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formalities for ships arriving in or departing from ports of the Member States
of the Community and repealing directive 2002/6/EC
- Report on impact assessment of different options to simplify/reduce/eliminate
administrative procedures for Short Sea Shipping and implementing a
European Maritime Transport Space without Barriers

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accompanying the

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on reporting formalities for ships arriving in or departing from ports of the Member States of the Community and repealing directive 2002/6/EC

Report on impact assessment of different options to simplify/reduce/eliminate administrative procedures for Short Sea Shipping and implementing a European Maritime Transport Space without Barriers

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Lead DG: DG TREN

Other involved services: DG AGRI, DG EMPL, DG ENTR, DG ENV, DG ESTAT, DG INFSO, DG JLS, DG JRC, DG MARE, DG MARKT, OLAF, DG REGIO, DG RTD, DG SANCO, DG TAXUD, SG, DG TRADE, DG TREN

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Executive summary

Fast growth of heavy road transport and related congestion, accidents and pollution are the main economic, social and environmental problems that the policy to promote Short Sea Shipping is expected to address. Europe needs an efficient co-modal transport system combining the benefits of all modes to maintain and increase its competitiveness and prosperity in line with the Lisbon agenda and the mid-term review of the White Paper on European Transport Policy.

Complex administrative procedures hinder Short Sea Shipping from developing faster. The administrative procedures involved have negative economic consequences, in particular costs that are associated with administrative delays, frequent or regular controls and the time spent preparing documentation and procedures. This complexity also decreases the attractiveness of the mode and entails that Short Sea Shipping cannot fully contribute the efficiency and sustainability of the European transport system.

While the removal of obstacles to land transport has finally become a reality, the Internal Market across the European Union is so far incomplete for Short Sea Shipping.

Under the concept of European Maritime Transport Space without Barriers, the Commission services have assessed the main administrative and documentary procedures in Short Sea Shipping with a view to simplifying, reducing or, when possible, eliminating them for transport operations between two EU ports.

In particular, the following procedures were examined:

- Customs procedures (including simplified procedures);
- Ship reporting procedures.
- Veterinary and phytosanitary procedures;
- Carriage of dangerous goods;

Further enablers were also considered:

- Electronic transmission of administrative data;
- Single window for all administrative formalities;
- One-stop shop for controls;
- Pilot Exemption Certificates;
- Alternative administrative language;
- Dedicated areas for Short Sea Shipping in ports.

The policy options that were considered were:

- Status quo as baseline scenario;
- Case-by-case simplification of individual administrative formalities;
- Act on the basis of a co-ordinated set of measures simplifying, reducing, and, wherever possible, eliminating formalities for vessels sailing between EU-ports in line with the model of the Internal Market offered by land transport.

The impact assessment of these options was based on many assumptions made under careful consideration of the contributions of all stakeholders. It showed with sufficient confidence that administrative simplification brings clear benefits and that the maritime transport sector should not be excluded from the general free-circulation regime in place for land transport.

The initiative has received full support from the stakeholders involved, and it is one of the cornerstones of the recent Communication on an integrated maritime policy, the "Blue Book". The stakeholders considered that not only the actual delays, but the risk of delays are important disincentives to use Short Sea Shipping. Reliability and punctuality are the most important factors and will be improved by the proposed measures at a rather moderate cost for the society. The alignment of administrative formalities applied to intra-EU maritime transport with the other modes will attract more shippers to maritime transport.

It is thus suggested that the Commission adopts an action plan to simplify existing administrative procedures and eliminate some of them. The action plan comprises short term measures:

- Rationalisation of vessel-related and goods-related reporting and forms required by Directives 2002/6/EC (formalities for vessels at the arrival/departure of ports), 2000/59/EC (waste and residue reception), 2002/59/EC (vessel monitoring) and Regulation (EC) N° 725/2004 (maritime security).
- Elimination of systematic controls and documentary requests by Customs for goods carried by sea between EU ports in line with inland transport. The measure will require a modification of the implementing provision of the Community customs code¹ and should be in force by 2010.
- Concerning the legislation on veterinary and phytosanitary products, guidelines should be adopted in 2009 in order to speed up the documentary checks in Directives 89/662/EEC², 90/425/EEC³ and 2000/29/EC⁴.

