Annual Report

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Motorways of the Sea – Priority Project 21

Fostering seamless transport in the European Union
Motorways of the Sea in the European logistics chain

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Disclaimer

The opinions expressed are those of the European coordinator, based on his findings in the first year of his tenure. His findings mainly reflect situations in countries that he has visited in this period: Belgium, the Netherlands, Germany, France, Portugal, Spain, Italy, Slovenia and Greece. Not having been able to visit the UK, Ireland, Denmark, Sweden, Finland, the Baltic States, Poland and the Black Sea region, he draws no conclusions on the situation there.

He does make recommendations of a general nature where his talks, including those with the European representative organisations, have convinced him that the issues addressed are common throughout Europe.
I Introduction

Motorways of the Sea form an integral part of the European transport infrastructure network. This realisation led the European Union to incorporate Motorways of the Sea expressly in the 2004 Community Guidelines for the development of the Trans European transport network. Motorways of the Sea have two clearly defined objectives: concentration of freight flows on sea-based logistical routes to reduce road congestion and/or improve access to peripheral and island regions and states. The objectives of improving transport logistics and of cohesion are clear. The first objective has only gained in importance with endemic congestion now affecting nodes in every single Member State. The overriding climate goal of the European Union to achieve 20% less greenhouse gas emissions and the subsidiary goal of saving 20% of energy consumption by 2020 make the achievement of the first objective of the Motorways of the Sea more urgent.

The importance of Motorways of the Sea and the need to realise them needs no further explanation. However, the concept of Motorways of the Sea suffers from a lack of clarity among the players in the sector. This could explain in part why the results with their implementation so far are at best mitigated.

For this reason the Commission entrusted the coordination of the project to a European coordinator. Luís Valente de Oliveira took up this function with his nomination on 27 September 2007. In agreement with Vice-President Barrot, he decided to dedicate the first year of his tenure mainly on issues in the Mediterranean and on the Atlantic façade by meeting as many players in the sector as possible, to discover where possible implementation problems lie and what the sector and the Member States expect from the European Union in this field.

This report sets out the coordinator's main findings. It aims at describing the main factors that influence the sea leg of the transport chain in the European Union and its neighbouring countries. It tries to set out the likely developments affecting this part of the EU transport chain. It equally attempts at providing clarity in the concept of Motorways of the Sea.

Finally, the European coordinator addresses a number of key recommendations to the European Commission on the manner in which to ensure optimal development of Motorways of the Sea in the existing EU and national frameworks.

II Lubrication of the logistics chain

Transporters will only choose a sea borne leg in their logistics chain if the maritime option is just as good as or better than the other modes. Competing with road is a tall order under the current circumstances, as road has the advantages of being flexible, at low cost compared to other modes and enabling door-to-door delivery. However, its environmental performance and endemic congestion on parts of European roads start to erode its competitive advantage.

Maritime transport intra EU and the other modes will only be really competitive if they are more environmentally friendly, quicker, more reliable, economically more attractive or safer. Apart from the cost and the environmental factors, the others do not depend on the sea leg of the transport chain. The interlocutors in the sector have assured the coordinator that 'the sea' is not the problem. The problems arise at the so-called 'breaking points' of the cargo: in ports,
with documentation treatment, in forwarding cargo on either by road, rail or inland waterway or by pipeline.

Fundamental improvements in the efficiency and availability of other modes (maritime, inland waterways, railways, pipelines) are necessary to speed up the change from an unbalance of 75% road transport in the EU to a more balanced distribution between modes.

A number of conditions have to be met to enable this change, such as equitable infrastructure charging, incorporation of the 'polluter pays' principle, incentives to choose other modes and regulatory changes. One of the most pressing changes necessary to enable a shift from road to other modes seems to be a change in the mindset of all players in the transport logistics chain – railway companies, inland waterway transporters, road hauliers, forwarders, port management, shipping companies, Member States’ different authorities and so forth – the realisation that there is no other option for future logistics, but the option for co-modality.

Co-modality necessitates a transparent, no frills, easy to access and fully reliable informatics system. This e-system gathers and relays information from all operators in the logistics chain, such as customs, terminals, barge operators, rail operators, road hauliers, shippers, depots, inspection authorities, forwarders, insurance agents and port authority. Conditions for enrolling in the e-system should enable all logistics operators to participate. Such systems already exist in some places, these should be generalised and improved upon and enable inclusion of options of tracking and tracing of cargo.

a. Efficiency indicators – benchmarking

As far as maritime is concerned, the relative attractiveness of ports is a crucial part in the decision of transporters to choose for a sea borne leg. This goes both for the efficiency of ports and ports services themselves and for the fluidity of the hinterland connections. Not all shippers are confronted with the same problems; oil tankers, roro vessels, ropax vessels, container vessels, general cargo and bulk carriers all have their specific characteristics warranting some form of special treatment. However, the problems they all have in common concern port efficiency and hinterland connections.

Objective and transparent efficiency indicators for ports and for the hinterland connections have to be used in order to enable rational choices of freight destination. These indicators or benchmarks are equally necessary for the decision to give a Motorway of the Sea quality label or 'blue flag' to a shipping line or a port.

A whole range of benchmarking instruments already exists, for instance ISO, EFQM. Some quick thought should be given to a hierarchy of benchmarking instruments and choosing the most objective and practicable among these, at least for part of the indicators. It should be revised at regular intervals in order for developments in the market to be taken into account.

Concerning efficiency of ports and ports' services themselves, they will range from turn around time of ships, electronic treatment of port approach and further handling, customs' treatment, safety and security in ports, 'gate to gate' time, Teu/ha, Teu/metre of quay length, revenues/ha, costs/ha, existence of 'harbour master' figure, organisation of terminal operation/management, ease of procedures concerning pier/terminal expansion, existence of concessions for terminals, degree of independence of port management from the state (ownership structure), waiting times in port, distinction between EU and non EU cargo,
flexible charging system - distinction in harbour charges between deep sea vessels and roro and other smaller vessels, possibilities of tracking and tracing cargo.

Special emphasis should be placed in this respect on the degree of independence of ports and whether or not parts of ports operations have been privatised. Privatised management and operation of terminals and different port services, have a demonstrable positive effect on efficiency. This allows maritime to better compete with road transport. All industry players in the sector agree that concessions in ports should be stimulated as it is the best tool to increase productivity.

