

THE MARITIME MOTORWAY BETWEEN GIJÓN AND NANTES SAINT-NAZAIRE



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INTRODUCTION

Crossing the Pyrenees by sea sounds like a joke!

It's a today reality with more than 18 000 trucks using the MoS Montoir Gijon for the first year of activity.

Ten years ago, MoS (Motorway of the Sea) was a concept in the White Paper of the European Commission.

A challenge lied in leading this innovative concept to the transport market in order both to address the requirements of shippers for their supply chain and the needs of people of safer and less congested roads.

The Port Authority of Nantes Saint-Nazaire has been part of this process for 10 years and is today proud of presenting encouraging results of the MoS Montoir Gijon.

For the Port industry as a whole, it's opening new fields of business in direct relation with intraeuropean trade at a time when a European Maritime Transport Space without Barriers is emerging.

BACKGROUND: THE PYRENEES AND THE EUROPEAN TRANSPORT POLICY

The Pyrenees are the backbone of the project. The European integration of Spain and Portugal in the eighties involved a major increase of trade and therefore, a dramatic development of traffic through these mountains.

The transport infrastructure system was not suited for facing the huge increase of traffic flows during the nineties. Few trunk roads and a very limited rail infrastructure.

In these conditions, Pyrenees became rapidly a major bottleneck in the Trans European Network.

¹ Port Authority of Nantes Saint-Nazaire.

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Two solutions emerged for solving this situation:

- In the nineties, the building of a new rail tunnel under the Pyrenees, the Tunnel Central Pyrénéen.
- In the twenties, the creation of MoS, as Jacques Barrot, vice-president of the European Commission, said in Ljubljana in 2006 during the Ministerial Conference on the Motorways of the Sea

“Mountain regions need the motorways of the sea”

The first proposal was more supported by Spain than France, which was committed to the Lyon-Turin project and focused much more on the Alps than on the Pyrenees.

The second proposal, MoS France - Spain, was first presented by French State in 2003, and largely inspired by the Port of Nantes Saint-Nazaire brainstorming.

In these conditions, supporting MoS could be a threat for TCP (Tunnel Central Pyrénéen). It took a while for explaining that the two projects were not competing but were complementary. The former is easy to launch, using an existing infrastructure (sea), the latter needing much more time and money to be operational.

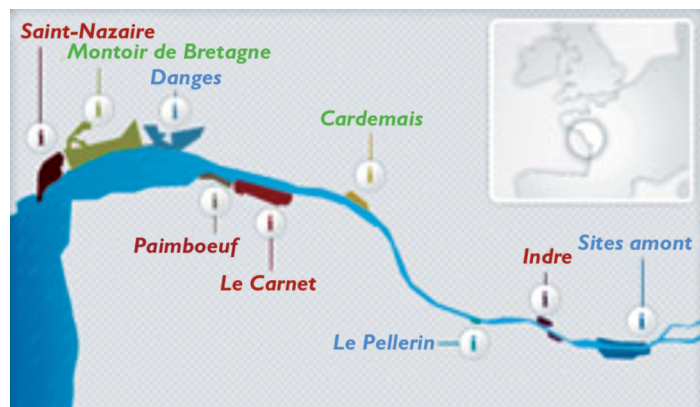
The European Transport Policy was critical for MoS. The European Commission introduced this new concept in its White Paper (European Commission, 2001) named “European Transport Policy for 2010: time to decide” laid down the concept in the framework of the modal shift.

Three years later (2004), a European scale MoS network was included in the TEN-T and part of the 30 priority projects.

