<b>Cherbourg-Portsmouth</b>	1	3:00
<b>Saint-Malo-Portsmouth</b>	1	10:45

Firstly, thanks to the narrowness of the strait, the crossing takes just 75 minutes, which means that Calais offers very fast connections.

Secondly, the tandem offers the highest service frequencies. With 50 rotations per day, 365 days a year, a haulier is certain to reduce waiting

times at port, thus enabling the crossing time to be respected.

Thirdly, Calais offers a high degree of service reliability. Unlike other connections, the service is provided by three shipping companies, exploiting over ten vessels. If one of the 50 daily connections cannot be provided, traffic can be put on to one of the following connections. In addition, the nearness of the Channel Tunnel offers an additional degree of reliability. If, for reasons to do with sea conditions, no vessel is able to provide the service, road hauliers can move across to the rail link. Thus, an operator can quickly and simply modify its transport plan, since the port and the tunnel are only a few kilometres apart.

Fourthly, prices offered at Calais are amongst the most competitive. The presence of three shipping companies offering the same service, coupled with the Eurotunnel offer, creates a state of permanent competition between operators, which leads to prices being lowered.

Finally, the port of Calais has become a benchmark in terms of port security. In the United Kingdom, boosting the immigration control went hand-in-hand with a hardening of penalties in cases of illegal migrants being discovered aboard means of transport. As a result, the driver and the transport company that employs her / him risk very heavy financial penalties. Road hauliers are in a poor financial situation, so such a penalty may lead to a company filing for bankruptcy. In consequence, transporters opt for infrastructures that offer the best level of security.

The port of Calais, coupled with Dover, currently offers services that are a perfect match for road hauliers' expectations, but the port must take care to consolidate its leadership. A port that stops investing is a port that dies. Due to its investment policy, the port of Calais shows its will to develop its activity and place it on a sustainable footing.

Ro-ro transport of goods is an exercise where it is difficult to add value. In the first place, the goods are not accessible, being held on pallets, wrapped in film, and loaded aboard a semi-articulated lorry. In the second place, for a road haulier, an efficient

cross-Channel port is one where the semi-articulated lorry is stationary for as short a time as possible. That makes it impossible to work on the goods.

However, the port of Calais has succeeded in adding a certain amount of value to its ro-ro traffic: in 2011, it installed the AP+ Cargo Community System (CCS). That tool enables the port to meet ICS-ECS customs requirements and to protect the collection of Vessel and Goods Port Dues. That enables the operator to increase its performance level, and to be up to date with international business and logistics changes.

## OTHER GOODS FLOWS

---

In parallel with its cross-Channel activity, the port of Calais has also diversified into niche sectors on the

one hand, and on the other hand by offering services with added value in more conventional activities.

## GENERAL GOODS

---

### EXPORTING UNDERSEA CABLES

The firm Alcatel Submarine Networks has installed a production unit making undersea fibre-optic cables near the port of Calais. That set-up enables the firm to load cables directly aboard cable-laying vessels that will be

tasked with laying cables at sea. Cables are loaded aboard vessels from the factory using an underground conduit and a specialist gangway.

The firm had turnover of €345,000,000 in 2006, with almost 700 employees.

### EXPORTING NEW CARS

Each year, the port of Calais handles the export of almost 150,000 new cars. A large part of the area and facilities available in the East Basin of the port is given over to that activity.

Vehicles are sent by train from production sites directly to the quay. Thereafter, vehicles from Groupe PSA

(Peugeot-Citroën) are loaded aboard ro-ro vessels going to the ports of Sheerness and Killingholme in Great Britain. To that end, the logistics firm Gefco has tasked the handling firm Walon with managing those operations.



The administrator of the port of Calais considers that “traffic in new vehicles forms one of the strategic strands for the medium- and long-term development of the port of Calais.” However, the market share held by French car manufacturers suffered a historic reduction this year. The development of new-car exports from the port of Calais is thus subject to a return to competitiveness on the part of manufacturers.

In July 2011, the port of Calais received its first new-car train. By limiting the number of lorry journeys from town to port, that new investment contributes to reducing greenhouse gases, thus reducing the port’s carbon footprint.

In 2007, the port invested 3 million euros in installing a new ro-ro ramp, adapted for light-vehicle traffic as well as freight traffic. Taken together with the 15 million spent to fit out 16 hectares of reclaimed land, the terminal can now handle new types of traffic.

The upgrade enables the implementation of collaborative work with other ports, in order to become part of the motorways of the sea programme promoted by European and French bodies.

In addition, Walon will have a Pre-Delivery Inspection (PDI) facility at the port. That facility will enable Walon to offer new complementary services that will add value to the flows going through the port. For example, it will be possible to prepare vehicles before delivery to final clients, for example by cleaning vehicles. Furthermore, it will be possible to fit new equipment to vehicles, thus adding to their value.

Exporting new cars is an exemplary service offered by the port of Calais. Stakeholders have created conditions that allow value to be added to the flow, whilst exploiting the strengths of multimodality – a mark of increased respect for the environment.

## SOLID BULK CARGO

---

### IMPORT

Various raw materials are imported through the port of Calais: petroleum coke, ore, aggregates, quarry products, estuary sand, pumice stone,

and rock fill. Those products are then processed by the economic stakeholders of the region, thus producing value.

### EXPORT

With its two silos offering a total capacity of 67,000 tonnes and its systems for loading into holds, the port of Calais handles sugar exports. The product comes from the agricultural sector of Nord-Pas-de-Calais Region, and is the outcome of refining sugar beets.

That traffic represents a significant share of the solid bulk cargo handled by the port of Calais. In order to do so, the port stores sugar in its silos before loading it aboard bulk carriers. However, in that field, the port has also been able to benefit from the flow of goods to add value to them. Thus,

the port has set up a sugar-bagging system, allowing sugar to be packaged before loading.

---

## THE OTHER ACTIVITIES OF THE PORT OF CALAIS

---

### MARINA

---

The port of Calais has a wet marina holding 262 sailboats and fishing

vessels, and a 45-berth tidal basin. The marina is ISO 9001 : 2008 certified.

### FISHING HARBOUR

---

Calais is also a home port for traditional fisherfolk. In addition to meeting the needs of local consumption, that activity also contributes to improving the image of Courgain Maritime, the fisherfolk's quarter. In that regard, the port

concessionaire provided the fish market with new booths in 2009.

Nord-Pas-de-Calais Region, the owner of the port, will invest 15 million euros in refurbishing the West Basin Wharf for pleasure boating, and La Colonne Wharf for fishing.

### HANDLING CRUISE SHIPS

---

The port of Calais handles cruise ships for journeys in the North Sea and the Baltic Sea.

---

## THE MANAGEMENT AND DEVELOPMENT OF THE PORT

---

### GOVERNANCE

---

Nord-Pas-de-Calais Region has owned the port of Calais since 1 January 2007, after implementation of the port strand of the 2004 law on decentralisation.

Calais Chamber of Commerce and Industry directly manages and develops the activity of the port of Calais. Since 1 January 2011, the

Côte d'Opale Chamber of Commerce and Industry has brought together the three former consular entities – now dissolved – of Boulogne-sur-Mer, Calais, and Dunkirk. Thus, the Chamber is also the concessionaire for the port of Boulogne-sur-Mer. In the first place, the Chamber manages port facilities. It builds, exploits, and modernises the cross-Channel

terminal, handling equipment, hangars, and infrastructures given over to pleasure boating and to fishing.

In the second place, the Chamber is in charge of the strategic orientation of the port. For its implementation, the consular authority has set up partnerships with shipping companies and local stakeholders in the fields of transport and handling.

In accordance with the delegation-of-service contract signed between the CCI and Nord-Pas-de-Calais Region, the port concessionaire carries out a public-service mission through its actions. In that regard, therefore, it is required to guarantee an adequate level of service, as well as equal treatment for all port users in terms of level of service and charging policy.

The concessionaire of the port of Calais is remarkable in two ways. In the first place, it is one of the only French operators to be able to auto-finance most of its infrastructures and facilities. In the second place, it is the longest-serving concessionaire, since it has managed the port since 1828.

For legal reasons, port extensions sought by Nord-Pas-de-Calais Region would require a call for tenders to be made for the port of Calais concession. The Chamber of Commerce and Industry, which has been the historic operator since 1828, is naturally a candidate, but a second stakeholder has emerged.

The Eurotunnel Group put together a competing proposal in January 2013. The Channel Tunnel administrator thus hopes to become the administrator of the two major cross-Channel infrastructures: the Channel Tunnel and the port of Calais. By

operating the port, it would have three shipping companies as clients. On the one hand, MyFerryLink, to which it hires ferries acquired after SeaFrance ceased to exist. On the other hand, P&O and LD Lines / DFDS, which are the most serious competitors against Eurotunnel's rail offer. In addition, the Eurotunnel Group could profit from port extension plans to present its candidacy for the provision of other services connected with the port. Through its Europorte subsidiary, Eurotunnel also manages and operates the railways of a number of French ports and their connections with the French national rail network.

The choice of candidates will be made in March 2012. That will be followed by an analysis of initial bids, to run until December. Negotiations will last until March 2013, leading to an analysis of final offers in July. The delegation contract will be awarded in September 2013.

If the Region were to select the Eurotunnel offer, that would mark a turning point in the management of the port of Calais, and of all French commercial ports. Until now, all ports, where large sea ports or regional ports, have been managed by a public or para-public entity.

In addition, that would give rise to an unusual form of collaboration between shipping services and rail services. However, the outline of that operation must be made clear in order to avoid any conflict of interest between the activities.

It is also important to note that the marina has been excluded from the call for tender. In 2014, management of the marina will be granted to a local administrator.

## STAFF TRAINING

---

Management of the port of Calais' human resources has greatly changed over the last few years. Professions change, and will need to do so even

more in order to meet the needs of the Port in 2015. The search for versatility is part of the strands being considered.

## THE PORT'S IMAGE

---

The port's image is also promoted through the port's direct representation within institutional and lobbying bodies. Thus, the port has been represented within the Dover

Port Consultative Committee, the I-Trans (CP5) competitiveness cluster, the Union des Ports de France, Club Log 59-62, Coastlink, and the BP2S (Short-Sea Promotion Bureau).

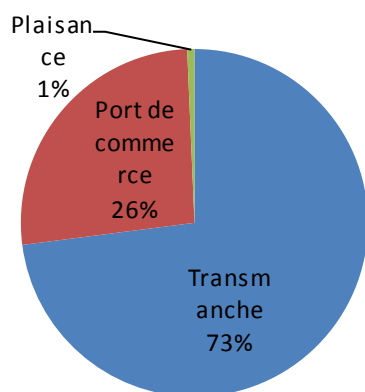
---

## THE OUTLOOK FOR DEVELOPMENT

### INVESTMENTS

---

Table 15: The port of Calais' spread of investments in 2011



The port of Calais' investments have been concentrated on cross-Channel activity (€6,720,000), as against €2,429,000 for the commercial port and €62,000 for the marina.

The port of Calais' investment strategy seeks above all to consolidate the position as leader in cross-Channel links. Nonetheless, the port is pursuing a policy of diversifying its traffic and the services offered at the port, with the intention of preserving the environment.

### DEVELOPMENT PLANS

---

Not content with accumulating specificities, the port of Calais presents another particularity. Calais is the most compact port in France in relation to its level of activity. Thus, it is the port complex that has the highest density of flows handled.

As its traffic increased, the port was able to innovate in order to handle greater volumes whilst maintaining the same area. In particular, it has sought to render its flows more fluid by installing a dynamic signalling system that guides vehicles from the motorway to their loading bays. Next,

it has constantly invested in its infrastructures to accelerate its processing rhythm.

Modal shift was an integral part of the consolidation and diversification strategies implemented by the port of Calais. Thus, the Eastern Dock was given a branch railway line in 2011, enabling new cars to be sent directly from factories by train. In parallel, the port is working on the development of Railway Motorway services, in

particular on basified strands where modal shift comes into its own.

The development of activities linked to marine renewable energies is not part of the port's diversification strategy. The lack of space in the port area prevents the installation of space-hungry activities. Furthermore, due to its extremely high levels of maritime traffic, the strait does not lend itself to offshore installations.

## CALAIS 2015

The “*Calais Port 2015*” project is an ambitious development plan for the port for the next 15 years. It aims at implementing the means to handle cross-Channel traffic with ever greater levels of efficiency, as well as positioning Calais as a massification point and central communications nexus in Europe. Nord-Pas-de-Calais Region, which is the project leader, has also made it part of the French Regional Transport Plan.

In order to increase the port's current capacity, it is planned to develop a new basin from the sea by building a dyke 3,000 m long. To the north of existing port installations, 100 hectares of additional landfill will be allocated to cross-Channel activity.