The right balance between privatisation, safeguarding of fair competition and safeguarding of public interests, needs however to be fully ensured by the Member States in the interest of the long term economic and environmental interests of the European Union.

For Motorways of the Sea special attention should be given to the port's policy regarding vessels for short sea shipping serving the needs of Motorways of the Sea like roro, ropax and feedering vessels. Ports always prioritise deep sea vessels over short sea vessels. For feedering activities, short sea vessels or barges sometimes need to manoeuvre beside a deep sea vessel for two, three or more times, as deep sea vessels will always get priority for docking, space being at a premium. For this reason it is important to include in the indicators determining port's eligibility for a Motorways of the Sea quality label indicators on the policy of ports in relation to short sea activities. For instance: do ports reserve dedicated (parts of) quays for Motorways of the Sea traffic, do they have dedicated terminals or space for short sea activities, is there a distinction in harbour duties between deep sea and other vessels.

A last crucial indicator for Motorways of the Sea is the environmental performance of the vessels that are being deployed for its service. Allowances have to be made for the start-up time of a line, as no shipper will use its newest ships for a line that is just being developed. However, minimum criteria should be met also in the start-up time. Depending on the commercial success of the line, and therefore on the question whether a line retains its Motorways of the Sea status after the start-up period, better environmental performance should be guaranteed.

The Port of Rotterdam traditionally gives out concessions for 25 to 30 years. Its concession policy changed radically over the last years. Now future concessionaires have to live up to commitments they make, not only in terms productivity, but equally in modal shift percentages to be attained. The Port has integrated a "bonus/malus" system in its concession activities concerning modal shift – if a concessionaire improves on its stated modal shift goals it gets a reduction on the price, if it undershoots its targets it has to pay extra. This example should be replicated throughout the EU.

Regarding hinterland connections such indicators will vary from travel time to main destination areas, availability of railway slots, existence of dedicated freight corridors, and hierarchy of connections (road, railways and inland waterways), connection to and location of logistics platforms, exploitation and openness to third parties of logistics platforms.

Sensitive commercial information will not be made available through such a benchmarking exercise. The goal is to arrive at an objective picture of ports' performance and hinterland connections. Sensitive cost/revenues information will always be aggregated and used to arrive at certain orders of magnitude in the comparison between ports.
Benchmarking is a moving target and should thus be a dynamic exercise. After a first impulse at EU level for benchmarking for the purposes of Motorways of the Sea, benchmarking should be completely handed over to the appropriate independent benchmarking authorities.

b. Relative attractiveness of ports

With the coarsest of generalisations, and of course plenty of individual exceptions, a difference between the North and South of Europe in port and hinterland efficiency exists, according to all interlocutors. Port management and port services are generally found to be more efficient and reliable in the North than in the South. The degrees of privatisation and proneness to labour unrest also differ between North and South. Whereas all European ports need to improve efficiency and need better hinterland connections, according to all interlocutors the coordinator has met, the situation is particularly acute in Southern Europe.

There is also a big difference between big and secondary ports. Most of the growth and development perspectives are now at secondary ports, since the big ports suffer from congestion in relative terms and thus from loss of efficiency.

Member States in the south with plenty of development opportunities should fully exploit this competitive advantage for their secondary ports and equally improve the position of their big ports, by rendering port services and hinterland connections more efficient.

The better port efficiency and better hinterland connections in the North of continental Europe, especially good road infrastructure, absence of restrictions to use roads during parts of the week, good railway freight services and efficient use of inland waterways for shipping freight from roughly Antwerp, Rotterdam, Hamburg to final destinations, eternize the lopsided freight movements from the North to Central and South of Europe. For example, cargo from China often sails through Suez, the Mediterranean and the Atlantic to be transported from North European ports by inland transport to final destination in Central and Eastern Europe, Northern Italy and Turkey. This is now the best and quickest way of organising transport in Europe; however, looking at the map of the world it does not make a lot of sense.

In the Mediterranean there is at least place for four big (transhipment) ports – Piraeus/Thessaloniki, a cluster of ports in the North Adriatic (Trieste, Koper, Rijeka, Monfalcone and Venice), Genoa/Marseille and a Spanish group of ports (Barcelona, Valencia Algeciras). Also in the South of Europe, the port of Sines can be developed into transhipment port. The ports of Gioia Tauro and Marsaxlokk already mainly serve as transhipment ports. However in general, such big efficient ports do not yet exist in the Mediterranean. Enabling the development of such efficient ports has the advantage of avoiding a five day delay of ships having to sail through the Mediterranean to Northern European ports, with the ensuing loss of 5 days worth of bunker oil and the negative environmental and economic consequences.

European ports lagging behind in efficiency will only realise the opportunities the current climate offers them, if the Member States and the sector players concerned make haste with the realisation of better hinterland connections and with more efficient management of (operations in) ports.
c. Cooperation between ports

Just as important is the realisation that ports will have to cooperate on a number of issues, as they only stand to gain from cooperation. This is especially true for cooperation on infrastructure (connections to hinterland, to logistics platforms and choice of location of logistic platforms) and safety and security. It is too expensive for each port to develop its own hinterland connections, railway connections being a case in point. Cooperation on infrastructure and safety and security issues does not imply specialisation of ports. Competition between ports is of the essence, the market will decide where to direct what kind of cargo.

However, given the relentless increase in the size of ships, cooperation and some form of specialisation will naturally develop. Some ports have natural draught of 18 metres, some ports can increase draught at rather limited costs, and other ports can only accommodate smaller vessels without having to engage in expensive infrastructural works. For other ports deciding upon increasing draught is only interesting if there are very convincing economic reasons for it, like increasing draught in Kavala or Alexandropoulis to accommodate bigger oil tankers.

d) Infrastructure charging

Equitable infrastructure charging is a priority. Equitable infrastructure charging and internalisation of external costs is a precondition for arriving at a European logistics chain that is economically sensible and environmentally responsible.

The current infrastructure charging gives road transport a competitive advantage, of which the further logistics chain and the environment bear the negative consequences. In some Member States this is more obvious than in others.