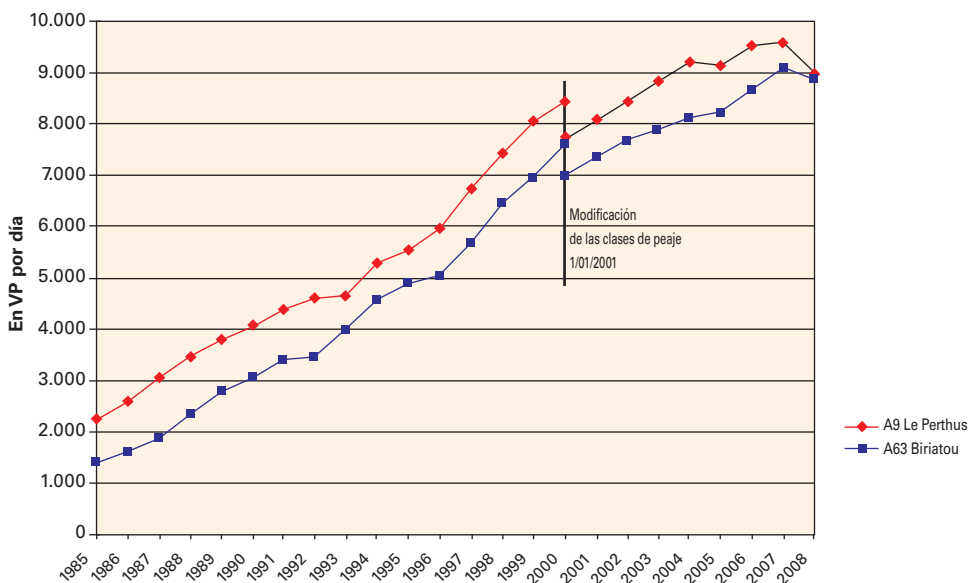
FROM CONCEPT TO PROJECT : 2001-2006

The Port of Nantes St-Nazaire is ideally located for trading with Iberian Peninsula.

It has been accommodating for more than 30 years (since 1974) a dedicated ro-ro service to Vigo (Galicia) for the automotive group PSA (Peugeot Citroën). Year to year, this connection is carrying 75,000 to 100,000 cars and 15,000-20,000 trailers.



Port Nantes St-Nazaire, French Ports leader on the Atlantic coast (30 Mt/year). Source: www.nantes.port.fr



Truck traffic on the coastline motorways in the Pyrenees (1985-2008).

Source: ASF – péage, in *Observatoire franco-espagnol des trafics dans les Pyrénées – Document n°5 – mise à jour du Graphique 24 (page 72)*.

Late 2002, by request of a member of Parliament commissioned by the French Government, the Port Authority translated this new MoS concept into a service named “AMT” or “MoSTransBiscaye”.

The truck traffic data on the Pyrenean motorways was the first data to take into account for designing this service. Nearly 4,8 million trucks crossed the Pyrenees in 2010, representing a daily flow approaching 9,000 trucks on each coastline motorway (Biriattou on the Atlantic Coast and Le Perthus on the Mediterranean one).

The initial assumption was the MoS ability to both carry an important part of the truck traffic and offer competitiveness in terms of frequency and reliability compared to the long distance road transport. The MoS had to deliver benefits to users/customers compared to existing land routes.

The MoS targeted:

- The traffic passing Biriattou (about 9,000 trucks/day).
- The trucks on long distance legs (more than 500 km): about 4,000 trucks/day).

Thanks to this understanding of the existing road flows (data analysis and market surveys), the Port defined a **estimated freight catchment area based on:**

- Savings on road distance.
- Savings on transit time.

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The Port conducted a port analysis on the Spanish coast, from Pasajes to Vigo, in order to select a port for a project (a multiport service was not feasible due to the need of frequency). This led to Bilbao, the largest Spanish Atlantic port (about 30/35 Mt/year).

The MoS initial goal was to tackle the road congestion and its related drawbacks (pollution, noise, accidents, etc...).

Therefore, the MoS initial project was ambitious:

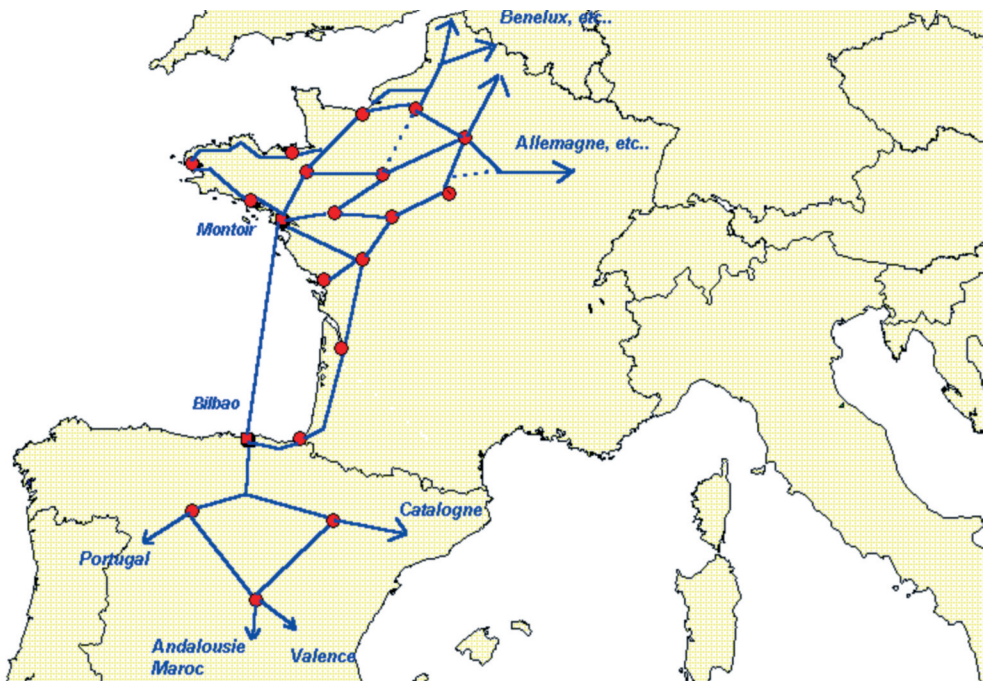
- It targeted 350,000 trailers in the start-up phase.
- It offered 3 daily sailings in each direction.
- It used ro-ro vessel with 160 trailers per unit (6 vessels).

In this way, the MoS was like a “floating infrastructure” with two main features: new dedicated ro-ro vessels and port terminals directly connected to the road and railTEN-T networks.

This new approach faced some critics, especially for the issue of funding ships with TEN-T and this initial project has:

- To be adapted in order to get ahead.
- To be acted as a political decision of the two States.

This was the second stage of the project, running from **2006-2010**.



MoS Montoir-Bilbao project.
Source: www.nantes.port.fr

FROM PROJECT TO SERVICE : 2006-2010

France and Spain agreed in **2006** to set up an intergovernmental commission in charge of working out a proposal for selecting the projects.

In accordance with the European Commission, France and Spain launched in **Spring 2007** a call for projects for a MoS between France and Spain without naming any port.

- A minimum of 4 sailings a week in each direction the first year and a minimum of 25 000 trailers.
- A daily sailing in each direction the third year and a minimum of 75 000 trailers.

In order to support the selected project, the two States and the European Commission agreed a subsidy during the taking-off phase of the service (3-5 years).

During this phase (six-months delay) both the Port of Nantes Saint-Nazaire and Gijon were in competition with other ports.

In Spring 2009, the two States presented the two winners, which both included Montoir as the French base port of their MoS.

- GLDA (Grimaldi and Louis Dreyfus Armateurs) for a MoS between Montoir and Gijon (project Fres Mos).
- AMA (Trasmediterranea) for a MoS between Montoir and Vigo, with connection to Algeiras and Le Havre.

Each of the MoS should receive a maximum of 30 M€ from the 2 States plus a Marco Polo subsidy of about 5 M€, in order to cover the initial loss of these new services.

Early 2010, the projects got the approval of both the national Parliaments and European Commission (Marco Polo Program) and in mid-July 2010 the administrative official process was completed.

Concurrently, the Port Authority of Nantes Saint-Nazaire had to adapt its ro-ro terminal in order to accommodate the Montoir Gijon. Indeed, the promoters of the service decided to operate a ro-pax instead of a pure ro-ro, in order to add passengers income to the freight one.

On the sea side, the Port had decided in 2008 to increase its berth capacity by building a new ro-ro pontoon (two berths). This investment amounts to 16 M€ and became operational in **January 2010**.

On the land side, the ro-ro terminal had to be fitted with a ferry station and related parkings **within a delay of about 12 months**.

The specifications of the operator GLDA were the followings, in accordance with ISPS regulations for passenger traffic:

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MoS terminal in Montoir.

Source: Port Authority of Nantes St-Nazaire .

- A storage area with an initial forecast capacity of 140 trailers (the ship capacity) and 120 passenger cars and a finally the area accommodate built capacity of 169 trailers (including 10 parking places (with 10 reefer plugs) + 70 passenger cars with caravan (caravan).
- A safe road access, segregating MoS traffics from traffics with the neighbouring sand terminal.
- A gate: 4 entrance ways, 2 exit ways, 2 cabin (fully computerised).
- A maritime station with sale, information, customs and sanitarries.
- A mobile (ZAR / Restricted Access to Public) access to the ro-ro ramp.