That work will be carried out in compliance with the environmental requirements of the site.

Thanks to the increase in its area and to the improvement in its nautical capacity, the port will thus be able to take up in full the challenge represented by new giant ferries.



Illustration 1: Artist's impression of the Calais 2015 project

## DEVELOPING THE LOGISTICS AREA

Flow density does not enable businesses to be set up directly within the port area, but the Calais area has land resources available.

With the constant increase in the number of heavy goods vehicles passing through Calais, both through the port and through the tunnel, the town can be positioned as a massification point. The port and the tunnel attract ever-greater levels of

flow, so there is an opportunity for Calais to no longer be just a transit point, but also a place where value can be added to flows.

Local authorities have set up an entity given over to that mission: Calais Promotion. The idea is to offer plots of land that have been developed and that have been provided with facilities, so as to encourage logisticians to set themselves up close to the port.



Set along the lower Seine, Haute-Normandie is the Paris metropolitan area's access corridor to the sea. The Paris basin is the leading consumer basin in France, with 20 million consumers. The area on its own accounts for the world's 4<sup>th</sup> highest GDP.

---

### HAUTE-NORMANDIE REGION

---

#### KEY FIGURES

- 4<sup>th</sup> largest industrial power in France, with 6,700 businesses
- 4<sup>th</sup> largest region for imports, accounting for 25.950 billion euros
- 6<sup>th</sup> largest region for exports, accounting for 22.617 billion euros
- 7% by value of French imports and exports

---

#### ECONOMY

Haute-Normandie is the natural port for Paris, as well as being a region that is oriented towards business and logistics.

However, Haute-Normandie maintains agricultural roots, with industry being concentrated along the banks of the Seine, in dense industrial / port areas. 30,000 workers and  $\frac{2}{3}$  of the territory are given over to agriculture. The region's agri-food industry is more linked to port activities than to local production; that is what makes it France's leading region for the production of chocolate.

One Haute-Normandie worker in five works in industry, whereas the French national average is 1 worker in 6.

Normandie specialises in petro-chemistry, the pharmaceutical industry, car manufacturing, and electronics. Two nuclear power stations, Paluel and Penly, produce 10% of France's electricity.

Haute-Normandie's logistics sector benefits from a strategic situation. It is France's leading region as regards the number of logistics-related jobs, with 74,100 jobs, i.e. 15.7% of total salaried employment<sup>8</sup>, according to a widened logistics approach. Thanks to its ports, the region handles the transit of 100 million tonnes of goods each year.

---

#### INFRASTRUCTURES

In order to ensure its role as a logistics corridor, Haute-Normandie Region has robust transport infrastructures available.

Its motorway infrastructures provide the region with fast connections to the Paris communications crossroads via the A13. The A29 motorway links the region to the entire western coastline

---

<sup>8</sup> Source: Logistique Seine Normandie

of mainland Europe, from Spain to the Nordic countries.

In addition, the region has an exceptional level of river infrastructure: the Seine. In addition to providing the port of Rouen with a direct link to the sea, the Seine provides interconnections between the ports of Le Havre, Rouen, and Paris with all the multimodal terminals set along its course.

Finally, the railway line from Le Havre to Paris is one of the most used in France. It will soon be joined by a second line for goods trains; that line is currently being modernised. A new high-speed line is also being studied.

However, what characterises the region the most is its maritime façade of the first rank. Taken together, the ports of Le Havre, Rouen, and Paris make up the 4<sup>th</sup> largest port complex in Europe, accounting for 130 million tonnes of sea and river traffic. The Seine Axis is also:

- the leading port for France's overseas trade
- Europe's leading port for bulk cargo
- Europe's leading port for cereal exports
- France's leading port for energy supplies.

Map 3: Location of the ports of Haute-Normandie, and gross tonnages in 2011

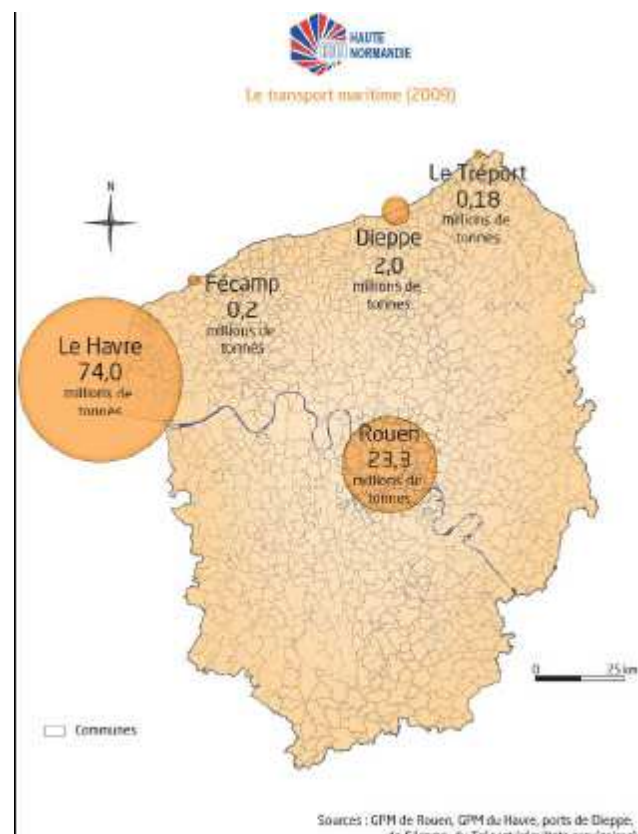
Since 2011, the ports of Le Havre, Rouen and Paris have begun a unification process. In particular, they have set up a common marketing policy that enables them to attract new markets by acting as a single stakeholder. That grouping has a name: Haropa, for HARbour Of Paris, or HAVre ROUen PARis.

At first sight, it does not seem easy for other ports to co-exist close to such a grouping. However, the port of Dieppe manages to do so, whilst, at the same time, being integrated into the regional economy. Moreover, Dieppe has even developed strong links with the major ports of the Region.

Through the large sea port of Rouen, it works on developing the traffic in bulk cargo and bulky items. Through the large sea port of Le Havre, it has developed a concerted commercial policy in order to attract activities linked to marine renewable energies. It also works in conjunction with local Channel ports, for example in relation to pooling dredging operations.

In addition, the port of Dieppe profits from its geographical position along the Paris-London axis. Dieppe is just 1½ hours from the City of Light and 5 hours from the British capital, thanks to its cross-Channel link with Newhaven. Dieppe thus offers good penetration of the British market whilst remaining close to the Paris basin.

Added to that is its closeness to the large sea port of Le Havre, which offers regular shipping links with Asia.





For example, a product can be imported to Le Havre, sent to Dieppe in 1 hour, processed, then despatched quickly to Paris or London.

Map 4: Location of the port of Dieppe



## THE TOWN OF DIEPPE

### PRESENTATION

Dieppe, called “the town with four ports”, lies 170 km from Paris. Its historic activities were ship building and the textile industry, neither of which now exists. Dieppe is the closest marina to Paris.

### ECONOMIC FABRIC

The Dieppe economy is characterised by the significance of industry, in particular the metallurgical sector. Key economic sectors are precision mechanics, car manufacturing (Renault Sport), agri-foods (Nestlé, Davigel), as well as electrical and electronic equipment.

<b>Agri-Food</b>	Nestlé France	358
<b>Agri-Food</b>	Lunor	200
<b>Automobile</b>	Renault Sport	330
<b>Industry</b>	Précision	305
	Components Industrie	
<b>Industry</b>	Toshiba TEC Europe	229
	Louis Dreyfus	286
<b>Transport</b>	Transmanche ferries	

Source: Dieppe Chamber of Commerce and Industry

Apart from the public sector, Dieppe industries are medium-sized. No business has more than 1,000 employees.

### MAJOR BUSINESSES

Table 16: Businesses with 100 employees in relation to the port's activities (2011)

Sectors of activity	Business	Employees
<b>Agri-Food</b>	Davigel	565

### THE ACTIVITIES OF THE PORT OF DIEPPE

With 1,250 direct jobs, Dieppe is France's leading port for scallops, the marina that is closest to Paris, and a commercial port. It was the leading banana port until the 1970s. The port

generates annual goods traffic of 1.7 million tonnes. It also manages a sea link with England that carries 250,000 passengers and 120,000 vehicles per year.

---

## THE ACTIVITIES OF THE COMMERCIAL PORT

In 2011, the port of Dieppe dealt with 1,218,561 gross tonnes of goods.

Cross-channel activity is predominant, but the port also handles other types of traffic.

---

## CROSS-CHANNEL LINKS

The firm Louis Dreyfus Transmanche Ferries (LDTF) provides 4 daily crossings from Dieppe to Newhaven, and the same number in the opposite direction. The vessels making the crossing can carry up to 54 lorries and trailers, between 35 and 320 cars depending on the amount of freight, and 600 passengers.

In 2011, that line carried 1,218,561 tonnes of freight, 37,781 lorries, 2,607 unaccompanied trailers, and 258,342 passengers across the Channel.

The results of that line are the fruit of the will of local stakeholders who wish to see the link between Dieppe and England maintained – for that sea link goes back a long way. In 1999, the private operator P&O quite simply decided to withdraw its services. What remained was just a seasonal service running from March to September and reserved for foot passengers.

The port's traffic collapsed, imperilling its very existing. The port's economic impact is assessed at 1,200 jobs, and its spin-offs at 50 million euros per year. Local authorities replaced the private sector to re-establish and develop the cross-Channel link. The current legal set-up of the line bears witness to that strategy.

On the French side, the port of Dieppe has been owned by Haute-Normandie Region since the 2007 law on

decentralisation. Its operation is delegated to another public body, the Syndicat Mixte du Port de Dieppe (SMPD), of which the Region holds a 73% share.

When service resumed in 2001, that was done under the Transmanche Ferries brand, operated by the Syndicat Mixte de Promotion de l'Activité Transmanche (SMPAT). The majority share in that entity is held by Seine-Maritime General Council, which also holds 15% of the SMPD. Since 2007, the operation of the line has been the subject of a public-service delegation granted to Louis Dreyfus Transmanche Ferries, which is owned by the shipping firm Louis Dreyfus Associés. However, the vessels operated, the “Côte d’Albâtre” and the “Seven Sisters” remain the property of the SMPAT.

In order to guarantee the durability of the cross-Channel service, Seine-Maritime *département* had to extend its investments outside France. From that time, it acquired a 75% share in Newhaven Port & Properties, Ltd. Seine-Maritime General Council thus took control of a private British facility: the English port of Newhaven.

Dieppe's cross-Channel offering is well in line with the expectations of road hauliers. The frequency of the link offers sufficient flexibility in transport organisation. Moreover, the

timings and duration of crossings – which are 4 hours long – allows for fast links. In addition, the port complies with the latest international

safety standards. That, coupled with geographical position, makes the port of Dieppe an effective crossing point to England.

## GOOD TRAFFIC FLOWS

---

Cross-channel activity represents 74.6% of the port's total activity, but the latter has also diversified into handling other flows.

The port is a transit point for cereal products (colza, cattle cakes, and oils), wood, shredded tyres, scrap metal, sea gravel, sand, and gravel. Those goods are handled in bulk as well as in big bags and containers. Port infrastructures also enable bulky items to be handled.

Between 2010 and 2011, the tonnage of Dieppe's commercial port fell by 34.4%. That sharp fall was caused by a 91% fall in imports, and a 34.4% fall in sea gravel.

Sea gravel is material extracted from the sea floor and used in construction

and public works. In particular, sea gravel is used to make concrete and asphalt cover for roads. Sea gravel is an alternative that is more respectful of the environment than material extracted from the beds of water courses.

GIE Graves de Mer – a subsidiary of the Vinci Group – exploits that resource from its base in the port of Dieppe. To that end, the business occupies a site covering 5 ha in the outer harbour, in order to discharge material harvested by offshore dredging barges. Materials produced in that way could be used to build wind farms. That would be a local and environmental solution. The use of local materials reduces unnecessary transport, and is virtuous for the local economy.

---

## THE OTHER ACTIVITIES OF THE PORT OF DIEPPE

### SAILING

---

Dieppe marina has 900 berths and is accessible 24 hours a day, 7 days a week, without any tidal restrictions. In addition to anchorage, it offers a varied range of services to pleasure sailors, such as a fuel station, wireless internet access, and raising gear that can handle all types of vessels. In addition, it is the marina that is closest to Paris, being just 150 km from the capital.

In 2010, the port was a prize-winner amongst exemplary marinas, thanks to an innovative development project that is a first in France. It consists in converting a facility that has become superfluous and putting it to new use.