In the absence of an equitable infrastructure charging system, other measures to enable a more balanced European transport system are necessary. These range from incentives to use other modes than road to more regulatory measures, such as interdictions to transport certain types of goods by road or to restrict driving hours on certain roads. Innovative thinking on the involvement of concessionaires of motorways in promoting modal shift would help, as would optimum use of the possibilities created under the Euro-vignette Directive, currently under revision.

As example on how governments can incite greening of transport, the Slovenian government has recently reached an agreement with the truckers' associations on a package of tax facilities to speed up the phasing in of Euro V and VI trucks. Slovenia will also introduce a German style GPS guided tolling system, which will make equitable infrastructure charging easier to implement.

e) Articulation of Motorways of the Sea with other modes

Apart from the fact that all players in all transport modes need to be flexible and active in accommodating co-modal transport logistics as it is the only possible way forward for EU transport. Some further findings on the different modes are added, gathered in the last six months.
**Railways**

In large parts of Europe, rail keeps losing ground to other modes, especially road. Rail is losing out on major volumes of cargo for a whole host of different reasons, ranging from lack of investments and lack of flexibility to practices that amount to active discouragement of considering the railway option. In addition, nearly everywhere in Europe passenger traffic is seen as a priority, both because of understandable public service reasons and in many Member States also because passenger traffic under the current circumstances is not a loss making activity, whereas cargo is. This picture cannot be generalised, even within Member States situations sometimes differ from region to region.

Freight forwarders and managers of logistics chains seek the maximum amount of flexibility in the slots they need to book to satisfy their clients. Railway companies, confronted with high fixed costs, seek commitments from their clients and need to be able to programme train movements with months in advance. These two positions are not easy to bring together. Only the development of an integrated logistics chain in Europe will gradually marry the need for flexibility of transporters with the need for security of revenues from the rail infrastructure managers. Here again full informatics treatment and timely information of the involved players is of the essence.

An example from Friuli Venezia Giulia may illustrate how active involvement of the Region, the port authority, the railways, shipping lines and other transporters can create an intelligent way of organising traffic; in this case traffic from Turkey to Trieste to Central Europe and back.

The different transporters have set up shipping lines from Turkish ports to Trieste using roro vessels. After loading their trucks, the truckers fly to Trieste in time to meet their trucks at the vessel and charge them on board a block train, where the truckers have a dedicated carriage. The block train arrives at Salzburg and the cargo moves on either by rail or by road to its final destination.

The Region confronted with endemic congestion and insecurity on its roads decided to fund 30% of the costs for this service. The benefits for the region are the development of Trieste port, benefits to the fragile environment and less insecurity on its roads. The benefits for the truckers are better working conditions.

**NB.** The successful lines operating on Turkey are more or less a direct consequence of the Balkan wars in the nineties. Land transport was no longer an option from and to Turkey. After the wars transporters were convinced of the convenience of the maritime / co-modal option.

In general, all interlocutors stressed the importance of block trains and good rail infrastructure in ports as important factors in realising performing Motorways of the Sea lines. The coordinator believes that presence of performing railway infrastructure in a port is a crucial indicator when benchmarking ports.

**Inland waterways**

Apart from the fact that all interlocutors stressed the need to quickly improve the situation on priority projects Seine-Schelde and the Danube, the coordinator was told that much better use can be made of inland waterways. Main conditions are upscaling of the sector, increase in the size of barges and modernisation of the logistics system that gets cargo from deep sea vessels.
into barges and to final destination. This is linked to general computerisation of the logistics chain in Europe.

The Port of Rotterdam, where 40% of arriving cargo is transported further to destinations in the Netherlands and Europe by inland waterways, claims that inland waterway transport could be seven times more effective than it currently is.

For the development of the Western Balkans and transport possibilities from and to the Black Sea and Central Europe, the navigability of some parts along the river Danube and the Sava River need addressing. This is done by European coordinator, Mrs. K. Peijs. The environmental sensitivities concerning works on some stretches of inland waterways, for instance on the Danube, mean that some improvements can be made quicker than others.

**Road transport**

Road transport is the competition for short sea shipping and for most other modes. As stated under the previous chapter, competing with road is a tall order. It makes short sea shipping into a sector with margins that are just as low as those in road transport. Roads' competitive advantage is starting to fray at the edges, because of its bad environmental performance and endemic congestion on parts of European roads.

The competitive advantage of road has increased over the last years by the last two enlargements of the European Union when qualified and cheaper labour has been added to the trucking personnel pool. Even though this is a transitional advantage, it is a reality for the other modes and further eats away at their margins.

Whereas some ports still need dedicated exits from motorways, or better road access in general, the coordinator does not believe there is place for European co-financing for such projects, apart from the ones possibly already earmarked for co-financing under the new Operational Programmes for 2007-2013.

Where support is warranted for the road sector, it is for better informatics treatment of the whole logistics chain, including the road leg as described above.

**Oil pipelines**

Consideration must be given to pipeline infrastructure. Transporting oil by road, where this is not necessary, unnecessarily adds to pollution and insecurity on roads. Pipeline infrastructure should be able to accommodate Europe's demand for oil to the maximum possible, avoiding pollution and congestion by road transport.

**Logistical platforms – inland terminals**

The development of logistics platforms or inland terminals or dry ports, is essential in the creation of a fluid door-to-door logistics chain. They should be seen as complement to a scarce factor: space in ports. Ports and other players in the sector are well aware of this. Examples of logistics platforms being developed in close cooperation, or even by ports are:

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<tr>
<th>Barcelona/Valencia</th>
<th>Saragossa</th>
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<tr>
<td>Barcelona</td>
<td>Toulouse</td>
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<td>Trieste/Koper</td>
<td>Fernetti/Sezana</td>
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The Slovenian port of Koper, managed as a PLC, is the leading partner in the development of its dry ports. Other dry ports are managed and operated by other players, not necessarily related to a given port. Ease of access and transparency in the allocation of capacity and services of the dry port should under any circumstances be guaranteed, or inefficiency will also hamper the development of these logistical platforms.

**Avoiding empty miles**
Transporting empty containers and other cargo recipients is a waste of money, time and scarce resources, including human health. It is so inefficient that one wonders why this should exist at all in the days of an abundance of information and communication technology. This is not just a problem in the EU, but a global problem.