¹ Council Regulation (EEC) N° 2913/92 of 12 October 1992 and Council Regulation of the European Parliament and the Regulation (EC) N° 450/2008 of 23 April 2008 laying down the Community Customs Code; OJ L 145 of 4.6.2008, p. 1

² Council Directive of 11 December 1989 concerning veterinary checks in intra-Community trade with a view to the completion of the Internal Market; OJ L 395 of 30.12.1989, p. 13

³ Council Directive 90/425/EEC of 26 June 1990 concerning veterinary and zootechnical checks applicable in intra-Community trade in certain live animals and products with a view to the completion of the internal market; OJ L 224, 18.8.1990, p. 29

⁴ Council Directive 2000/29/EC of 8 May 2000 on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community; OJ L 169, 10.7.2000, p. 1

Further enabling measures would also need to be implemented, namely:

- Enhancing the electronic transmission of administrative data;
- Setting-up an administrative single window;
- Simplification of the sea transport of dangerous goods by implementing in the EU Member States the equivalence between some IMDG (carriage of dangerous goods by sea) rules and those of ADR/RID (carriage of dangerous goods by road/rail).

The two first measures could be implemented and co-ordinated under wider proposals, in particular those to be included in the action plan for the deployment of e-maritime systems in 2009.

In addition, recommendations should be given that Member States implement further enabling measures, each time the local conditions permit to do it in an efficient manner, namely:

- Coordinate the inspections carried out in the ports by the various administrative services (“one-stop administrative shop”);
- Extend the scope of Pilot Exemption Certificates;
- Introduce the use of the language most commonly used at sea as an alternative to the national language(s) in administrative communication;
- Create areas in ports dedicated to Short Sea Shipping where that can facilitate the operations for this mode.

This combination and co-ordinated implementation of the measures will allow cost savings and productivity benefits while maintaining the availability of essential information.

Information on goods under Customs and other types of supervision (animal product, veterinary and phytosanitary) would still be available and have to be presented at spot checks.

The package will allow a reduction of administrative burden estimated at € 2.4 billion and environmental benefits estimated at € 182-365 millions during the period 2009-2040. The costs for designing, developing and operating the measures are estimated at € 617 millions. They would be shared by the economic operators, essentially port authorities and shipping companies. The costs for national administrations would be negligible.

The approach would not risk lowering standards and thus preserves the fundamental objectives of Customs and safety related regulations.

It would help lowering the costs to businesses in several Member States and, subsequently, to consumers.

1. PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

1.1. Organisation and timing

The creation of the European Maritime Transport Space without barriers is part of the Commission's Legislative Work Programme 2008 and corresponds to action 2008/TREN/017 of the Work Programme of the Directorate-General of Energy and Transport.

An interservice Working Group on internal market and maritime transport, which included DG AGRI, DG EMPL, DG ENTR, DG ENV, DG ESTAT, DG INFSO, DG JLS, DG JRC, DG MARE, DG MARKT, OLAF, DG REGIO, DG RTD, DG SANCO, DG TAXUD, SG, DG TRADE and DG TREN was set up in October 2006. The Group met seven times until May 2008.

The group provided a first inventory of administrative measures applying to intra-EU maritime transport measures, identify the objective to achieve for its insertion in the action plan for an integrated maritime policy, prepared terms of reference for the quantification of the impacts of potential options by an external consultant, prepared the questionnaire for a public consultation and followed up the impact assessment study.

1.2. Expertise and consultation

1.2.1. External expertise

An impact assessment study was carried out by PriceWaterhouse Coopers (PwC) between September 2007 and June 2008. The consultant provided assistance in order to:

- Identify the main stakeholders involved and set up contacts in order to discuss potential solutions;
- Develop a first set of draft solutions;
- Analyse the decision processes and possible bottlenecks for implementing potential solutions in order to come up with practical, well defined results;
- Substantiate the discussion with the stakeholders by analysing and reporting on the relevant issues (market issues, legal issues, specific Customs procedures);
- Provide the Commission with elements of impact assessments for possible solutions.