Infrastructure obsolescence is a problem that affects several ports. A facility built several decades ago, perhaps even a century ago, no longer meets the characteristics required in our time. Thus, the facility becomes unusable, but it continues to occupy

harbour space. If it cannot be put to another use, the cost of demolishing it is prohibitive. In consequence, it is not rare, on the one hand, for ports to need more room to develop their activities, and, on the other hand, for ports to own unusable port wasteland.

A form of dry dock is a typical example of a wasteland facility. A dry dock is a basin that enables vessels to be berthed dry for maintenance. The vessel is floated into the dock, then a watertight door seals off access. Water is then pumped out to allow work to be done on the hull of the vessel. In most French ports, those installations are no longer used, for two reasons. On the one hand, vessels have not stopped growing in size, making most docks unsuitable. On the other hand, lifting cranes allow work to be done more effectively on small vessels, such as fishing vessels or pleasure boats. The vessel is removed directly from the water using lifting equipment, and it is laid on a flat surface. Contrary to dry docks, cranes enable several vessels to undergo maintenance work simultaneously. In addition, they are flexible equipment providers that can be applied to other functions.

The port of Dieppe was able to take up that challenge by transforming an old dry dock into a dry port able to take 300 vessels. That transformation allowed part of the port's wasteland to be re-appropriated, whilst conserving the historic character of the site. The investment is a powerful lever for developing the nautical sector and boosting the attractiveness of the Côte d'Albâtre.

By giving fresh value to an obsolete facility, the tool will enable more pleasure boaters to be handled all through the year, creating value to the profit of the local economy.

Furthermore, pleasure boating is an asset for tourism-related events and development. Dieppe is the leading stopover port for pleasure boaters in Haute-Normandie. Its infrastructures handle on average 3,500 vessels a year. In 2006, that transitory clientele was made up mainly of Dutch (40%), British (18%), and Belgian (16%) people. Based on that finding, the port developed premises close to the dry port for businesses that develop services activities for pleasure boating and tourism.

## FISHING

---

Dieppe is France's leading port for scallops, as well as being the leading fishing port in Haute-Normandie. With a fleet of over shell-fishing vessels, trawlers, and gillnet fishing vessels, the port lands over 3,000 tonnes of halieutic resources each year. Production in 2011 stood at 3 493 tonnes, which is an increase of 15.7% over 2010.

The port's investment policy in relation to fishing is an ongoing one. Thus, the port has set up a fishing technical area with lifting equipment rated to 400 tonnes. That facility offers ship-repair businesses the means to grow. Moreover, the concessionaire has modernised the direct sales area used by fisherfolk.

In the port, high-quality infrastructures support the fishing sector by improving

processing capacity. In particular, those infrastructures include a refrigerated covered market occupying 870 m<sup>2</sup>. Auctions are computerised

and linked to auctioneers working in Fécamp.

## GOVERNANCE

Since the 2007 law on decentralisation, the port has been owned by Haute-Normandie Region.

Before that date, the Dieppe Chamber of Commerce and Industry was the port concessionaire. Since that date, the port has been operated directly by the Syndicat Mixte du Port de Dieppe (SMPD). That company is in turn controlled by Haute-Normandie Region, which holds a 73% stake in it. Other local authorities also have holdings in SMPD: the *département* holds 5% and Dieppe Maritime, the

Dieppe urban area, holds 4%. The chairperson of Haute-Normandie Regional Council, Alain Le Vern, is also the director of SMPD. The port of Dieppe is the leading public investor in Dieppe.

## HUMAN RESOURCES

Each year, the port of Dieppe spends 4.8 million euros on salaries for its 115 officials. It has a significant training programme: over 100,000 euros in 2008 for the crane operator, heavy goods vehicles, and management programme.

## THE OUTLOOK FOR DEVELOPMENT

### INVESTMENT POLICY

The port of Dieppe maintains a sustained investment policy that enables it to consolidate and develop its activities.

Over the last three years, the port has invested €6,338,000 in the cross-Channel activity, €8,650,000 in pleasure boating, and €10,420,000 in the fishing sector.

Table 17: The port of Dieppe's investments linked to cross-Channel activities

Investment	Amount	Benefits
<b>Upgrading to ISPS standards</b>	€988,000	Reinforcing port security and the reliability of the link with Great Britain
<b>Ramp safety</b>	€1,450,000	Better service for users of the cross-Channel link
<b>Berthing vessels</b>	€1,100,000	Improved ferry berthing conditions
<b>Re-organising the site and cross-Channel reception arrangements</b>	€2,800,000	Enlarging the harbour station and improving reception arrangements for passengers
<b>TOTAL</b>	<b>€6,338,000</b>	

In addition, the port is equipped with the AP+ system. According to Alain Le Vern, the system enables Dieppe's position as a European port to be confirmed. The AP+ system will

enable administrative, commercial, and operational procedures between Dieppe stakeholders to be made more fluid, in particular on the cross-Channel link.

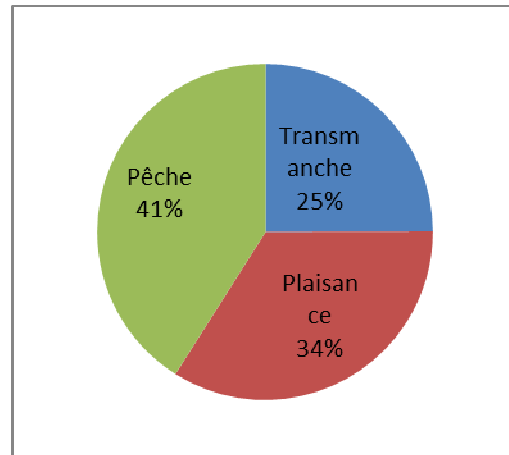
**Table 18: The port of Dieppe's investments linked to pleasure boating**

Investment	Amount	Benefits
<b>Creating berths and pontoons</b>	€1,000,000	Additional berths and new pontoons have been installed in order to meet the expectations of pleasure boaters and to facilitate access to tourism activities relating to sea trips and fishing at sea
<b>Creating a dry port</b>	€5,300,000	Storing over 300 motor vessels and having on site all the services needed for vessel maintenance
<b>Renovating the Ango Building</b>	€2,350,000	Enhancing the region's tourism activity
<b>TOTAL</b>	<b>€8,650,000</b>	

**Table 19: The port of Dieppe's investments linked to fishing**

Investment	Amount	Benefits
<b>Replacing the lock gate of the fishing basin</b>	€1,100,000	Automating the lock and making the basin safe
<b>Setting up lifting gear to land sea products</b>	€100,000	Improving working conditions for seafaring fisherfolk
<b>Creating a fishing pontoon</b>	€480,000	Improving working conditions for seafaring fisherfolk
<b>Creating a fishing technical area</b>	€6,800,000	Improved compliance with environmental requirements Allows fishing vessels to undergo maintenance in the port.
<b>Upgrading fishing installations</b>	€1,000,000	Improved seawater quality
<b>Waste collection</b>	€100,000	Recovering and treating waste water
<b>Creating a direct sales area for fishing professionals</b>	€840,000	Showcasing the fishing activity
<b>TOTAL</b>	<b>€10,420,000</b>	

Graph 15: Distribution of the port of Dieppe's investments



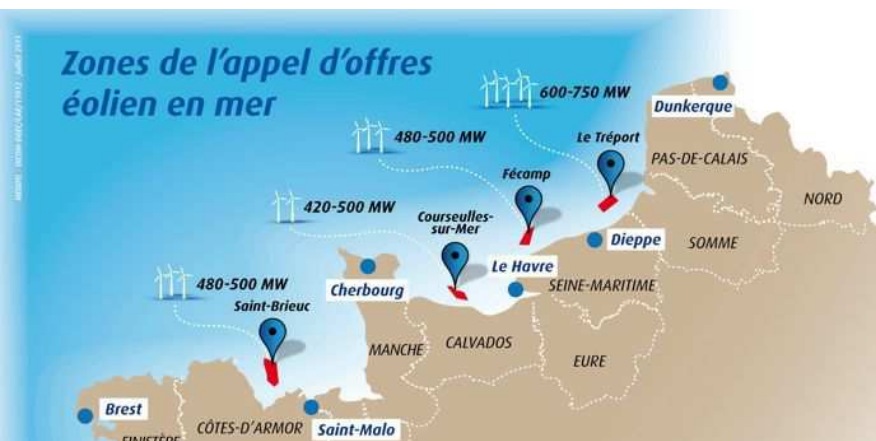
## DIVERSIFICATION IN THE MAINTENANCE OF WIND FARMS

As a commitment from the *Grenelle* on the Environment, France has set itself the aim of having renewable energies produce 23% of energy consumed by 2020. Thus, 9 years from now, the share of renewable energies should double.

To reach that goal, in 2011, the French State launched a call for tender for the construction of 5 offshore wind farms. Four of those ports are located in the Channel arc, once again emphasising the importance of that area.

the wind farm was not selected at a first call for tender, the project was re-launched in September 2012 by the Prime Minister. The second, Parc des Deux Côtes, is set off Le Tréport, with plans for 100 wind turbines to be installed.

Offshore wind farms represent a major economic challenge for coastal regions, one that is being rolled out in two phases. Initially, the installation of wind farms requires specialist businesses to be set up on site (turbine manufacturer, specialist in undersea foundations, industrialists working in metal construction) and generates a high level of activity for local businesses. Furthermore, large numbers of specialist workers will have to spend time on site, which boosts even more the impact on the local economy. Although the economic spin-offs of the construction phase of wind farms are significant, they only



Map 5: Location of planned wind farms in France in 2013

That pro-active approach by the central authority is a development opportunity for Dieppe and its port, since they are set close to two of the wind farms.

The first, Parc des Hautes Falaises, is set off Fécamp, with plans for 150 wind turbines to be installed. Although

last for as long as the worksite does. A second phase consists of exploiting wind turbines. Although the economic spin-offs are less intense than for construction, they last for a much longer period, of the order of about thirty years.

From that point, ports and local communities are positioned on that promising market. Nonetheless, taking up the challenge presented by wind power requires port infrastructures that are adapted to giant-sized wind turbines. By way of example, an Asltom Haliade 150 wind turbine, once installed, measures over 100 metres, with its blades covering a diameter of 150 metres. In consequence, wharves must be able to support heavy loads as well as the handling of long items of equipment. Nonetheless, in most cases, maintenance activities are less demanding in terms of port infrastructures.

The port of Dieppe's position on marine renewable energies underlines the benefits that ports derive from working together with other ports in the Channel area. The port of Dieppe plans to pool its efforts with a large sea port, the port of Le Havre. The large port would handle most construction operations, as well as heavy-maintenance operations.

The port of Dieppe is the local asset for operations relating to the exploitation and maintenance of wind

turbines, as well as being the area that is best suited to handling service vessels and a portion of materials during the construction phase. It is ideally situated on the Côte d'Albâtre to optimise intervention costs.

In that regard, it could accommodate six service vessels that carry out operational maintenance on wind turbines. That positioning will require new facilities at the heart of the port of Dieppe. In particular, a second berth would have to be built in the outer harbour, which is not subject to tidal constraints, in order to enable service vessels to intervene 24 hours a day. Equally, other infrastructures will be renewed in order to meet the requirements of wind-turbine exploitation.

That work will involve the port's finances to a large degree, up to 4 million euros.

Initially, those new infrastructures were also expected to respond to another project linked to energy. The French State planned the construction of a new-generation EPR nuclear reactor on the site of Penly power station. That project called for 5 years' work; it would have provided 2,000 jobs during the construction phase, followed by 300 long-term jobs. However, the government's priorities having changed, the new Minister for Ecology, Delphine Batho, stated her opposition to the project.



---

## CLUSTERS IN THE DIEPPE REGION

The Dieppe region is at the forefront of showcasing its businesses and its skills. It brings together no less than 3 clusters that have direct links to the port's activity.

The first, Vialog, brings together businesses from the fields of logistics and of industrial sub-contracting for cross-Channel transport. The second, Dieppe Méca Énergies, focuses on the mechanical and energy sectors.

The third, Dieppe Navals, brings together stakeholders in the field of ship repairs and of maintenance of offshore wind farms.

Thus, local businesses group together to offer a full range of industrial and logistics services. The aim is to respond to large structuring projects in the region: installing offshore wind farms, maintaining nuclear installations.

---

## VIALOG

Vialog was set up in 2009. It is a cluster of Dieppe businesses specialising in industrial sub-contracting, transport, and logistics.

The cluster brings together 14 members drawn from three universes: integrators, sub-contractors, and logisticians.

Integrators are businesses with a vast range of skills in industrial matters. For example, they include an Alcatel-Lucent electronics and telecommunications skill centre, and the only Toshiba-Tec Group industrial entity in Europe.