For maritime transport, for instance, the environmental performance in terms of CO2 emissions is positive compared to road. However, it is only positive compared to full trucks if ships are filled to at least 60% of capacity. More and more empty containers are being shipped straight back from EU to Asia, as they badly lack container capacity. Filling them with low value cargo is no longer economical. In this context, it must be mentioned that trucks also transport their share of empty containers.

A performing informatics system, the realisation of all players in the logistics chain that a minimum of cooperation is in their long-term interest and the full enforcement of cabotage rules throughout Europe could help redress this situation. Although, empty miles may never be completely avoided considering differences in economic activities between regions and therefore in offer and demand for transport services, cooperation and better information can help reduce them.

**Marketing Motorways of the Sea and ports**
Motorways of the Sea and the whole concept of co-modality need vigorous marketing efforts. Trucking in many Member States consists mainly of small firms with less than 5 trucks. Such companies often do not have time to look for alternatives, or do not believe an alternative could ever work until they see a good example in practice. The same goes for other operators in the logistics chain.

Some ports, for instance the ports of Koper and Trieste, are very good at communication to their clients and open representative offices near to their main (prospective) clients. Other port's communication efforts are restricted to a yearly communication of the new harbour dues. This is neither in the interest of ports nor in that of European modal shift policy. Where necessary, ports should improve their communication strategy.

Given the current difficult situation in which the Short Sea Shipping Promotion Centres find themselves, with extremely limited funding and understaffing, an overhaul of the organisation of the Promotion Centres for Short Sea Shipping seems indicated. This opportunity should be taken to change in the direction of the thought underlying this paper: the need to develop a co-modal logistics chain in Europe.
To start with, future Promotion Centres should not focus on Short Sea Shipping alone, but on the whole logistics chain. They should be turned into Co-modality Promotion Centres. This will work only if the funding is overhauled. A one-off start up sum for a Promotion Centre is not a guarantee for success in the future.

A good example of an appealing promotion activity is the one below organised by Short Sea Flanders, by the way the only Promotion Centre to be 100% financed by the Flemish authority and therefore independent from industry.

**Short Sea Flanders organises three short sea vessels against truck races**

Based on an Italian idea of 2002, Short Sea Flanders is organising a race between short sea shipping and onwards transportation to final destination and full road transport in June/July.

1)  
   a) Vessel of DFDS from Gent to Goteborg and onwards by truck to Stockholm  
   b) Truck from Gent via NL, DE, DK to Stockholm

2)  
   a) Vessel of Cobelfret Zeebrugge – Waterford and truck to the Dublin area  
   b) Truck from Zeebrugge via the Chunnel (and one by ferry) through England, ferry to Ireland and then to the Dublin area by road

3)  
   a) Vessel of MSC via Antwerp to Gebze and on to Izmit (Turkey)  
   b) Truck over land to Izmit with short ferry distance between North Italy and South-west Europe

Parameters for success of one mode above the other are: speed and price relative to road transport.

Learning points from the races will be the following:

- Influence of waiting times at terminals and driving and rest time for truckers;
- Tracking and tracing of cargo (via container/cargo unit number or number plate depending on the cargo);
- Comparison of emissions between the two modes. In cooperation with the University of Leuven emissions will be monitored from start to finish;
- Whether return freight can be found.

The coordinator recommends initiating a public – private partnership for the creation of Promotion Centres, into which the Short Sea Shipping Promotion Centres could be merged. Their funding could come from public funds (EU and/or national/regional funding), the private sector and from projects the Promotion Centres will run with the sector. They should first submit a business plan for 3 years and depending on its merits be granted the funding for a period of 3 years, after which they will have to present a new business plan for 3 years. Continuity of funding is of the essence, the only conditionality being the performance of the individual Centres.

In order to make sure that they really know the sector inside out and are useful in promoting the co-modality philosophy, part of their funding should come out of the projects they set up with players in the sector. They should be allowed to enter into bonus-malus type contracts with the sector and keep the profit they make on projects, to be invested in further projects.

The Promotion Centres should also become the single window for the transport sector for advice and guidance on subsidy possibilities, both from appropriate EU and from national/regional funding possibilities.
From the considerations above, it seems nearly inevitable to conclude that port authorities are in the best position to stimulate and initiate fluid door-to-door delivery supply chains into Europe. Their role in the logistics chain is pivotal and is to be developed. They will not have to manage the supply chains, this can be done by third parties, but they should be fully involved.

III Ensuring fair competition

Some parts of the sector and some Member States are rather wary of the competition distorting effects of choosing a shipping line as Motorway of the Sea, or choosing a port as Head of a Motorway of the Sea. This is a risk that is not imaginary and this consequence of the Motorways of the Sea deployment should be avoided.

It is not more than fair, however, to realise that this will always be somewhat difficult. No market functions in a vacuum and its functioning is to a lesser or greater extent determined by conditions that were or are created by some form of intervention or another. Roads have been constructed, ports and railways built without a second thought being given to fair competition.

The European Union seeks to prevent or combat any distortion of competition. This does not mean that under duly justified circumstances and without causing undue distortion of the internal market, Member States can choose to provide funding for vessels or for transport services or for port development, providing the State Aid rules are complied with.

To err on the side of caution, the European coordinator has gradually come to believe that Motorway of the Sea status and TEN-T or Marco Polo funds should possibly not be coupled.

In Chapter II a) the coordinator indicates his perceived way forward on benchmarking and indicators for performance of Motorways of the Sea. The coordinator is of the opinion that Motorway of the Sea status should not be given to a line that serves ports that are underperforming against the most important benchmarks concerning efficiency of ports and hinterland connections. Nor should a line be rewarded that does not comply with minimum environmental and service efficiency standards. Motorway of the Sea status must be seen as reward for efficiency, for environmental performance or for concrete plans to achieve a given benchmark within well defined delays, backed up by earmarked financing and formal guarantees.

IV Social aspects

Maritime transport in the European Union can only keep growing, or in some cases start growing again, when the right social framework conditions are in place. The importance of constructive social dialogue cannot be overestimated in this respect. Some flexibility is necessary to ensure the interests of both workers and employers; their interests will only be fully understood and room will be made for accommodating them if constructive and open social dialogue is possible at all levels.