1.2.2. Public consultation

As part of the European's freight transport agenda⁵ of 18 October 2007, the Commission services launched an open consultation on a "European maritime transport space without barriers" until 20 January 2008. A questionnaire was put online on the European Commission website in view to gathering stakeholders' views.

The number of stakeholders that participated in the consultation was 52. 45 stakeholders were from EU countries, 4 from non-EU European countries and 3 from outside Europe. 7 contributions came from

⁵ Communication from the Commission: The EU's freight transport agenda: Boosting the efficiency, integration and sustainability of freight transport in Europe, COM(2007)606 of 18 October 2007

national administrations (of which 3 were national governments, 16 came from ports and port services, 9 from ship owners and 5 from shipping agents).

1.2.3. Workshops with stakeholders

In addition to the online consultation, two dedicated workshops with participants from the industry were organised in Brussels on 26 March 2007 and in Antwerp on 15 April 2008.

The Consultant sent specific questionnaires to selected port authorities and port operators. These questionnaires collected information on issues partially covered in the consultation.

A reference stakeholder group comprising twelve persons from industry and the administration was established in October 2007 and had the opportunity to make comments during the impact assessment process.

1.2.4. Main results

The consultation confirmed that most procedures require around one physical control per arrival/departure: according to several stakeholders, dangerous goods procedures require more than one control per arrival/departure. Dangerous goods procedures generate a consistent delay to arrival/departure due to controls and require the highest number of controls (document request, documentary control, inspections).

Several stakeholders complained about the poor competitiveness of sea transport against road transport, *inter alia*, due to much more complex administrative procedures.

They warmly welcomed the principle of the abolishment of administrative procedures in intra-EU maritime transport to the same extent that they have been abolished for road transport.

Some stakeholders, notably those from administrations, pointed to possible negative impacts of eliminating or reducing administrative procedures. For instance, the ones for Dangerous Goods) should be reduced at no risk for human health and the reduction of border controls should not give rise to increased security risks, trafficking or smuggling.

Many respondents, however, call for a simplification of administrative procedures. For customs procedures however, a share of stakeholders, notably shipowners, proposed their elimination. It was also highlighted that the elimination of barriers would enhance the development of trade and intermodal maritime transport.

The outcomes of the consultation have been used to identify the measures to be assessed and have been complemented during the impact assessment.

1.3. Consultation of the Impact Assessment Board

1.3.1. Opinion of the Board

The Impact Assessment Board of the European Commission gave an opinion of the draft impact assessment report on 18 July 2008. The Board expressed a number of remarks, which can be summarised as follows.

The problem definition shall present more thoroughly all the relevant administrative bottlenecks/regulatory failures generated by existing administrative procedures, clearly differentiating

whether these flow from EU or national legislation. The general and specific objectives shall relate to them and to the concrete measures envisaged in the various policy options. The report shall define on subsidiarity grounds which instruments and at which level would be used to implement the elements of the options.

The overall utility of the initiative (in terms of net benefits/cost) is largely determined by the correct assessment of 'time cost savings' and the IA report shall present more clearly how and on the basis of which assumptions the corresponding estimates have been calculated, and to what extent stakeholders considered these time cost savings to be the most important benefit of this initiative. The report shall clarify how the Standard Cost Model SCM methodology has been used when assessing changes in administrative burden.

The IA report assumes (on the basis of two scenarios) significant environmental benefits resulting from the reduction of external costs (mainly air pollution) due to an expected modal shift from road/rail to maritime transport. The report shall clearly set out how Short Sea Shipping competes with road/rail transport, specify which Member States will be most affected and present more clearly the calculations and the data used to develop the scenarios, consistent with the IA on external costs of transport (e.g. impact of the up-coming Euro VI measures for road transport).