The strength of that cluster is to be able to offer an extended variety of services, with industrial sub-contracting and cutting-edge logistics services. The aim is to add value to

industrial and logistics flows passing through Vialog's stakeholders.

Together, they constitute an industrial sub-contracting chain that is capable of responding to the current major changes in the field of logistics.

The advantage for the client consists of benefiting from the strength of a business network whilst having a single contact person.

Thus, the services offered by Vialog enable a logistics chain to be rationalised and its cost limited, whilst value is added to the process. By enabling a massification of flows and delayed differentiation between products, the offer reduces the carbon footprint of supply solutions.

---

## DIEPPE MÉCA ENERGIES

Since 2009, Dieppe Méca Énergies has brought together over 115 businesses with over 6,000

employees and with a combined turnover of over 580 million euros. The cluster's core business is industrial

sub-contracting: metallurgy, mechanics, and electronics, as well as construction and public works. Thus, the cluster is able to provide industrial solutions, products, and services with a high degree of added value.

The skills and know-how developed by Dieppe Méca Énergies apply to transport (air, automobile, rail), energy

production (nuclear, wind, photovoltaic), as well as health.

The cluster is therefore perfectly suited to the port's ambition to become a logistics platform for maintaining offshore wind farms.

## DIEPPE NAVALS

---

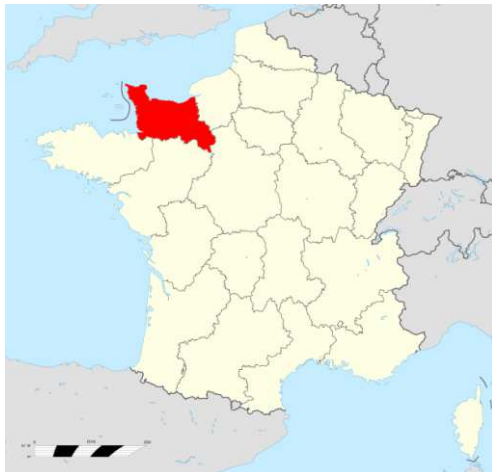
The significant levels of investment committed by the Syndicat Mixte du Port de Dieppe in order to stimulate cross-Channel activities, freight, fishing, and sailing have led local stakeholders to reconsider their positioning. Dieppe Navals emerged from that thought process, and brings together skills in the service of the sea.

Set up in June 2011, the cluster set itself the objectives of promoting local skills in activities related to maritime matters, setting up synergies between stakeholders in the sector, and making grouped service offers. Dieppe Navals

focuses on all the port's activities: fishing, pleasure boating, vessels, and maintenance at sea.

Dieppe clusters are an illustration of the logistics centred on the port. Synergies developed between the port of Dieppe and businesses that have been set up in its hinterland enable local skills to be showcased, as well as a service offer to be made that is robust and consistent. In addition, that approach enables value to be added to flows transiting through the port, value to be created locally, and solutions to be offered to minimise the impact of transport operations on the environment.

BASSE-NORMANDIE REGION



Map 6: Location of Basse-Normandie Region

Basse-Normandie Region enjoys a central position in the Channel area. In terms of mainland Europe, it is immediately adjacent to the Seine Axis, one of the major logistics corridors in North-Western Europe. It is at a crossroads between the motorway that leads in two hours to the Paris region and the one linking European estuaries. In addition, the two major ports of the region, Caen-Ouistreham and Cherbourg-Octeville, are both close to the large sea port of Le Havre.



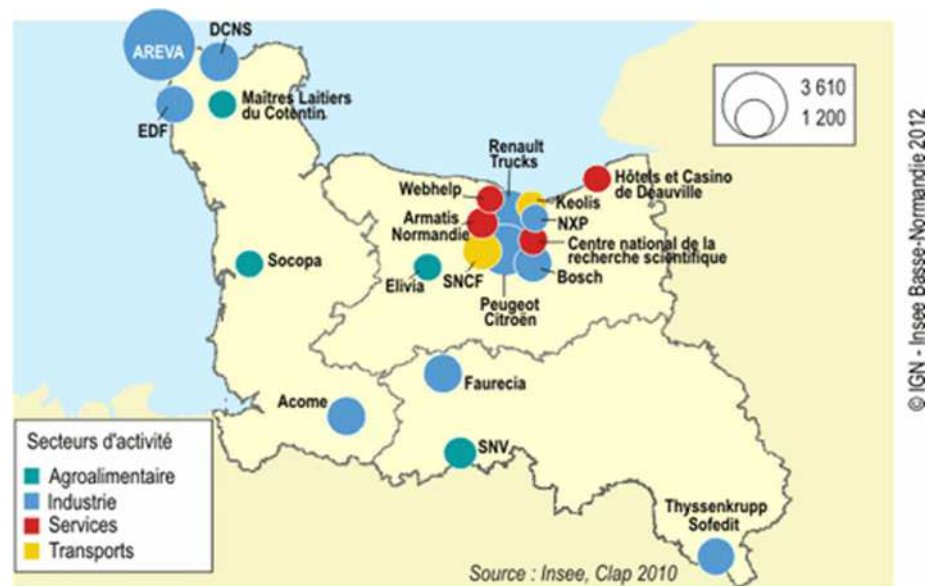
Map 7: Location of Basse-Normandie

In maritime terms, the two ports mentioned are well positioned to provide links to the British Isles, whether to the United Kingdom or to Ireland. It was not by chance that Calvados enabled William the Conqueror to dominate England, and allowed the Allies to liberate Europe. In addition, the region profits from transcontinental flows transiting via the Channel.

more or less direct concern to almost 7,000 businesses.

The region is home to several jewels in the crown of industry. Cotentin *département* is at the forefront of the sector of nuclear production of electricity. For its part, Calvados retains a strong activity linked to the car industry.

Map 8: location of the 20 leading businesses of Basse-Normandie Region



In 2010, Basse-Normandie's gross domestic product reached 34.4 billion euros, i.e. 2.3% of national wealth produced. The region is characterised by specialisation in industry, in particular agri-foods.

The sector accounts for 23% of jobs in the industrial sector, and constitutes one of the region's major assets.

Tourism is the third largest sector of activity in the region, behind construction and public works and agriculture. In Manche *département*, its annual turnover was estimated at 475 million euros en 2005, including between 20% and 25% for sailing. It provides 12,000 direct or indirect jobs, including 9,300 salaried jobs, and is of

## LES PORTS NORMANDS ASSOCIÉS

### PRESENTATION OF THE PORT OF CAEN-OUISTREHAM

Set on the Baie de Seine, the port of Caen-Ouistreham is the 10<sup>th</sup> largest in France, thanks to annual traffic of 3.2 million tonnes and 936,000 passengers. Caen presents a characteristic that is unique in this

study: some of its installations are 15 km from the sea. Calvados's main port is organised as a string of terminals along the 15-km channel that links Caen to the sea.



Carte 9: Location of terminals of the port of Caen-Ouistreham

The terminal of Ouistreham is free from tidal constraints, and handles a significant level of cross-Channel ferry traffic. The port's other facilities are accessible through a double lock.

Le Mauresquier business park is a logistics base of the first rank for a transporter using the ferry terminal.

The terminal of Blainville handles very varied traffic, of which the most significant is made up of cereals, wood, scrap metal, containers,

general goods, and heavy items. Its industrial-port area covers 40 hectares, and is a site for car and logistics industries.

Hérouville Basin also handles general goods. It also includes a multibulk area with specialist installations for handling fertilisers.

Finally, the New Basin, which is set immediately next to Caen town centre, is used to receive cruise ships, prestige vessels, yachts, and other racing vessels.

---

## PRESENTATION OF THE PORT OF CHERBOURG-OCTEVILLE

The port of Cherbourg-Octeville is provided with remarkable infrastructures, such as the largest artificial harbour in Europe. It offers exceptional nautical facilities with round-the-clock access in all weathers, including for the largest vessels.

With a strategic position on the Channel, Cherbourg is the only port studied that has a military activity.

Moreover, the port is home to DCNS, one of the world's leading submarine builders. The Cotentin also has other leading-edge technologies. In the nuclear field, the *département* has the largest factory for re-processing fissile fuel, as well as a power plant of the first rank that includes a new-generation EPR reactor.

---

## A UNIQUE PORT AUTHORITY

The ports of Caen-Ouistreham and Cherbourg-Octeville, taken in isolation, present a number of singularities, but their combination is a veritable one-off in the Channel. Since 1 January 2007, the management of ports of French national interest has been transferred from the Centre to the regions.

Local authorities in Basse-Normandie opted for a unique mode of governance. They set up a mixed syndicate, Ports Normands Associés (PNA), the owner and administrator of two ports. The infrastructures of Caen-Ouistreham and of Cherbourg, almost 130 km apart, are thus provided with a single port authority. Basse-Normandie Region as well as La Manche and Calvados *départements* came together in a dedicated governance structure to stimulate the performance of the two ports and to rise to their development challenges.

Taken as a post complex, PNA represents a major port facility in

France, with traffic of over 4.7 million tonnes of goods and 1.5 million passengers.

With multimodal access linked to European traffic axes, PNA offers port capacity that enables the management of extremely varied levels of traffic and types of activity. Thanks to a single authority, the two ports draw significant strength from their complementarity.

PNA provides management and development for the port area, guarantees the safety of nautical access, and defines a policy of sustainable development for the two ports.

PNA employs a hundred people spread evenly across the two ports.

PNA, as delegating authority for its public-service missions, chooses the delegates and concessionaires who conduct operations and exploit equipment at the terminals of the ports of Caen-Ouistreham and Cherbourg.

## MANAGING THE PORT OF CAEN

---

Caen port installations are covered by three concessions. The marinas are owned by the towns of Caen and Ouistreham, and are exploited by the Chamber of Commerce and Industry of Caen (CCI Caen). The concession of the commercial port has also been awarded to CCI Caen, to run until 2045.

The CCI is the administrator of the port of Caen-Ouistreham. It carries out a variety of missions, e.g.:

- maintaining and exploiting public equipment
- developing and maintaining the 153 hectares of the concession (roads, networks, landfills, etc.) and 14 hectares of buildings
- making investments in superstructures
- the availability of the lifting means

To that end, CCI Caen currently employs 46 people, including 12 seafarers.

## MANAGING THE PORT OF CHERBOURG

---

In 2008, the concession for the port of Cherbourg-Octeville was nearing its end, so PNA had to initiate a fresh procedure for public-service delegation for managing the port. The contract was awarded to a consortium made up of CCI Cherbourg-Cotentin and the Marseilles-based firm Louis-Dreyfus Armateurs. Since then, the two associates have set up a private company in which they are equal shareholders: SAS port de Cherbourg.

For the first time in France, a private company is in charge of managing a commercial port. It holds the concession for twelve years in respect of the western part of the port, which includes cross-Channel activities, and three years for the eastern part, which is given over to goods traffic. All employees working at the port were transferred to the new company.

A second company, Cherbourg Terminal Vrac, SAS, was also set up

in 2010 in order to promote the port's bulk-cargo activity. It brings together the CCI of Cherbourg and PNA.

---

## THE ACTIVITIES OF PORTS NORMANDS ASSOCIÉS

---

### FISHING

The ports of Caen-Ouistreham and Cherbourg have a fishing sector that occupies a remarkable place in the local economy by generating direct and indirect employment.

At Caen-Ouistreham, traditional coastal fishing produces an estimation of 3,000 tonnes of halieutic resources each year. Its fleet is made up of about fifteen vessels, including 11 trawlers and 5 coastal-fishing dories, and employs 35 seafarers. Products from fishing are sold directly on the quayside, or at a 24-stall Fish Market

that enables seafarer-fisherfolk to dispose of their goods.

Cherbourg fishing port has a fleet of 33 vessels and employs 110 seafarers, all based around the Centre de Marée, the hub for selling products derived from fishing.

Intended mainly for direct consumption, those products also supply agri-food industries specialising in the transformation of sea products.

### SAILING

With regular growth, sailing represents a buoyant market. With its three marinas, PNA occupies a natural position in the market.

Holder of the EU Blue Flag, the Cherbourg port of Chantereyne is the leading port on the Channel coast. It current includes 1,560 floating berths, and in 2011, it logged 8,000 passages and 18,000 overnight stops. A significant plan to extend the port will enable it to accommodate a further 600 vessels. For a number of years, it has been the focus for leading nautical events like the Figaro newspaper's Solitaire and the Tall Ships Race.

Linked to the sea by a 14-km canal, Caen marina – which has 108 berths – gives direct access to the town centre.

The port of Ouistreham is accessible free of tidal constraints. It has 600 berths, and should see its capacity increase. Developed close to a business area with service providers specialising in nautical requirements (ship chandlers, fittings suppliers, ship-repair companies, boatyards, etc.), it offers a number of facilities. For the 13<sup>th</sup> year in succession, Ouistreham marina was awarded the European Blue Flag.