To start with the employers: there are some very good examples of shippers and other employers in the maritime trade that are able to attract and keep good personnel, because of the good primary and secondary working conditions they offer. Among the secondary
working conditions one can cite: growth perspectives, including different career choices possible within the same company or same sector, taking into account the fact that for a number of people in a certain age group the combination of family life and life at sea is impossible, continuous training possibilities for personnel, specialisation possibilities, possibility to find a job on shore after a career at sea and possibility to go back to sea after a stint on shore. Where possible, these practices should be emulated by other employers.

Seafaring careers are not very appealing to job seekers at this moment. A serious recruitment problem therefore exists in many parts of the EU. Good pay is the only way to attract high quality seafaring personnel. High quality personnel are the best guarantee for efficiency, safety and security of maritime transport. The EU fleet will never become a cheap flag fleet, nor can it make a distinction in salary on board for similar jobs based on EU or non EU nationality, as this endangers social cohesion on board, and with that efficiency and security of operations.

The maximum use has to be made of the different possibilities that exist under, for instance State Aid regimes, where seafaring personnel can under certain conditions be exonerated from income tax.

Equally on the side of employees some show of flexibility and solidarity with future colleagues might be necessary. This holds especially for employees in monopoly services, where these exist, such as crane drivers, dockers, pilots, personnel operating locks. If EU shipping with its respect for working conditions both at sea and at land is to keep competing in the future, some changes are necessary. These might be painful, but losing employment to employees from third countries is even more so.

**Training**

The importance of training, apart from training facilitated by employers, should also be underlined here. Good training opportunities exist, but in many Member States the needs are not completely or not at all in line with the needs of employers. The development from a segments approach to transport to a whole logistics chain approach has not found its translation in many of the curricula. Even though sectoral training is essential, developments in transport render it necessary to accommodate the needs for training in co-modality and general training into logistics and transport flow management.

Here again, good examples exist of players in the sector actively engaging with schools and helping in setting up curricula that respond better to the need of current practices.

Some streamlining in schooling should also happen, the existence of four medium performance major schools in a Member State might be considered an unnecessary luxury were two well performing to schools exist that deliver graduates that can be put to work in the sector straight away. Involvement of the sector and a public relations exercise from their part to explain the job and growth opportunities in the sector would be helpful in raising the image of the sector among future job seekers.

V **Environmental aspects**

Environmental aspects, apart from the environmental performance of vessels themselves, have only very briefly been touched upon in the discussions so far. This is however a crucial part for the development prospects of Motorways of the Sea and shipping in general. Close
cooperation with DG ENV, on issues like the Habitats Directives, the Water Framework Directive and environmental rules agreed upon in the framework of the International Maritime Organisation is necessary.

The possibilities of vessels having access to charging points for electricity to make their approach and leaving of ports less damaging to the people and environment in the immediate vicinity of ports should be evaluated. Possible incentive measures to speed up the deployment of these charging points need to be considered in close cooperation between TREN – MARE and TAXUD.

Possibly a link might be made with the work of Commissioner Piebalgs in his efforts to create a performing off shore network to transport electricity from renewable generation points at sea, primarily off shore wind, to shore. Opportunities for the involvement of the shipping industry into the development of this grid, and possibilities to let shipping benefit from this green source of electricity might be looked into.

VI Safety and security

Safety and security at sea is an issue that is being dealt with in the appropriate fora. Safety issues surrounding the Channel and other narrower straits or difficult waters like the Gulf of Biscay, have not been mentioned by any of the interlocutors as a real obstacle to the growth of maritime transport. The Channel with its mounting and descending ramp has plenty of capacity to accommodate more traffic. The crux is good policing of compliance with the rules by the competent authorities.

Of greatest interest for the Motorways of the Sea project are questions related to safety and security of transported cargo. This goes for the whole logistics chain from charging of cargo to final destination and is therefore not limited to the sea leg of the transport chain. Here again, informatics treatment of cargo is crucial.

The coordinator advocates the generalisation of the harbour master figure. The harbour master is responsible for nautical safety and security in port approach and leaving. It administers pilot, tucking and mooring services and clearance for entering port once a quay, depot or terminal has capacity to receive the vessel. Capacity constraints in ports or at other parts of the logistics chain are aggravated by poor communication between (too many) involved players, when such a central figure does not exist.

The Vessel Traffic Services (VTS) would normally fall under the responsibility of the harbour master. As the name suggests, presently it focuses only on the traffic management operations of the vessels, it does not directly support the management of cargo operations or track cargo.

Therefore, great care should be taken of the interface between VTS and the future tracking and tracing of individual cargo, both at sea and on land. Some shippers (Evergreen, for example) are running pilot projects with Radio Frequency Identification (RFID) systems to enable it to track and trace every individual cargo, every individual container, and different cargoes inside one container. Furthermore, the potential shown by the new VTMIS (Vessel Traffic Management and Information Services) systems, for tracking and tracing cargoes and to reconcile ships and their cargoes has not yet been sufficiently exploited.
Some rudimentary form of tracking and tracing of individual cargo already exists in the form of tracing by container number. This is not always 100% accurate though. Customs only trace cargo by document number. Every badge of cargo from a particular transport company receives a document number. It does not distinguish between cargos.

In the near future, the European Union transporters should dispose of a watertight satellite system of tracking and tracing their cargo. For the moment, the GPS system will be used. The coordinator would advise to ask DG TREN's services to consider prioritising such a European or worldwide system as one of the applications for Galileo which can be developed in partnership with the industry.

VII Simplification

E-maritime and a common maritime space as indicated in Commission Communication on a European Ports Policy are clearly the way forward for maritime transport. The competent services of the Commission are working on this.

A one-stop-shop or 'guichet unique' for administrative and customs procedures is necessary to reduce the disproportionate administrative burden imposed on transport by water. Especially since short sea shipping competes with road transport, the administrative procedures should resemble those applicable to road transport.

In this respect it is important to set up a watertight system to distinguish EU containers from non-EU containers. The system needs to be watertight since counterfeiting of goods such as medication makes it impossible to relax customs procedures and checks for containers. Just vessel control is not enough, containers need to be checked.

For the deployment of the Motorway of the Sea project it would furthermore be helpful if ports would make the distinction between Schengen and non-Schengen traffic, like air and road traffic do.