1.3.2. How the opinion has been taken into account

Modifications have been brought to the Report in order to integrate the remarks of the Board. In particular, a table based on the description of the policy measures has been added under the "Problem definition" in order to describe more precisely the list of administrative bottlenecks and the information whether they flow from EU or national legislation. The specific administrative failures have been added in the table "specific objective" (paragraph 3.2.). The description of each measure which is part of Option B (paragraphs 4.2.1. to 4.2.9.) indicates now clearly what the available instruments are. An extended description of the methodology used has been added as Annex D.

2. PROBLEM DEFINITION

The administrative procedures involved in Short Sea Shipping have negative economic consequences, in particular costs that are associated with administrative delays, frequent or regular controls and the time spent preparing documentation and procedures. This complexity also decreases the attractiveness of the mode and entails negative environmental and social consequences such as road congestion, road accidents, lower efficiency and sustainability of the European transport system.

With the complexities, Short Sea Shipping is not able to play its full role in co-modality that is aimed at combining the benefits of all modes to maintain and increase European competitiveness and prosperity. The complexity of administrative procedures has been generally identified as an obstacle to faster development of Short Sea Shipping not only by the Commission (cf. the 2003 Programme for the Promotion of Short Sea Shipping⁶, the mid-term review of that programme⁷ and earlier Commission Communications on the mode⁸) but also by national administrations and other stakeholders.

⁶ Communication from the Commission: Mid-Term Review of the Programme for the Promotion of Short Sea Shipping, COM(2006) 380 final of 13.7.2006

⁷ Communication from the Commission: Programme for the promotion of Short Sea Shipping, COM(2003) 155 final of 07.04.2003

⁸ Communication from the Commission: The Development of Short Sea Shipping in Europe, A Dynamic Alternative in a Sustainable Transport Chain, COM(1999) 317 final of 29.06.1999

2.1. Underlying drivers of the problem

2.1.1. Internal market in maritime transport is incompletely achieved

The achievement of an Internal Market for goods across the European Union is so far incomplete with regards to sea transport. Indeed, while the removal of obstacles to land transport has finally become a reality, for sea transport there are still major barriers to overcome. Among these, there are administrative barriers, which are often complex and heterogeneous across Member States.

With a few exceptions in the Customs, veterinary and phytosanitary domains, the administrative procedures applicable to intra-EU maritime transport of goods are comparable to those in force for international sea transport.

Maritime voyages from one port of an EU Member State to another, even without calling at any intermediate non-EU port or free-port or meeting another ship en-route, are normally considered international. This is the case irrespective of the types of goods that the vessel carries. For Customs purposes, a ship is indeed considered to leave the Customs territory when it leaves a Community port for another Member State port, sailing through international waters. For this reason, a number of administrative procedures are set up when vessels arrive or depart from ports. These administrative procedures involve a wide set of EU and international legislations. They range from Customs and taxation rules to immigration, trade, statistics, environment, waste, phytosanitary veterinary and health protection, security and safety regulations. These regulations are not coordinated with each other, thus sometimes leading to redundancies and heavy time consumption.

2.1.2. Further problem drivers

- Procedures associated with sea transport of dangerous goods are different from those in land transport, thereby adding complexity to intermodal shipments;
- Veterinary and phytosanitary controls in intra-EU sea transport, with the exception of regular direct links between ports, are considered import/export with all the formalities involved.
- EU common regulations are subject to individual interpretations by Member States or even ports;
- Member States often require administrative procedures to be carried out in their local languages;
- Information technologies are not universally widespread across ports and there are different information systems in place. Electronic notifications or declarations are not commonly accepted across the EU.

Most of the procedures concentrate in ports.

2.1.3. Magnitude of the problem

Administrative procedures are, admittedly, heavy in Short Sea Shipping. The mode cannot offer the same flexibility as road. Transit time is often somewhat longer. Short Sea Shipping is the best option in transport over a certain distance that is longer than in other modes.

The existing procedures can be classified in a number of ways. First of all, it needs to be pointed out that there are three main authorities that can collect the information from vessels and can carry out inspections/controls on vessel, crew and goods: Port Authorities (that is, Harbourmasters in ports),

Customs authorities, and Maritime Rescue Coordination Centres (MRCCs), controlling vessels' traffic along the coasts and border guards/control Authorities.