## CRUISE-SHIP STOPOVERS

The ports of Caen-Ouistreham and Cherbourg both have the potential to handle cruise liners. In that regard, cruising contributes to diversifying and enriching the maritime activities of the two ports.

Table 20: Cruise ships calling at PNA ports in 2011

Port	Cruise ships
Cherbourg	93,882
Caen	1,960
Total PNA	95,842

That fairly recent, seasonal activity has tended to increase over the last few years. The tourist attractions and

the historical renown of the Region, coupled with the development of that form of tourism, have encouraged tour operators to organise excursions and itineraries in Basse-Normandie.

In Cherbourg, facilities and investments have been applied to the cruise terminal of the transatlantic port in order to put the cruising activity on a permanent footing and intensify it, as well as to continue to receive ever bigger passenger vessels.

The port of Cherbourg alone handles about 50% of cruise passengers welcomed by studied ports.

## CROSS-CHANNEL ACTIVITY

With traffic of almost 5.5 million tonnes of goods and 17 million passengers in 2011, PNA ports are the leading cross-Channel link to the west of the Strait, and offer efficient alternative itineraries for ro-ro exchanges between mainland Europe and the British Isles.

Table 21: Caen and Cherbourg cross-Channel passengers in 2011

Port	Cross-Channel passengers
Caen	951,758
Cherbourg	606,131
Total PNA	1,557,889

Several maritime operators provide daily ferry links between Caen-Ouistreham and Cherbourg on the one hand, and the United Kingdom and Ireland on the other hand.

From the terminal at Ouistreham, the firm Brittany Ferries provides four return crossings a day to Portsmouth. Extensions that have been built will enable the terminal to further increase its handling capacity. Each year, that line provides crossing facilities for nearly one million passengers as well as 120,000 lorries. Other regular lines exist with Poole for the United Kingdom and Rosslare for Ireland.

The port of Cherbourg-Octeville serves the same destinations as Caen-Ouistreham in the British Isles. However, Cherbourg is set at the end of the Cotentin Peninsula, so it offers shorter crossing times.

In 2011, the ports of Caen-Ouistreham and Cherbourg-Octeville captured 50% of the cross-Channel passenger traffic which does not pass through the Strait of Pas-de-Calais.

## GOODS TRAFFIC FLOWS

Table 22: Tonnages of the ports of Caen-Ouistreham and Cherbourg-Octeville in 2011

		gross tonnages			
		liquid bulk	solid bulk	general goods	total
Caen	<i>In</i>	42,290	230,523	1,249,295	1,522,108
	<i>Out</i>	0	391,060	1,669,602	2,060,662
	<b>Total</b>	<b>42,290</b>	<b>621,583</b>	<b>2,918,897</b>	<b>3,582,770</b>
Cherbourg	<i>In</i>	0	133,233	692,774	826,007
	<i>Out</i>	0	37,357	922,197	959,554
	<b>Total</b>	<b>0</b>	<b>170,590</b>	<b>1,614,971</b>	<b>1,785,561</b>
<b>TOTAL PNA</b>	<b>Total</b>	<b>42,290</b>	<b>792,173</b>	<b>4,533,868</b>	<b>5,368,331</b>

Port	Cereals	Animal feed	Coal	Ore	Fertiliser	Other	Total
<b>Caen</b>	298,163	14,979	30,729	69,412	90,270	118,030	<b>621,583</b>
<b>Cherbourg</b>	0	0	65,703	9,295	0	95,592	<b>170,590</b>
<b>Total PNA</b>	<b>298,163</b>	<b>14,979</b>	<b>96,432</b>	<b>78,707</b>	<b>90,270</b>	<b>213,622</b>	<b>792,173</b>

Table 23: Solid bulk cargo handled at Caen and Cherbourg in 2011

Table 24: General goods traffic flows at the ports of Caen and Cherbourg in 2011

Port	Containers	Ro-Ro	Other	Total
<b>Caen</b>	181	2,860,347	58,369	<b>2,918,897</b>
<b>Cherbourg</b>	4,797	1,549,075	61,099	<b>1,614,971</b>
<b>Total PNA</b>	<b>4,978</b>	<b>4,409,422</b>	<b>119,468</b>	<b>4,533,868</b>

PNA processed all containers handled by regional ports in the Channel area in 2011.

## THE MAIN FLOWS OF THE PORT OF CAEN-OUISTREHAM

---

Setting aside cross-Channel activity, the port of Caen-Ouistreham handles wood imports as well as exports of scrap metal and of products required by the agricultural sector.

### WOOD

---

The port of Caen is ranked 4<sup>th</sup> in France for wood imports, and it is one of the main importers of exotic woods.

### SCRAP METAL

---

Scrap-metal exports to Southern Europe and North Africa account over 10% by volume of the port's overall

traffic. Those materials are collected from industries and the general public in Haute-Normandie and Basse-Normandie.

### CEREALS AND FERTILISERS

---

The port of Caen-Ouistreham handles 89% of the cereal traffic of the ports studied. In that regard, it is France's number 2 port for that activity, after the large sea port of Rouen.

## THE MAIN FLOWS OF THE PORT OF CHERBOURG-OCTEVILLE

---

The port of Cherbourg-Octeville handles a variety of traffic, such as materials obtained from local quarries (sand and gravel). Those materials are mainly intended for export to the United Kingdom. Hazardous materials represent a regular form of traffic for the port. Like the port of Caen-Ouistreham, the port of La Pointe Cotentin also handles scrap-metal exports.

In addition to hazardous materials, one of the emblematic services offered by the port of Cherbourg is the handling of heavy items. The port draws its know-how from previous activities such as constructing and assembling jackets for offshore oil rigs. The port was able to retain that specificity, and regularly handles wind-turbine blades, modules for Flamanville EPR, as well as special boiler-making parts.

In addition, the port benefits from an elevator that allows vessels to be placed on a hard standing, and which is a unique tool. Thanks to its technical characteristics, the elevator is particularly aimed at high-speed vessels. That facility can lift loads of up to 4,500 tonnes, 32 metres wide and 90 metres long.

It should be noted that for 25 years, the port was Toyota's anchorage on the European mainland. Thanks to accommodating giant ro-ro vessels, the car manufacturer landed 80,000 each year at the port. The stoppage of that activity in 2000 had a negative impact on the port's results for a decade.

## CONTAINER TRAFFIC

Cherbourg was the only port studied that had a regular line that handles containers. In early 2013, the firm

Huelin Renouf stops the line in Cherbourg and the Channel Islands.

## DIVERSIFICATION STRANDS

### SHORT SEA SHIPPING BETWEEN CHERBOURG AND THE UNITED KINGDOM

With the setting up of the joint venture Cherbourg Terminal Vrac, SAS, the port's stakeholders aimed to make Cherbourg a port for breaking up bulk cargo intended for ports in Great Britain. In that sense, significant levels of investment have been made to

to accommodate vessels of 200,000 tonnes coming from South America. In consequence, coal is discharged at the ports of the Northern Range, then reloaded aboard small tramp vessels.

Cherbourg's strategy is simple: to profit from the port's privileged position. Set at the end of the Cotentin Peninsula, it is closer to the routes followed by vessels. Furthermore, its forward position in the Channel makes it the port that is closest to British ports. Thus, it is the first port that can be used by vessels arriving in the Channel.

The idea is to accommodate bulk "Capesize" carriers coming from South America. Those vessels will remain anchored outside the harbour, where a giant floating crane will trans-ship coal into barges. After the barges have been towed into port, the coal will be loaded on to tramp vessels adapted to the capacity of the English market.

That highly innovative offshore project enables a reduction in journey times for vessels passing through to supply Great Britain and optimise those vessel's routes, as well as reduce their fuel consumption, thus reducing their polluting emissions.



capture flows of coal.

Figure 2: LDA's forthcoming "Capesize" vessel<sup>9</sup>

Contrary to France, which has opted for nuclear energy, 70% English electricity product comes from coal-fired power stations. Currently, English coal supplies pass in huge volumes through Rotterdam and Terneuzen. English ports do not have the capacity

<sup>9</sup> Source: meretmarine.com

The Chamber of Commerce does not have sufficient financial resources, so it had to withdraw from the project.

That activity will henceforth be carried out only by LDA, which maintains the intention of developing it.

---

## MARINE RENEWABLE ENERGIES

For Basse-Normandie, offering a base to the marine renewable energies sector presents a considerable challenge in terms of jobs and

development. That is why PNA is leasing several projects involving the development and extension of its ports.

---

## BUILDING AND MAINTAINING OFFSHORE WIND FARMS

Set 120 km apart and offering tailored infrastructures, the ports of Ouistreham and Cherbourg allow Ports Normands Associés to make an end-to-end service offer in the field of wind energy, answering the needs of constructors as well as the needs of operators. Here again, PNA enjoys a decisive advantage based on the complementarity between its two ports.

The port of Caen-Ouistreham has a number of assets that position it as a facilities site during the construction phase of offshore wind farms, then during their operating phase:

- immediate proximity to Courseulles field (15 nautical miles)
- outer harbour always accessible
- large storage areas available
- several port services present (port safety and security, towage, ship maintenance and repairs, etc.)

In addition, the Caen urban area provides housing capacity and services that allow for the accommodation of teams that will work on building wind farms.

The port of Cherbourg constitutes a forward platform at the heart of the Channel, closest to the British coastline, and offering rare characteristics:

- round-the-clock access without going through a lock and with no clearance constraints
- thanks to the largest artificial harbour in Europe, the port can accommodate vessels over an area of 20 hectares, and offers a guaranteed constant draught of 14 metres
- wharves that are well suited to handling heavy items (15 tonnes / m<sup>2</sup>), with a planned extension of 220 metres
- 44 ha immediately available for development, with the possibility of a 35-ha extension.

With the large sea port of Le Havre, PNA enjoys the best resources in the Channel for accommodating and developing the offshore wind-turbine sector. For those reasons, PNA has been able to convince major names in the sector, e.g. EMF Alstom and WPD.

## DEVELOPING HYDROKINETIC TURBINES

Not content with having a land base with a privileged position for offshore wind farms, Cherbourg also has all the assets needed to develop a new technology that exploits marine renewable energies: hydrokinetics. To that end, the port combines two of its singularities.

Set a few cables' length from the port, Le Raz Blanchard (called the Race of Alderney in English) presents a passage that gives cause for concern to the most experienced mariners. It includes tens of shallows and one of the strongest currents in Europe.

Cherbourg is also a DCNS arsenal. DCNS has designed vessels for the French Navy since the 17<sup>th</sup> century. In Cherbourg, it builds – in conditions of the greatest secrecy – attack nuclear submarines and missile launchers, enjoying the respect of navies from around the world. With the intention of making the most of its cutting-edge skills, DCNS has also developed a prototype turbine tested off Paimpol, in Bretagne.

DCNS's plan is to set up a farm of one thousand hydrokinetic turbines in Le Raz Blanchard, thanks to the opening of a manufacturing site in Cherbourg. With about one thousand jobs planned and a production rate of about one hundred hydrokinetic turbines per year, that sector would offer a significant degree of stimulus to the economy of the region.

In 2010, DCNS launched a feasibility study of a 20-MW hydrokinetic-turbine farm at Le Raz Blanchard, in the Channel. The installation of the first

machines could be done from 2014-2015 onwards. In the long term, another field could be exploited in Bretagne: Le Fromveur, between the Molène archipelago and the Île d'Ouessant.



Figure 3: Prototype hydrokinetic turbine tested at Paimpol

In December 2012, Patrick Boissier, Chairperson and Managing Director of DCNS, and Laurent Beauvais, Chairperson of Basse-Normandie Region and Chairperson of Ports Normands Associés (PNA), signed a framework agreement. That agreement allocates areas to the port of Cherbourg to ensure the

development of hydrokinetic-turbine activity.

Mobilising Basse-Normandie local authorities, the town of Cherbourg,

Mache *département*, and the Region in conjunction with Ports Normands Associés, now enables a rapid response to be provided to the needs of industrialists in the sector.

---

## CREATING A SEA LINK BETWEEN CAEN AND LE HAVRE

As was set out in the foreword, the globalisation of worldwide exchanges of goods has gone hand-in-hand with the containerisation of goods. That dual change has led to massification of volumes within major ports: the gateways. Large ports have been able to invest massively to stay in the race, but regional ports have had to turn to more specialised markets.

For regional ports, that has led to some of their traditional traffic moving to other ports. For example, bananas imports using refrigerated vessels have completely disappeared, to be replaced by reefer containers.

For large ports, flow massification has gone hand-in-hand with an increased complexity in the management of port logistics. The large ports of mainland Europe are in increased competition, so they must meet in full measure the performance expectations required by their clients. To that end, the land-based discharging of containers has become a key factor for success.