Swifter customs treatment for Motorway of the Sea cargo would also help. Decision 70/2008/EC of 15 January 2008 on a paperless environment for customs and trade should provide the answer to speeding up customs treatment for, among others, maritime transport. The Decision leads to an interoperable e-customs system by 2013. The system will gradually be introduced with technical preparatory work underway. Single windows for customs treatment are an important part of the system.

In relation to simplification of funding procedures, it would seem advisable to ask for advice on a kind of streamlining of interstate cooperation or proposing a new framework for interstate cooperation on Motorways of the Sea projects. The fact that two or more Member States give state aid to the same project often necessitates a bilateral treaty and thus parliamentary approval in two or more Member States with the ensuing delays. In addition a special body needs to be designated to deal with resolution of disputes. For the limited amounts of state aid now talked about by the Member States this seems a disproportionate burden.

Finally, the coordinator feels that an even wider-spread of English as a common working language, like in aviation, would facilitate maritime transport in the EU greatly. In addition to
the current use of English for the safety of maritime operations e.g. Pilotage, anti-collision procedures, VTS reporting, a wider spread on the shore side of the maritime transport chain would be beneficial to increased cooperation, simplified communication and reduction of friction.

VIII Impact of global developments on the sea leg of Motorways of the Sea

The current climate of increasing competition for scarce resources and the negative environmental impact of the use of most energy sources makes increasing efficiency on all fronts more urgent than ever. Maritime traffic from South Asia, North or South America to Europe and vice-versa via anything but the shortest route might be a luxury the global community will find very costly to bear in the medium to long term. The economic and environmental costs associated with such inefficiencies in the logistics chain will start to weigh heavily on the world economy.

To resolve one of the most obvious inefficiencies in environmental terms – detour of cargo from the Mediterranean to North continental Europe to be transported back over land - transhipment ports need to be developed in the southern part of Europe, and environmentally efficient onwards land transport. This will help European transport infrastructure coping with the doubling of the Suez and the Panama Canal.

The expected increase in traffic generated by their doubling will need to be accommodated in Europe, where it makes most economic sense to receive it, i.e. as close as possible to final destination. Connections should be provided with the most important container route, known as the 'round the world trip' from Singapore-Suez-Panama to Singapore.

The European spatial planning framework might need reviewing in the light of origin and destination of freight. Choices must be made concerning the development of inland waterways, railways, pipeline infrastructure and road infrastructure based on the ways that can most efficiently and most environmentally friendly transport imports from ports to destination in Europe and exports to European ports, bearing in mind that 90% of freight in and out of Europe is moved through ports. For this reason a step by step study into the origin and destination of freight is necessary. DG TREN, supported by an advisory council consisting of Eurostat, some research institutes, EPSO, ECSA and independent experts from academia, should start this process soonest.

On top of the doubling of the Canals, comes the relentless increase in the size of ships which makes infrastructural works necessary in many ports, if they do not want to loose out on most of the deep sea traffic of the future.

The seemingly relentless increase in energy prices as a result of (at least a perceived) scarcity of resources makes action unavoidable. Losing 5 days of bunker for a detour to efficiently run ports with good hinterland connections should be reason for immediate action by Member States in the Mediterranean.

Shippers are not waiting and already start developing ports in third countries along the Mediterranean where conditions can be offered that can never be matched by Member States. The legal framework in third countries surrounding for instance working conditions and environmental protection is less strict, and makes it easier for operators to make profits.
More acute realisation of the implication of this development seems indicated. Seeking protection from unfair competition is logical. It is a fact that this constitutes unfair competition to European ports, and some form of protection might perhaps be warranted. However, erecting protection barriers is not the right answer. It is a stop gap measure that will not alter the fact that without urgent necessary investments in ports and hinterland connections, Member States bordering the Mediterranean will keep losing out on economic development opportunities.

The coordinator is of the opinion that European investment support for infrastructure or shipping lines should not be extended to third Mediterranean countries at this moment. He does feel that the European Union only stands to gain from better qualified personnel in all logistics services in the countries it trades with as this increases safety and security of operations in the Union as well. Extension of European financial support for training in some areas would therefore be welcome.

The coordinator intends to play an active role in the development of the plans for Motorways of the Sea in the framework of the Union for the Mediterranean, instigated by French president Sarkozy. He equally intends to play an active role in the development of Motorways of the Sea in the Black Sea Region and with Russia.

Regarding global developments in environmental regulations, the impact of the IMO marine environment committee decision of early April which would lead to barring the use of bunker oil from 2010 by vessels in IMO members' territorial waters, if the rule is formally adopted by IMO in October, would have consequences for the competitive position of the shipping industry.

Should the decision be formally adopted, the additional demand for distillates this would cause might create scarcity in existing refining capacity. The oil industry will have a heavy responsibility as well in ensuring that cleaner fuel will be used in shipping. Should additional refining capacity be constructed in time and should demand for oil still be able to be met with current resources, the additional costs for shipping fuel could mean sizeable price increases for many products.

The current downturn in the economy already affects global shipping. Especially traffic to the United States, as the rate of the dollar and its poor economic performance have sized its imports down considerably. Global demand for ships is slowing, with an exception for short sea vessels. It is not clear how long this exception for short sea shipping vessels can last.

All this makes it all the more urgent to invest in Research and Development into new and cleaner ways of propelling vessels, and fuelling the transport sector in general.

IX Financing Motorways of the Sea

As for all infrastructural and other transport projects, the bulk of the financing for Motorways of the Sea related investments will have to come from the private sector. Community funding provides leverage for projects which might otherwise not quickly be realised by the private sector alone.
For all forms of public funding to projects related to Motorways of the Sea, no funding should of course be given out without cast iron guarantees concerning the feasibility of the project, the market research that has preceded it and the formal engagement of enough players to secure a successful project. There should always be a possibility of reclaiming money if partners do not live up to their commitments.

a) EU funding and State Aid Guidelines

Among the players in the sector and among Member States’ authorities some confusion reigns as to the articulation of the different kinds of European funding for Motorways of the Sea project. Under Marco Polo and the Trans European Networks funding, different conditions apply. This is compounded by the fact that under the Community Guidelines on State Aid for maritime transport still other conditions apply.