The cost of this investment is **4.9 M€**. During this period, the two ports and the operator worked closely in order to harmonize, as much of possible, the two terminals.

RESULTS AND LESSONS

The MoS Montoir Gijon opened on September 2010. Today, it is a new ferry route in Europe and opened a new market in the Gulf of Biscaye.

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RAPIDITY // ECONOMY // FREQUENCY // PROXIMITY



The crossing will offer the best conditions of safety and comfort and enable your driver to continue his journey whilst enjoying the benefit of a good nights sleep.



Promoting a new ferry route to Spain.
Source: LD Lines.

The vessel Norman Asturias has a 120 trailers / 518 passengers capacity and sails at 20 knots. She's plying the two ports three times a week.

The results of the first year (2011) are very encouraging. They exceed the initial forecasts both in term of trailers and passengers.

The Montoir Gijon becomes a new ferry route in Europe and opened a new market in

Traffic	Units
Trailers	18.251
With tractor	14.886
Without tractor	3.365
Passenger cars	12.161
New cars	15.354
Passengers	49.857

MoS Montoir Gijon: 2011 results



Ropax (2007) Norman Asturias.
Source: www.directferries.fr

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The **first lessons** are very valuable:

- Targeting the accompanied trucks was right: the first customers are mainly small to medium **Iberian road companies** and need to cross with their tractor for their business.
- **Adding passengers** to freight involved more port investment but provided many interest to local public decision-makers, keen of developing tourism. This a by-product of the MoS.
- It doesn't really impact on the existing ro-ro service between Montoir and Vigo, which is dedicated to PSA traffics (new cars and automotive parts).

In term of occupancy rate , a two month data analysis (September/October 2011) revealed that:

- 84 % of the trailers are accompanied: tractor + trailer + driver.
- 86 % of the road companies are Iberian (Spain or Portugal).

This load factor depends on the day of the week. The average load factor in 2011 was 70-75% with 25 % of all the crossings full (100 %).

- High:
 - From Gijon: Sunday afternoon sailing and Tuesday evening sailing.
 - From Montoir: Friday midnight sailing.

The discussions with truck drivers reveal that , the decision of using MoS are based on the following reasons:

- Useful for delivering cargo up to Paris area (Ile de France), German border and, southwards, to North Portugal and Madrid area.
- The MoS accommodate a large range of cargo: food, industrial goods, project cargo, breakbulk on Mafis trailers.
- It delivers safety and security.

More and more shippers appreciate the MoS: for a leading building materials retailer, the MoS contributes to:

- Less trucks with the shipper's cargo on the roads: it decreases the company carbon footprint.
- More regularity and reliability: the MoS proved reliable and respectful of the schedules (avoiding all the problems occurring on roads).
- More reactivity: thanks to the MoS, the company can load its trailer in the Centre Portugal up to Friday morning for delivering early morning on Monday in France.
- More transport capacity: it was often difficult to find trucks