Finally, the interests of large ports and of certain regional ports are once again converging. The former are seeking to capture new traffic that carries higher levels of added value than their traditional traffic, whilst the latter must render more flexible their links with their hinterland.

Partners in the Paris Seine Normandie Project, the port of Caen-Ouistreham

and the large sea port of Le Havre seek only to deepen their collaboration by seizing that opportunity.

For Caen-Ouistreham, that short sea link will enable it to be in sync with the new port game, position itself in a buoyant development niche, provide its activity with a growth engine, and – above all – respond to the expectations of stakeholders in local economic life.

In respect of logistics, that brings the Basse-Normandie basin closer to a major port, Le Havre, France's leading container port, and a port that accounts for 60% of that activity. Furthermore, given its large number of regular sea links, Haropa gives access to 300 ports around the world.

The project has been long awaited by regional businesses oriented towards the international scene, it is consistent with French and European intentions to favour intermodality, and it is essential for the long-term outlook of the port as well as being a structuring project for the entire regional logistics sector. It is also essential for the maintenance and development of jobs linked to the port's activity.

In Basse-Normandie, most import / export products that generate international flows are handled in containers. In the main, they cover the major industrial sectors in the region: agri-foods, automobile,

pharmaceuticals, industrial equipment, etc.

The challenges of that project for the Basse-Normandie Logistics Sector are to:

- contribute to establishing the activities of Basse-Normandie loaders (industry, distribution, business, etc.) by offering them a range of services that is different and that is a response to changes in the organisation of their international logistics patterns
- set up a massification point for containerised goods (which does not currently exist in the region) that opens up the possibility of complementary logistics activities that generate added value (container packing / unpacking, storage, preparation, assembly, distribution, etc.), new activities that will benefit regional stakeholders and boost existing activities at international level
- implement interport co-operation with the Large Sea Port of Le Havre from the perspective of complementarity, as well as technical and economic competitiveness.

Each year, 50,000 containers coming from Le Havre are used across the Caen urban area, and 80,000 across a

geographical area going up to Fougères.

PNA has decided to adapt its infrastructures by investing 1.5 million euros in them. The dedicated container terminal will cover 3.5 hectares, and will be operated by a consortium made up of the CCI as well as Sogemar, a subsidiary of Sogena, which already has a presence in Caen.

The shuttle will have a capacity of 200 TEU containers. It will provide three return journeys per week.

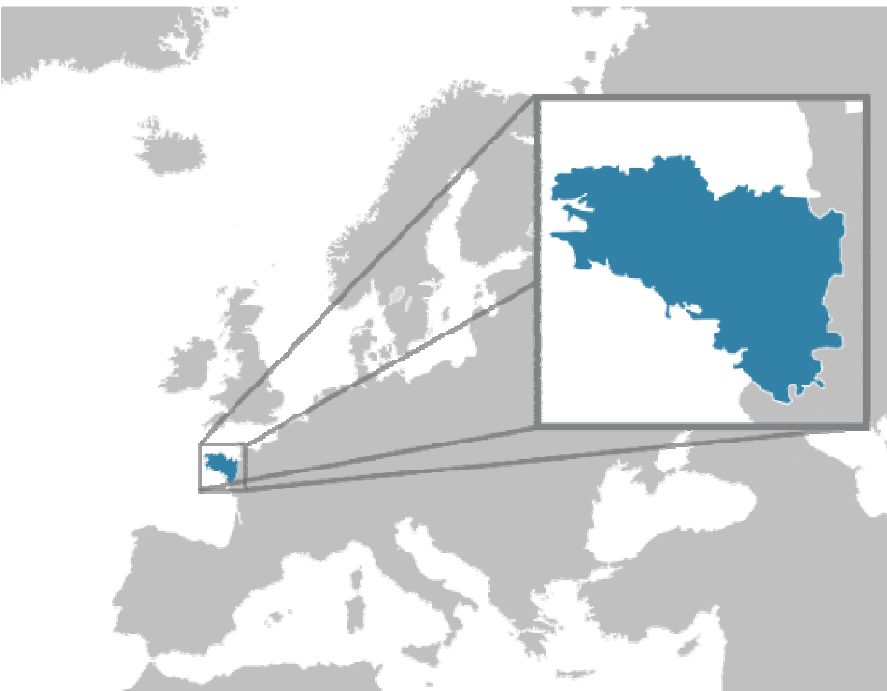
From the environmental point of view, the sea shuttle of the operator CFT should avoid having 10,000 heavy goods vehicles using the road between Caen and Le Havre.

The port of Caen-Ouistreham is a tool in the service of regional businesses. It is essential that it should become the leader of an offer that is tailored to the globalisation of exchanges in which the sea route is predominant.



## BRETON PORTS

**B**retagne is the westernmost region of mainland France: a peninsula between land and sea.



Map 10: Location of Bretagne in North-Western Europe

Bretagne has an indissoluble relationship with the sea. The region on its own accounts for 49% of the French coastline, and 75% of the coastline under study. That, taken together with its projection into the ocean, means that none of its communes lies more than 80 kilometres from the coast. That makes Bretagne a major region for sailing, and the leading region for fishing, accounting for 47% by volume of French production. In addition, a large number of its industrial activities and services have a direct outlet to the sea. Thus, ship building and ship

repairs represent the 4<sup>th</sup> largest industrial sector in Bretagne. In addition to its large numbers of fishing ports and marinas, the region has 5 commercial ports: Brest, Lorient, Roscoff, Saint-Brieuc, and Saint-Malo.

Bretagne retains its rural anchoring to the land. The leading agricultural region in France, it generates 12.6% of national agricultural production. It is the leading producer of vegetable and of dairy products, and it raises 50% of French pigs. In order to process its agricultural production, the region has a strong agri-food sector that represents 36% of Bretagne industry's added value, as against 13.55 nationally.

Bretagne also knows how to showcase its heritage through tourism-related activities. It is ranked 4<sup>th</sup> amongst the tourism regions of France, and employs 68,000 people.

In Bretagne more than elsewhere, commercial ports have the overarching mission of supporting the regional economy and of developing their traffic in good harmony – since arbitration must often be used to satisfy all the port's stakeholders as much as possible.

On the one hand, commercial ports are an essential link to the outside world for agriculture and industry. They provide those sectors with supplies of raw materials, then despatch products to areas of

consumption. On the other hand, those ports are on coasts that are under heavy pressure from property development linked to the development of tourism. Thus, ports respond to a twin challenge: within the port area, they must set up cohabitation between large commercial vessels, fishing vessels, and pleasure boats, the whole contained within a tourist area.

## BRETAGNE IN FIGURES

---

- Ranked 7<sup>th</sup> region in France for wealth production
- 2007 GDP of 82 billion euros, i.e. 4.4% of national wealth
- Ranked 13<sup>th</sup> region in France for exports, accounting for 2.4% of national exports, of which 68% go to the European Union
- The region accounts for 1.84% of French imports, of which 57.6% come from the European Union.

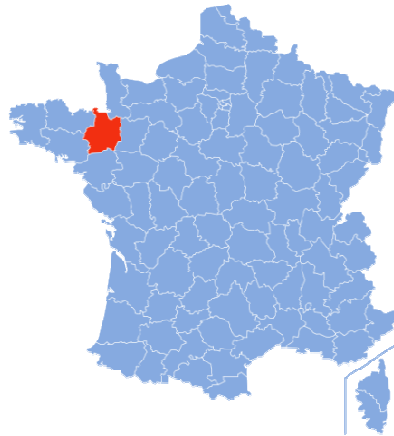
---

## THE PORT OF SAINT-MALO

---

### ILLE ET VILAINE DÉPARTEMENT

---



Map 11: Location of Ille et Vilaine département

The economy of Ille et Vilaine *département* rests on two pillars. The first is the agri-food sector, which provides work for 25% of industrial employees in the *département*, i.e. a level that is ten points higher than the national average. The second pillar of its economy is car manufacturing, which provides work for to 23,000 people, i.e. 37% of industrial employees across the territory. Moreover, industry and large service companies are concentrated in the Rennes urban area.

---

### SAINT-MALO URBAN AREA

---

Saint-Malo urban area has been formed by a rich maritime history. The fruit of a lack of *entente cordiale* between the French and the English, its fortified town is a jewel in the crown of French national heritage and one of the most visited sites in Bretagne. Tourism generates 2,200 direct jobs through the year, and over 4,600 direct jobs during the high season. Saint-Malo's high number of tourist visits makes it the number two commercial cluster in Ille et Vilaine.

However, the corsair town is not a sleeping beauty. Saint-Malo remains an important port, whether by reason

of its goods traffic, its cross-Channel links, or its activities linked to fishing and to pleasure boating. Saint-Malo is ranked 3<sup>rd</sup> amongst Breton ports for goods (1.6 million tonnes in 2011), and 1<sup>st</sup> for passengers (814.283 billion *[sic.]* passengers in 2011). It is also the 2<sup>nd</sup> most important regional cruise port, with 28,146 cruise passengers welcomed in 2011. At national level, it is ranked 14<sup>th</sup> by gross tonnage of goods in 2011. In 2009, port activities generated almost 2,000 jobs.

---

### LE PORT

---

The port of Saint-Malo draws part of its dynamism from its geographical location. It is the fastest outlet to the British Isles for the Rennes urban area and its car industry. It also plays a key role in supplying the regional agri-food sector.

## BUSINESSES

The importance of the port of Saint-Malo for the economic influence of the region is shown by the Saint-Malo business fabric.

Table 25: Main businesses in the Saint-Malo area with links to the port

Business	Activity	Employees
<b>Groupe Roullier</b>	Manufacturing and distributing products for the agricultural sector: fertilisers, animal feed, detergents.	1,086
<b>Sanden Manufacturing Europe</b>	Automobile equipment manufacturer: manufacturing and distributing air conditioning sub-assemblies for cars	764
<b>Compagnie des pêches</b>	Fishing, transforming and distributing sea products	377
<b>Groupe Guisnel</b>	Road haulage of goods	365
<b>PBM Import</b>	Importing and trading in wood, storage, and transformation. The company has a subsidiary in charge of maritime charters, land transits, and customs-agency work	208
<b>Rene Event et Cie</b>	Road haulage of goods	93
<b>Transports Georgelin</b>	Road haulage of goods	81

Apart from the firm Sabena Technics, which specialises in aeronautical maintenance, all the large businesses in Saint-Malo maintain strong links with the port. Naturally, they include stakeholders from transport and logistics, such as road hauliers,

forwarding agents, and haulage contractors. Also present is the agri-food industry, which needs the port to receive supplies of materials needed for crop cultivation and stock breeding. The port is also the ideal place to give added value to products derived from the sea.

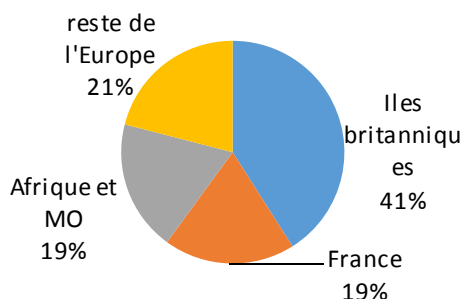
## THE PORT'S ACTIVITIES

The port of Saint-Malo is ranked 3<sup>rd</sup> in Bretagne for its goods traffic (1,637,029 tonnes in 2011), behind Brest (1,515,701 tonnes) and Lorient (1,886,255 tonnes). At national level, Saint-Malo is ranked 15<sup>th</sup>. It has been owned by Bretagne Region since 1 January 2007. The Region has delegated management of the port to the Chamber of Commerce and Industry of the Pays de Saint-Malo. Saint-Malo is also the 9<sup>th</sup> largest

auction venue in the region, as well as being the largest marina along the coast of Northern Bretagne. The port also accommodates an important cross-Channel link, as well as activities linked to accommodating cruise ships and to ship repairs.

## GOODS TRAFFIC

Graph 16: Distribution of the port of Saint-Malo's



traffic flows by geographical area in 2009

Graph 17: Distribution of the port of Saint-Malo's tonnages in 2009, in thousands of tonnes

The commercial port of Saint-Malo is an important *cabotage* port that makes exchanges over short distances, receiving or despatching full loads. Most of its traffic is with European ports.

In that regard, in 2009, it carried out 41% of its exchanges with the British Isles.

As regards the balance of its flows, the port of Saint-Malo is the one that presents the most unbalanced situation. Over 80% of its traffic is represented by import flows. That situation is on an upward trend, with imports representing just 77% of its volume in 2009.