The current situation can be broadly summarised as follows:

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<tbody>
<tr>
<td>Operations/services</td>
<td>Investment in infrastructure(^1)</td>
<td>Investment in infrastructure Operations/services</td>
<td></td>
</tr>
<tr>
<td>Aid intensity</td>
<td>35%</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Aid duration</td>
<td>5 years</td>
<td>Depending on individual case decision. In principle degressive</td>
<td></td>
</tr>
<tr>
<td>Budget</td>
<td>450 m(\text{€})^2</td>
<td>310 m(\text{€})^3</td>
<td>Not relevant</td>
</tr>
</tbody>
</table>

More transparency and ease in the handling of the different EU funding possibilities has been recognised as an important issue. The issue is especially important for Member States’ authorities and for smaller and medium sized enterprises.

Duration and intensity of aid could be harmonised to some extent. As regards subsidies for services, all interlocutors have indicated that they accept the idea of degressivity of support. This could also be made to apply to support for services under Marco Polo or, if considered eligible for funding, under TEN-T.

\(^1\) Start-up aid for operations /services is possible in special cases

\(^2\) The Marco Polo II budget is spread out over yearly calls. No funding has been earmarked for Motorways of the Sea projects. The amount of funding going to Motorways of the Sea projects depends on the quality of the projects.

\(^3\) The funding for Motorways of the Sea is spread out over yearly calls for proposals. The budget is divided in the following manner: 2007 – 20 m\(\text{€}\), 2008 – 30 m\(\text{€}\), 2009 – 85 m\(\text{€}\), 2010 – 100 m, 2011 – 50 m\(\text{€}\), 2012 – 25 m\(\text{€}\). The first call will be published on 23 April 2008.
The coordinator firmly believes that TEN-T funding should be given to investments in infrastructure that benefit the whole logistics chain, i.e. port/hinterland infrastructure. TEN-T funding is there to enable modal shift and to lubricate the logistics chain in order to make other modes an attractive proposition. Public service related cohesion efforts are a different matter.

The limited amounts of funding available under Marco Polo and TEN-T for Motorways of the Sea projects will to some extent limit the use of this funding to seeding money. It is in the sector's and in the common interest to make sure that the seeds are sowed in fertile ground. Improvement of infrastructure both in ports and hinterland connections seem the best way to spend TEN-T funding. For Marco Polo special priority should be given to subsidising services in the common interest, such as improvement of efficiency of services in ports and of personnel in ports and at sea. Funding of vessels should only be considered for the part of the necessary investment to improve the environmental performance of shipping. Here, close cooperation with DG RTD under the 7th Framework Program is indicated, especially as regards the application of innovative technology in vessels or on land to make operations run with less harmful emissions.

Should start-up aid be given to new lines, this support should be degressive and given to the one deciding on the modal choice for the cargo: the cargo owner.

One of the criticisms of TEN-T and Marco Polo funding is that it risks being spread out over a host of small projects of a very different nature. An idea to focus the yearly calls under TEN-T and Marco Polo on specific subjects could be considered. For instance the development of logistical platforms for TEN-T in a given year and training under Marco Polo. All yearly calls could have a specific subject. This would focus the minds of applicants, make it easier to apply and gives the European Commission additional leverage on the direction it wants to steer its efforts in.

b) National tax instruments

All players in the sector have spoken highly of the Italian Ecobonus system. This is a direct subsidy of 100€ to a transporter which, instead of choosing the road to final destination of its cargo, chooses to take a vessel for (part of) its trip. This reduces congestion on the clogged Italian roads, reduces air pollution and gives the incentive to the players that directly influence the balance between the transport modes by the choices they make. In some ways it resembles the incentive of a 30% subsidy given by the Region of Friuli Venezia Giulia for train transport.

According to the coordinator this system merits to be considered taken as best practice example that could be integrated by other Member States. Especially by the Member States that profit from the Italian subsidy as it also relieves congestion on their roads. He therefore recommends an evaluation of the possibilities of expanding the system to a cooperation effort by 2 or 3 Member States. Should such an approach be successful, it could be generalised throughout Europe, taking into account national and regional specificities.

In order to speed up investment in new vessels and therefore increasing the environmental performance of shipping, the coordinator would welcome initiatives by Member States that would allow for quicker depreciation times of vessels.
There are a host of other national tax possibilities that can be brought to bear when promoting modal shift and increasing the environmental performance. Important is that the sector and the Member States engage in a constructive dialogue on how to redistribute income from taxes and excises to enable these goals.

c) Structural funds

In this context it would be useful to remind the Member States that under the Structural Funds they should make full use of the available financing to enable modal shift. Some Member States have access to significant amounts of funding under the Cohesion Fund. However, all Member States can use money from the Structural funds for training activities, for reconversion of industrial areas in decline, for cross border cooperation and for other activities that could be used to speed up the transition to a European co-modal transport infrastructure.

In conclusion, the coordinator is of the opinion that TEN-T funding should only be destined to projects of common interest to the European Union, be it for reasons related to the environment, European competitiveness or cohesion.

Where duly substantiated reasons exist for a Member State or a region to fund the development of a given port or service, without this clearly serving the common interest, such funding should be considered under the State Aid rules, as it is done in other sectors.

Member States need to be encouraged to make the best use of the Community and national funding possibilities at their disposal to improve the position of their maritime sector and make the most of the environmental imperative of promoting modal shift in favour of less polluting modes.

d) European Investment Bank

The role of the European Investment Bank for funding investments needs clearer definition. The coordinator intends to visit the EIB shortly to discuss this.

X Clarifying the concept of Motorways of the Sea

The Transport White Paper of 2001 introduced the concept of Motorways of the Sea as high quality transport services based on short sea shipping. Not many are really clear as to what the concept entails or as to what sort of activities would form part of a Motorways of the Sea project. The coordinator believes that the Transport White Paper gives an adequate description and that further definition is unnecessary.

More important than a definition of Motorways of the Sea, in his view, is clarity on what the conditions are for enabling fluidity of the logistics chain in direct connection to the maritime part of the chain. He believes that the realisation of these conditions can form part of a Motorway of the Sea project.
Defining a Motorway of the Sea line or a Head of a Motorway of the Sea line will inevitably cause problems in countries with many ports, in countries with a decentralised structure and in countries which are liberalised and fear competition distortion.