On the side of the ships, three main representatives of the ships are involved in the procedures, reporting activities and possible checks on crew and passengers: shipmasters, ship agents and ship operators (owners or carriers).

All the procedures could be divided into three main areas: ship reporting documents (usually related to port authority), declaration and clearance of cargo (usually related to customs) and routine checks or inspection.

Costs for administrative formalities depend on the time spent preparing and carrying out specific procedures in port: document related and full-time-equivalent related procedures ("vessel side" and "port side") and the possible delays of vessels or goods due to specific inspections and/or procedures.

The following table summarises the total man-hours (considering an average, best-case and worst-case scenario) required to carry out the various procedures⁹ for all entities/counterparts.

Time involved for procedures on standard goods (man-hours per call) Source PwC Enquiry 2007

	Proc. related to goods	Proc. related to vessels	Total
Average time for the document preparation	2.5-3.0	3-3.5	6-6.5
Average time carrying out the procedures in port	2.0-2.5	4.5-5.0	6.5-7.0
Average time for carrying out the procedures	5.0-5.5	7.5-8.0	13.0-13.5

Man-hours in relation to procedures on non-standard goods Source: PwC 2007

	Dangerous Goods	Phytosanitary	Animal
Average time for carrying out the procedures	2.0-2.5	1.5-2.0	2.5-3.0

According to the assumption on personnel costs, the average personnel cost related to all the administrative procedures could be fixed at around € 288 per port call.

The total costs related to personnel costs of carrying out procedures and the effect that these procedures and related controls (of vessel and goods) can go up to 3 – 3.5% of total transportation costs.

Dwelling time of goods depend on the impact of customs and other administrative procedures and also on the shortcomings in storage management and cargo handling, and on commercial practices. The average dwelling time does not exceed 5 to 7 days for containers, 7 to 10 days for general cargo, and two weeks

⁹ All figure have been carried out according to consultation outcome, data gathered from specific quantitative questionnaires and bottom up analysis.

for bulk products. In intra-EU SSS, where journeys last on average less than a week (often less than a day), a delay longer than the journey time has a tremendous weight on the overall attractiveness of the maritime alternative to road transport.

2.1.4. Main bottlenecks generated by existing administrative procedures

The main failures derive from customs, as well as veterinary, zootechnical, phytosanitary administrative requirements, which are imposed on goods if they are moved by vessels when the same procedures are not be applicable if goods are carried with other transport modes. Administrative procedures should be transport mode neutral. These failures clearly result from EU legislations.

In addition, consultations have highlighted other failures resulting either fully from EU legislation or lack of legislation (transport of dangerous goods, authorised regular shipping services, single windows, use of a second language) or partially (lack of interoperability of electronic data transmission, pilotage exemption certificates, joined inspections) or fully from national or local conditions (separation of areas in ports).

The specific administrative failures have been added in the table "specific objective" (paragraph 3.2.).

For four measures suggested by stakeholders during the consultation, a recommendation is the only instrument which was envisaged, because they relies on local condition and a general measure would only be envisaged after a more detailed analysis of these local conditions, which was not the purpose of our study. It is the case for the separation of areas in ports.

The following table indicates what the available instruments are.