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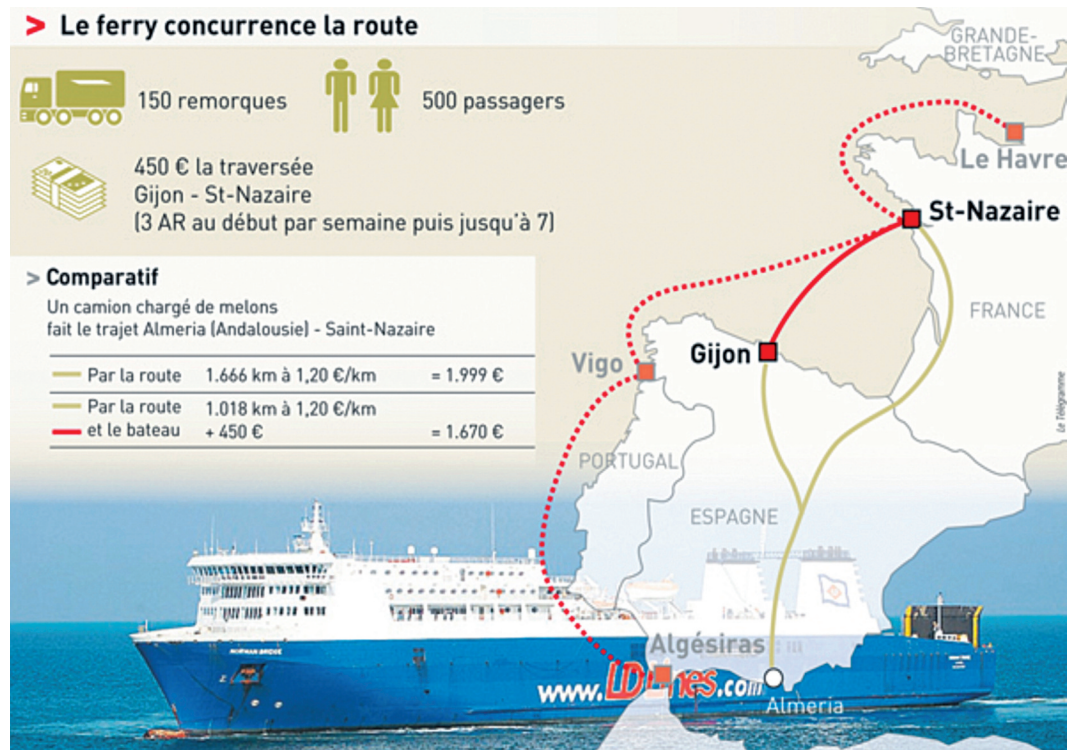
- More ship capacity: no risk of “left alongside”
- More flexibility for operations: MoS terminal in Montoir is close to the company logistics platform
- Cheaper than pure road transport: a 5 % - 7 % gain on transport price

At last, for the two Ports Authorities, MoS has been bringing :

- Cooperation during the carrying out of their respective MoS terminals.
- Partners through the operating company in charge of MoS Montoir Gijon.
- More traffic in each port.
- For NSN, the ro-ro traffic increased by 106 % in 2011.
- For Gijon, the ro-ro is quite a new business (diversification).
- Benefits to the port communities (tourism).

OUTLOOKS

Considering the initial need of easing the road traffic, the results are obviously modest due to the careful approach of the two States.



MoS vs road?

Source: Télégramme de Brest – septembre 2010.

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MoS and rail motorway are emerging but their volumes are far from catching a big marketshare:

- Montoir – Gijon: 18 000 + Perpignan – Bettembourg: 36 500

54 400 trailers = about 1 % of the road traffic

MoS Montoir Gijon in 2011 = 2 days of truck traffic in Biriattou

The outlooks are good in terms of demand:

- More and more shippers are keen of integrating inter-modal solutions in their supply chain, providing both savings and lower carbon footprint.
- Road industry is looking for solutions for decreasing costs: fuel, road toll.
- Iberian economy is very export-oriented due to the crisis in its domestic market.

The outlooks in term of supply are challenging:

- Increase of capacity: adding a new vessel to the service: ro-pax or ro-ro?
- Increase of fuel costs: introducing a Bunker Adjustment Factor early 2012.
- Future of HFO in European waters: extension of SECA's?
- Facing fierce competition of pure road transport and other MoS (Bilbao-Zeebrugge / Santander – UK).
- Future competition with rail motorways along the Atlantic Coast (2017?).
- Increase of promotion tools for inter-modality: ecobonus.
- ITS and integrated Information Transport System.

The initial goal remains valid: a MoS has to be a “door to door” inter-modal solution (Green corridor concept promoted by the European Commission). In a near future, the MoS could add on selected inland platforms rail services in order to add to the MoS a rail motorway. In this way, road transport focus on the first or last kilometre.

	Initial (2002)	Today (2012)
relation	NSN - Bilbao	NSN-Gijon
Nautical distance	428 km (231 miles)	470 km (270 miles)
Time at sea	16 hours	14 hours
Turnaround time:	8 hours	10 hours
Dedicated terminal in Montoir	1 dedicated ro-ro berth and 15 ha of parking area	1 public ro-ro berth and 4,5 ha of parking area
Frequency	3 sailings/day/direction	3 sailings/week/direction
Volume of traffic	350 000 trailers (unaccompanied)	18 000 trailers (80 % accompanied)
passengers	None	50 000

From concept to service: a successful 10 years path