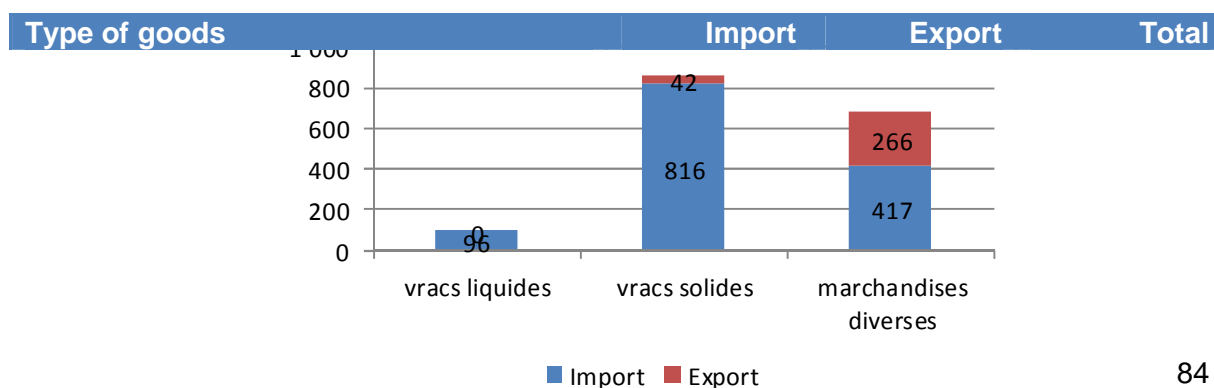
The two main activities are exports of new vehicles and fertiliser imports.

Table 266: the port of Saint-Malo's traffic flows in 2011

	gross tonnages				activity share		
	liquid bulk	solid bulk	general goods	Total	liquid bulk	solid bulk	general goods
<b>In</b>	96,156	816,108	417,209	1,329,473	7%	61%	31%
<b>Outs</b>	0	41,650	265,906	307,556	0%	14%	86%
<b>Total</b>	<b>96,156</b>	<b>857,758</b>	<b>683,115</b>	<b>1,637,029</b>	<b>6%</b>	<b>52%</b>	<b>42%</b>

Source: DREAL Bretagne

Table 27: Main types of goods processed at the port of Saint-Malo in 2011



<b>Chemical products</b>	96,156	0	96,156
<b>Cereals</b>	36,930	0	36,930
<b>Animal feed and fertiliser</b>	128,124	3,984	129,111
<b>Ore</b>	111,483	10,909	112,402
<b>Fertiliser</b>	537,542	26,757	538,325
<b>Ro-ro traffic</b>	228,208	210,887	229,305
<b>Non-containerised and non-Ro-Ro goods (palettes, big bags, etc.)</b>	189,001	55,019	189,075

The main import flows are fertilisers, wood, and granite, of which the corsair town is France's leading importer.

Imports of chemical products fell by 22% between 2009 and 2010. That is explained by the fall in activity of the firm Timac (part of the Roullier Group), which concentrates 90% of the liquid bulk cargo activity of the port.

Main export flows are represented by scrap metal, fertilisers, livestock, manufactured items, and new vehicles.

Saint-Malo is the closest port to Rennes, which is the site for one of the PSA Group's main factories. In that regard, it is that car manufacturer's main export point towards the British Isles. France's leading ro-ro terminals have experienced a sharp fall in their export flows, which they have tried to balance by positioning themselves as a port for imports. Given the poor health of French manufacturers, it is probable

that Saint-Malo may experience the same situation.

The port enjoys a favourable position, but its location at the heart of Saint-Malo imposes limitations on its development. It is therefore in competition with the urban area for the allocation of land resources. In addition, that location imposes a strong limit on handling hazardous materials. Added to that is the fact that its access roads are sometimes bottlenecked by high numbers of tourists, even more so in the summer season.

Its nautical access represents a second bottleneck. Saint-Malo Bay has one of the widest tidal ranges in Europe – the tidal range can exceed 13 metres. Thus, its access cannot be operated on a continuous basis. Moreover, its lock is the sole interface between the port infrastructures and the ocean. A failure on the part of the latter would lead to straightforward paralysis of the port's activities.

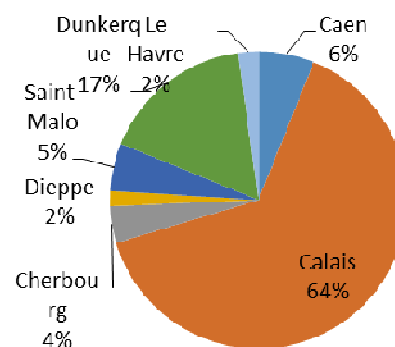
## CROSS-CHANNEL ACTIVITY

The port of Saint-Malo has ferry links to the Channel Islands (Guernsey, Jersey) and the British Isles (Portsmouth, Poole, Weymouth). Those services are operated by two companies: Condor Ferries and Brittany Ferries.

Contrary to the situation in Calais and Dieppe, those lines carry mostly passengers rather than ro-ro traffic.

In 2011, 814,283 travellers used the ferry terminal at Saint-Malo, a figure that represents 5% of the total traffic of the ports studied. In 2001, the port processed 1.4 million passengers.

Graph 18: Distribution of 2011 passenger flows between the ports studied



## FISHING AND PLEASURE BOATING

Between Cancale and Saint-Malo, over 19 million euros' worth of sea products were landed in 2006.

Saint-Malo marina offers 1,625 pontoon berths spread over two sites and several basins. Its capacity has been extended thanks to the setting up of the firm PortMalo. The latter provides pleasure boaters with a dry port for over-wintering and for vessel storage. Its current capacity is 200 berths.

Furthermore, the port of Saint-Malo offers a set of facilities and of services that enable a variety of vessels to be built, maintained, and repaired, ranging from pleasure boats to tramp vessels. The port concessionaire wishes to set up a cluster dedicated to ship building and ship repairs. That cluster will offer a single showcase site for local stakeholders in ship building and ship repairs.



## THE PORT OF SAINT-BRIEUC

Côtes d'Armor *département* represents the northern façade of the Breton peninsula. Agriculture and the agri-food industry are important sectors in the Côtes d'Armor economy.

With a coastline of 350 km, Bretagne has obvious maritime potential that it uses profitably, with its 7 commercial ports and its 17 fishing ports. Those infrastructures guarantee a strong level of development for the halieutic sector. Pleasure boating has not been left behind, with over 14,000 berths. The beauty of its landscapes makes the Côtes d'Armor a highly sought after tourist destination, with large numbers of second homes along the coast.

The absence of large sea ports and of regional ports in the *département* means that the General Council is the sole entity in charge of port development. The *département* is thus the owner of some 22 ports that are strung out along its coastline. It has awarded management to a single delegatee: the Chamber of Commerce and Industry of Côtes d'Armor (CCI22).



Map 12: Location of Côtes d'Armor *département*

Occupying a central position on the Côtes d'Armor coastline, Saint-Brieuc Le Légué is the main commercial port for the *département*, as well as being an important centre for sailing and for ship repairs. However, it is the only *département* port to be included in this study, because it has shown a clear degree of dynamism in relation to its development. The vitality of the port is out of proportion to its size.

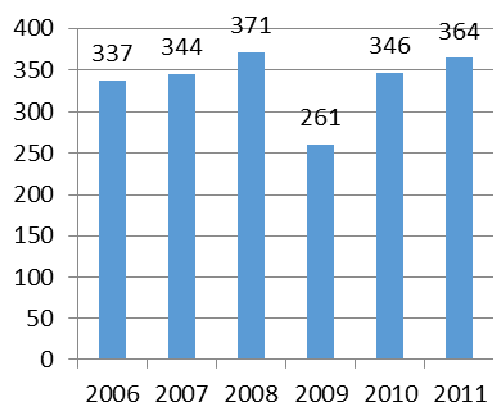
## THE PORT'S ACTIVITIES

### THE COMMERCIAL PORT

Set at the heart of a valley, the port of Saint-Brieuc Le Légué can accommodate tramp vessels of up to

5,000 tonnes. Ranked 5<sup>th</sup> amongst Breton ports, it has seen its activity grow each year.

Graph 19: The port of Légué's gross tonnages between 2006 and 2011



Like all Channel ports, Saint-Brieuc experienced a sharp fall in its traffic in 2009 due to the crisis, but its activity bounced back from 2010 onwards. In 2011, its traffic increased again by 5%, with 364,170 tonnes of goods being handled.

## THE PORT'S ACTIVITIES

Agriculture and tourism are the engines of the Saint-Brieuc economy. The port of Le Légué has the mission of supporting those activities, as well as other sectors like fishing and the exploitation of local quarries.

The activity of the port of Saint-Brieuc is oriented towards handling solid bulk cargo, more precisely raw materials or products that have undergone low levels of transformation.

Table 288: The Port of Saint-Brieuc's traffic in 2011

	gross tonnages			Total
	liquid bulk cargos	solid bulk cargo	general goods	
<i>In</i>	0	214,329	45,567	259 896
<i>Out</i>	0	104,276	0	104,276
<b>Total</b>	<b>0</b>	<b>318,603</b>	<b>45,567</b>	<b>364,170</b>

Source: CCI 22

Table 29: Main types of goods processed at the port of Saint-Brieuc in 2011

Types of goods	Import	Export	Total
<b>Agro-food</b>	130,650	0	130,650
<b>Scrap metals</b>	0	45,260	45,260
<b>Wood</b>	45,567	0	45,567
<b>Fertilizer</b>	47,603	0	47,603
<b>Kaolin, clays</b>	0	53,354	53,354

The main import traffic is made up of wood and agri-food products (cattle cake, corn gluten feed, and salt). For exports, the port handles the loading of quarry products (kaolin, refractory ore) and scrap metal.

Sea transport is provided on a tramping basis. In other words, bulk carriers that provide the carriage of goods are chartered on demand by a shipping agent. It is, therefore, a flexible service that operates only when a need exists.

## IMPORTS

### PRODUCTS FOR LIVESTOCK FEED

Products for livestock feed form the port's number one traffic, and represent 35% of volumes processed.

Imports of colza cattle cake and of citrus have risen by almost 29%, going from 107,246 tonnes in 2010 to 130 650 tonnes in 2011. In that same period, the volume of traffic in salt, which is a complementary product for livestock feed, more than doubled from 6 539 tonnes to 14 891 tonnes.

Côtes d'Armor *département* has a significant pig rearing sector. Bretagne accounts for almost 50% of French pork stock, and needs mass imports of products for animal growth. It is no accident that the commune of Le Plérin, which adjoins the port, is the site of the market that sets pork prices for the whole of France.

Competing head-to-head with Germany and the northern countries, the French sector is part of a production-focused strategy that aims at producing large volumes at low cost. That price tension is maintained by the purchasing policy of large distributors, which have a predominant position in France.

The port is a vital instrument for the pork sector, and enables it to import large volumes with reasonable transport costs – since the lower the value of a product, the higher the proportional logistics costs for despatching it. A product with high added value can absorb a significant cost overrun linked to transport. However, products imported through Saint-Brieuc cannot, since their prices are low.

Hence, the port and its stakeholders must ensure that handling those products is carried out under optimum conditions, in order to rationalise the impact on the total cost of ownership. It is therefore a key factor that the vessel should spend a minimum amount of time in port, its chartering being the main cost of sea transport. Handling operations must be high-performance, and the port must offer nautical capacity that enables easy movements.

In that regard, the port's geographical situation at the centre of the *département* allows for a reduction of post-despatch distance. Lower levels of road transport lead to lower costs and a better environmental footprint.

### WOOD FOR CONSTRUCTION

Imports of wood for construction form a significant traffic for the port, accounting for 45,567 tonnes in 2011, an increase of 48% compared with 2010. Forest products are intended for construction activities in Bretagne Region, those activities being supported by regional tourism development.

Wood comes mainly from Scandinavia, Eastern Europe, and Russia. The port attaches great importance to the environmental soundness of those products. All imported wood has been treated using procedures that are respectful of the environment, which prevents soil pollution and water pollution in the area around the port.

The rise in wood traffic is explained in particular by new facilities at the port of Saint-Brieuc, facilities that have enabled an improvement in the quality of service and in processing capacity.

The new 2,500-m<sup>2</sup> hangar has enabled new traffic to be captured.

## EXPORTS

### SCRAP METAL

The port of Brest handles half the traffic in scrap metal in Bretagne, but Saint-Brieuc handles almost a quarter. The traffic is made up mainly of exports of metal waste (86%) that will be recycled by being recast. Over one third of those exchanges are to French ports, and a little less than two thirds goes to the Iberian Peninsula.

Between 2009 and 2010, that activity experienced a decline with the firm Ferrailles de Bretagne having transferred its flows to the port of Tréguier. The firm Le Gall in Ploufragan continues to export through Le Légué.