For this reason the 'flag' for a port or for a shipping line, based on objective indicators as described in Chapter II, serves as quality stamp of approval. All ports or shipping lines meeting the benchmarks should receive such a quality stamp. This does not mean that they will all receive support. It is recognition of excellence. Just like beaches can lose their flag every year, so should the dynamic benchmarking of Motorways of the Sea lines and ports lead to new flags being given out. Lines or ports that do not meet the benchmarks anymore should lose their quality stamp.

The different players have given the coordinator their views on what makes or breaks a Motorway of the Sea project. Their input leads to the following conclusions:

- Reliability is the most important success factor. Transporters need to be sure of the conditions under which their cargo will be transported over sea; they need to be sure their cargo will reach the agreed destination at the agreed time. Reliability depends on all the efficiency issues described in the report, concerning services, ports and hinterland connections;
- Frequency of the line comes next. There is no standard frequency for a Motorway of the Sea line, it cannot be said that frequency should be determined as 1 or 2, 3, 4 or 5 or 7 times a week. One sailing a week is the minimum, but it would go too far to decree at EU level that frequency should be at least 3 or 5 times a week. It very much depends on the line and on the cargo that is being transported. A new line will take time to get to full capacity, even considerable time as many experiences in the short sea shipping field show. Upping frequency requires enormous investment and can only be done when the line has found its feet. Where frequency can not be decreed, fixed departure times are essential;
- Ease of access and use for the clients - good informatics support to enhance transparency;
- Close contacts with potential clients and continuous exploration of the market;
- Marketing of the concept among transport companies and getting these to change their way of doing business and changing their traditional investment patterns, for instance for an equal amount of trailers to trucks, to more trailers than trucks for unaccompanied transport.

This would lead to the following list of quality criteria for Motorway of the Sea status:
- Hinterland connections of ports
- Port internal network
- Characteristics of ro-ro terminal or container terminal
- Characteristics of ro-ro ramps or container platforms
- Loading, unloading operations
- Time and procedures necessary for departure, arrival of vessels
- Berthing of vessels
- Vessel characteristics
- Maritime services characteristics
- Indicative prices of maritime services
- Administrative procedures
**Development of the Motorways of the Sea project**

For the latest developments relating to the deployment of the Motorways of the Sea project, the coordinator refers to the Commission Staff Working Document 'Report on the Motorways of the Sea – State of play and consultation' of October 2007.

The choice for the 5 different corridors is justified, as the relevant seas have characteristics that are unique enough to warrant specific approaches. One possible exception would be the Mediterranean, where the split halfway through Italy seems to some extent artificial.

Apart from stimulating progress within the different corridors and appealing on all players involved, and offering his help should project implementation problems arise, the priority of the coordinator is to ensure that the articulation points between the different corridors do not develop into friction points of whichever nature.

**XI Conclusion**

The basic thought underlying this report is that a success will only be made of Motorways of the Sea when all involved actors – the European Union, the Member States and all their levels of administration, all the players in the transport chain from shippers, to ports, to terminal operators, railway companies, truckers’ organisations, motorway concessionaires, down to individual clients of transport and to consumers at large – cooperate on the realisation of the most important objective underpinning the European Union's Trans European Networks policy:

**Strengthening Europe's competitive position in the world by doting it with a seamless modern transport infrastructure guided by radical and immediate choices for:**

- a. Ensuring responsible and sustainable economic growth;
- b. Ensuring that internalisation of external costs related to transport develops from being an object of discussion into being professed in practice;
- c. Coordination between the European Union and the Member States on infrastructure policy; the right coordinated choices now will enable the European Union to keep growing and to increase its competitive edge in future oriented sectors;
- d. Research and Development efforts to decrease environmental consequences and global energy use implications on shipping’s competitive position, thus sustaining global economic growth by trade.

It is the coordinator's belief that in principle a policy of either regulatory or financial incentives to realise the objectives above would be the best guarantee to get cooperation of all involved players in the achievement of these objectives. The European Union, but most of all the Member States bear an important responsibility in realising the Lisbon Agenda's goals through the right policy framework conditions.

However, a firmer regulatory approach might be warranted should the behaviour of Member States and economic actors keep stunting European efforts to achieve economic growth in a responsible and sustainable way.
XII Recommendations

The findings above bring the European coordinator to formulate recommendations; many recommendations are incorporated in the text and are not repeated here. Some new recommendations and recommendations of an institutional nature are summarised below. Most of these are addressed firstly at the Vice-President of the European Commission and through him to the broader European institutions, Member States and economic players.

- In general a refocusing of infrastructural priorities and policies in the Member States would be called for.
- Start of an industry wide initiative to improve the environmental performance of shipping, upon the initiative of the Vice-President;
- Implication of the Vice-President in brokering bi-or trilateral agreements on Ecobonus type systems in relevant Member States, for instance starting by setting up a working group between Italy, France and Spain;
- The Commission to adopt a Communication on Motorways of the Sea and the articulation between different sources of European funding shortly;
- Setting up of an Interservice group between TREN (and EMSA) – MARE – RTD – ENV – COMP – TAXUD, to meet in different compositions according to agenda, steered by TREN;
- Launching a call for expressions of interest into becoming a Motorway of the Sea Head or line, not related to subsidy, but on the basis of an on-line benchmarking questionnaire producing traffic light results. A rapid two month study will precede the call.
- Focus TEN-T funding on infrastructure investment that benefits the whole logistics chain.
- Focus Marco Polo II funding on training of personnel, on Co-modal Promotion Centres and on environmental improvement of the vessel fleet.
- Focus the yearly calls for TEN-T MOS funding and Marco Polo II funding on specific subjects.
- Introduce English as "langue v hiculaire" for all services related to port approach and operations.
- Public Relations efforts to put expenditure in modern European infrastructure in perspective, for instance in relation to Member States' expenditure.
- Studies:
  - Step by step long-term study into origin and destination of freight in Europe to be gradually refined
  - A short study on appropriate benchmarking/indicators in line with existing national and international systems to grant Motorways of the Sea status
- Continuous improvement on indicators/benchmarking exercise for ports, dynamic exercise
- Follow-up and possible deployment of pilots into tracking and tracing of cargo
- Atlas of European ports with main characteristics, in port and hinterland connections – to be reviewed every 3 years