Loaders using the port of Le Légué also despatch non-ferrous metals to China. That traffic accounts for low volumes, so it is containerised before being sent to Le Havre by road for loading on to a regular line.

### QUARRY PRODUCTS

The subsoil of the Saint-Brieuc area contains rare materials that are required by some industries. For example, kaolin is used to make ceramics and porcelain. Kerphalite and andalusite are additives in metallurgy. Its products are mostly exported to Germany and the United Kingdom.

## STAKEHOLDERS

---

The port of Saint-Brieuc Le Légué is a public port, owned by Côtes d'Armor General Council and operated by the Chamber of Commerce and Industry of the *département*. The involvement of the public authority is vital for the port's development. However, a public pro-active approach must not conceal the part played by partners in the port's good results. That is because

performance is a collective endeavour between private and public stakeholders.

At Le Légué, handling operations are provided by two companies: BLP and Corbel Shipping Agency (formerly known as Coralmer).

## BOLLORÉ LOGISTIQUE PORTUAIRE (BLP)

Bolloré Logistique Portuaire, formerly called Cogemar, has had a presence at the port of Le Légué for 80 years.

The 12 employees of the Saint-Brieuc agency handle imports of several vessels unloading wood from the north, fertiliser, cereals, and livestock feed. Kerphalite ore, kaolin, and large volumes of scrap metal are the export flows. In all, the 25 vessels processed call for the handling of 300,000 tonnes, of which 109,000 tonnes are warehoused directly at the port.

In addition to handling, BLP also deals with operations involving consignment and chartering vessels, warehouse logistics (storage and stock management), as well as organising land transport. To that end, the company uses three berths in the port on a constant basis, and two berths in the outer harbour. In all, BLP offers its clients 15,000 m<sup>2</sup> of landfill for storage and 8,500 m<sup>2</sup> of warehousing.

The Groupe Bolloré is a multinational firm of which the activities range from industry to audiovisual and agriculture, via transport and logistics. Its subsidiary, BLP, has a presence at 15 of the main ports in France, and is one

of the leaders in the provision of port handling facilities.

A partnership established between Côtes d'Armor General Council, the CCI, and BLP Saint-Brieuc enables an increase in the traffic capacity of the port of Le Légué. The construction of a new warehouse covering 2,500 m<sup>2</sup> and used for bulk cargo will guarantee the search for growth of that traffic recorded in 2010 and 2011 in Saint-Brieuc, and secure the logistics of kerphalite exports.

In addition to that new warehouse, BLP Saint-Brieuc has this year taken over the operation of 2,500 m<sup>2</sup> of storage space. The company has also ordered a crane, which brings to three the number of handling devices at the port of Le Légué, an investment of 500,000 euros.

## CORBEL SHIPPING AGENCY

The Corbel Shipping Agency works for several agricultural co-operatives in the *département*, as well as with the region's main kaolin producer. The broker carries out port handling for its

clients, as well as vessel consignment and goods storage.

In 2009, the company carried out 2 handling movements and handled the consignment of 62 vessels.

## IMPROVEMENTS MADE

---

The port's commercial activities are carried out on two sites. The historic port, which also handles pleasure boats, is made up of basins that are accessed through a lock. The width of that lock is such that only vessels not exceeding 2,000 tonnes can pass. The tramp fleet operating in the Channel is made up of vessels of 4,000 tonnes on average, so that bottleneck could imperil the commercial activity of the port. The unsuitability of installations for the needs of loaders would have led to all traffic being transferred to the port of Saint-Malo.

Aware of that situation, the port authority sought to work around that limitation. It was decided to build new infrastructures downstream from the historic port. The outer harbour of Cesson includes the most modern berths and hangars. Thanks to that significant investment, the port can accommodate vessels of up to 5,000 tonnes.

Nautical access is henceforth unconstrained, but the effect of the

## MULTIMODALITY

The new berths of the outer harbour have a rail spur, and enable goods trains to come to the quayside, as close as possible to vessels. Those installations allow the handling of goods on the quay, thus transshipment from maritime transport to a train, and *vice versa*.

However, those facilities remain unused. In that matter, the port of Saint-Brieuc is subject to the same vicissitudes as its fellow ports. In France, the carriage of goods by rail has experienced constant decline, since it no longer meets loaders' needs.

tide remains a determining factor. Saint-Brieuc is a Not Always Afloat But Safely Aground port (NAABSA). When the tide goes out, vessels undergoing handling rest on the bottoms of basins, on cradles placed there for that purpose.

That technique enables larger vessels to be accommodated, whilst avoiding costly work to create a deepwater port. The technique is commonplace in Germany, Belgium, Netherlands and in the United Kingdom, but its use here is a first in France. It is therefore an innovation led by the port of Saint-Brieuc.

Grounding vessels is, however, subject to a limitation. To avoid hull deformation when the vessel is not afloat, the technique is only used with vessels of less than 5,000 tonnes. Moreover, when tides are too low in winter, some vessels must come alongside at the port of Saint-Malo.

Constructing a new 240-m berth in 2008 has enabled greater facility to be brought to vessel loading and unloading.

Thus, even though the port encourages modal transfers to means that are more respectful of the environment, and it invests in the means allowing that ambition to be attained, the port has to face external contingencies that it cannot resolve. In consequence, rail links cannot be developed between the port of Saint-Brieuc and its hinterland.

However, one should not forget that the port itself is an intermodal nexus. Without it, all the traffic that it handles would have to go through the port of Saint-Malo, 100 km away. If so, no fewer than 10,000 lorries would have

to carry goods from the port of Saint-Malo to Saint-Brieuc. When one realises the importance of tourism for the region, one can measure the

negative impact of such a level of road traffic on the attractiveness of the territory.

## PLEASURE BOATING

---

The port of Saint-Brieuc has 250 berths, accommodating vessels in a constant-level basin that is accessed via a lock. The complex lies at the bottom of the Gouet Valley, and is the border between the communes of Saint-Brieuc and Le Plérin.

That position at the heart of two towns makes the marina an engine for local

business. Shops and artisans related to pleasure boating are set along the wharves, and restaurants take advantage of the setting offered by the basin.

At first sight, the position may seem limiting in respect of the marina's expansion, but the port authorities have increased capacity by creating a dry port.

## CREATING A DRY PORT

---

With 150 berths on land, Saint-Brieuc is the leading dry port for pleasure boating in Northern Bretagne.

Storage out of the water may remedy the lack of space that affects all French marinas, but it should not be viewed as simple storage. The

installations also provide other services with added value, e.g. maintenance of vessels and re-launching them. Storage on land does not allow for an immediate departure, but it presents advantages. A boat that is not used regularly profits from being stored on land.

## LE CARRÉ ROSENGART: A SHOWCASE FOCUSED ON THE SEA

---

The *département* and CCI22 have found an innovative way to showcase the port's marina and its stakeholders. Opened in 2006, the Centre d'Activités Maritimes, also called Carré Rosengart, has led to the installation of economic activities linked to sailing: businesses with a maritime focus, mechanical workshops, and ship repair workshops. The facility also includes a business centre, a theatre

school, as well as a television studio. In addition, that area is the setting for the technical cluster covering pleasure boating and ship repairs, managed by CCI 22.

Covering 10,000 m<sup>2</sup>, Carré Rosengart offers lovers of the sea a wide range of services. By fostering the development of cultural and business activities as well as services focused on the sea, it plays a full part in the attractiveness of the port area.

## SHIP REPAIRS

---

Set up in 2006, the Saint-Brieuc ship repair site is a facility that is unique in the Channel. At one and the same time, it meets the needs of stakeholders from the areas of pleasure boating and of fishing. The platform is fitted with highly functional equipment:

- a belt elevator that allows the lifting of vessels of up to 350 tonnes. This high capacity is particularly suited to fishing vessels
- a careening area with 8 to 10 berths, enabling several vessels to be worked on simultaneously.
- a paint workshop capable of accommodating vessels of up to 29 m in length.

Making those costly facilities available to local artisans enables the latter to develop their activities, failing which vessel owners would have to turn to

service providers based outside the *département*.

Moreover, that facility also offers benefits to the owners and operators of vessels. Thanks to its location as close as possible to home ports, the site guarantees artisan fisherfolk a quick turnaround in repairing their production tool. Quick work reduces costs caused by the vessel being immobilised.

For those reasons, the port of Saint-Brieuc has become one of the most important sites of North Bretagne as regards ship repairs. In 2010, it handled 224 vessels, and its development continues. Its area of influence now goes beyond the boundaries of the *département*. It attracts large numbers of professionals from the Channel, the Channel Islands, and even Southern England.



---

## DEVELOPMENT PLANS

---

### EXTENDING THE COMMERCIAL PORT

---

The port of Le Légué has carried out studies aimed at totally eliminating the tidal constraint on port movements. Filling the outer harbour would transform Le Légué into a deepwater port that is permanently accessible. Nonetheless, the financial contingencies to which the *département* is currently subjected do

not allow that work to be carried out in the short term.

However, a 4<sup>th</sup> wharf is planned for the medium term. It will be joined by new landfill covering about 30,000 m<sup>2</sup>, thus increasing storage capacity. That new facility, estimated at 7 million euros, would enable the draught to be increased by one metre.

### COLLABORATIVE PLANS

---

Not content with having improved its infrastructures, its volumes, and its quality of service, the port of Saint-Brieuc wants to activate a new lever: collaboration. That boost for interaction between transport stakeholders in the Channel would take two forms.

Firstly, a partnership with a major port connected to large world routes would enable the port of Le Légué to diversify into container handling.

Secondly, pooling sea transport needs would lead to the entire port community gaining in attractiveness and competitiveness.

### A CONTAINER FEEDER LINK WITH THE PORT OF LE HAVRE

---

As has been stated, Saint-Brieuc has no potential for developing a land-based multimodal offering, in spite of the pro-active approach of the port authority. However, the port wishes to progress in a new direction by developing a short-distance maritime offering.

can even link sea ports and river ports set in the interior of the continent *Cabotage* enables all types of goods to be handled (liquid and solid bulk cargo, containers, rolling freight). Short Sea represents 60% of the European Union's sea transport, and about 40% of intra-European exchanges.

Also called *cabotage*, it allows the despatching of goods between ports of the European maritime area. As it is done using medium-sized vessels, it

Each year, 7,000 containers take the road from the Saint-Brieuc area to be loaded at the port of Le Havre. Traffic flows that are most suited to a modal

transfer are non-ferrous metals, kerphalite, and kaolin.

In addition, that offer could also enable the development of new traffic. Certain businesses in the Saint-Brieuc area would like to enter the export market, but the cost of road transport to Le Havre do not allow them to be competitive. Thanks to the massification that it generates, *cabotage* can lead to a lowering of costs of transport to Le Havre, allowing businesses to gain in terms of competitiveness.

That said, developing containerised traffic at the port of Le Légué will be a project for the long term, because there will be a large number of difficulties to resolve. Road transport is not without its advantages. Organising transport is very easy: the loader just has to make contact with a

haulier or a broker. In addition, a road train covers the 325 km from Saint-Brieuc to Le Havre in a single day, from the loader's door to the terminal. Moreover, the cost of road transport does not include its environmental cost (wear and tear to infrastructures, congestion), it remains competitive.

Furthermore, the project is opposed by certain transport stakeholders, who fear a decline in their activity. That is of course the case for road hauliers, but also for brokers.

In order to convince the community of the feasibility of the operation, the authorities of the port of Saint-Brieuc wish to organise an experiment in the medium term. In addition to lightening congestion on the road network, that modal transfer would lead to a 62% reduction in carbon emissions caused by the 7,000 annual movements towards the port of Le Havre.

## OPTIMISING VESSELS RETURNING EMPTY

---

The port of Le Légué has also identified another strand for optimisation. Its sea links are all organised on the tramping model, Contrary to regular sea lines, vessels are chartered on an "on demand" basis, when traffic being handled calls for it.

The technique is very flexible, but it suffers from a disadvantage: when the vessel has unloaded its cargo, it almost always returns empty. It is for that reason that 90% of the vessels in the Channel area are sailing empty.

The aim, therefore, is to reduce those "empty vessel" journeys by bulk carriers, by setting up improved collaboration between ports, loaders, and transport organisers. The idea

would be that if a vessel must leave a port empty, it would be able to load up again at a nearby port.

For ports, that would enable them to capture new traffic, thus increasing their activity. For loaders, maximising vessel occupancy would enable them to rationalise freight rates. For shipping companies, a better use of their means would offer them better profitability.

To take up that challenge, one of the ways consists of setting up a collaborative portal that enables better information sharing between stakeholders in the Channel area. Initially, that approach could be led from the French side, which has associative bodies like the Association

des Ports Locaux de la Manche and the Short-Sea Shipping Development Bureau. In the second phase, the

solution could be extended to British ports.