List of the main measures for the reduction of administrative bottlenecks in SSS

Bottleneck	Measure	Instruments	Expected benefits
Customs procedures, even when simplified is fairly cumbersome and induce a distortion with road transport	Elimination of Customs formalities for intra-EU sea transport of EU, EU cleared and goods in transit goods	The objective can only be achieved through EU legislation as the bottleneck results from existing EU legislation. The legislation should not affect maritime transport of imported/exported goods.	Free circulation within the EU ports Levelling with road transport
Veterinary, phytosanitary procedures and controls on animal foods products are systematic for non-regular intra-EU sea transport, which induce a distortion with equivalent land transport	Elimination of veterinary/phytosanitary/sanitary systematic formalities for intra-EU maritime transport. Extension of the exemptions granted to regular services by the relevant Directives 2000/29/EC, 90/425/EEC, 89/662/EEC to all intra-EU services.	The objective can only be achieved through EU legislation as the bottleneck results from existing EU legislation. The legislation should not affect maritime transport of imported/exported goods.	Free circulation within the EU ports Levelling with road transport
Vessels are often changed by operators. Problems arising when operators take slots on vessels from other short-sea operators can be solved in this way. High time consumption for carrying out procedures (customs); Low degree of competitiveness against road transport (customs)	License “Regular liner service” to be connected with operators (not with vessels) and to be granted to non regular liner services intra EU cargoes.	The License should not be connected to one or more vessels/routes, but it should be given to the operator for intra EU cargoes. The objective can only be achieved through EU legislation as the bottleneck results from existing EU legislation.	Less administrative burden, lower costs. More fleet management flexibility for shipping companies. (only for customs formalities)
Sea transport of dangerous goods requires compliance with different and more complicated regulations and documentation than road transport.	Simplification of regulations on carriage of dangerous goods in the case of “Authorised Regular Shipping Services”	Authorities must agree on regulations regarding dangerous goods that are harmonised between transport modes. Even if a regional agreement between Member States exists, the measure should be achieved through EU legislation, as it necessitates an adaptation of existing EU legislation. Intra and extra EU trade should benefit from this simplification	SSS would become a more attractive transport mode; lower costs.
High time consumption for carrying out procedures; Low degree of	One single document for administrative	Introduction of a single document, which	Faster turnaround times for vessels in ports

competitiveness against road transport	procedures applicable to intra-EU SSS	would be used for all the procedures. Several administrative forms are mandated by EU legislation and the introduction of a single document needs a change to existing legislation. Intra and extra EU trade should benefit from this simplification.	(less counterparts in ports)
Administrative procedures often require going to several offices, with different opening hours.	Administrative single window in ports	Setting up administrative desks in ports, where to go through all administrative procedures.	Faster and more rational administrative operations. Lower administrative costs for Shipmaster.
Not all MS recognize electronic manifest; the use of IT for custom purpose is not considered in all ports	Enhanced electronic data transmission	Integration of the existing networks for monitoring sea traffic and for customs clearance. Integration of the SafeSeaNet system.	Faster turnaround times for vessels in ports; enhanced maritime safety; lower waiting times; less costs
Inspections are carried out by different services, which don't necessarily coordinated, and it follows that delays caused by inspections may be much longer than necessary.	Coordinated inspections in ports	Coordinated inspections can be organised either at EU level or at national level. As the inspection regime depends on factors, as the risk assessment methodology, which takes account of criteria varying with the inspection purposes, it is difficult to mandate fully coordinated inspections. Thus a recommendation is the only instrument contemplated in the report.	Faster and more rational administrative operations. Lower administrative costs for Shipmaster.
	Separation of areas in ports	To dedicate and physically separate areas exclusively for vessels performing SSS. The feasibility and the efficiency of this measure depend on the port configuration and the traffic volume. The cost and benefits of this measure could only be assessed on a case-by-case basis, which can not be done in the framework of this study. The only instrument contemplated is a recommendation to the Member States.	To speed up loading/unloading and waiting times of vessels in ports.

<p>Not all MS recognize electronic manifest; the use of IT for custom purpose is not considered in all ports</p>	<p>Enhanced electronic data transmission</p>	<p>Integration of the existing networks for monitoring sea traffic and for customs clearance. Integration of the SafeSeaNet system.</p> <p>The measure can be applied at the initiative of a port, of a Member States or at EU level. The more realistic instrument mixes all level, making benefits of systems which have already been put in place locally, but enhancing the advantages of the electronic data transmission systems by providing an international framework for interoperability and standardisation of equipment.</p>	<p>Faster turnaround times for vessels in ports; enhanced maritime safety; lower waiting times; less costs</p>
<p>Not all countries grant PECs to sea-going vessels. Even those which do issue PECs, there are often national barriers (e.g. language)</p>	<p>Issuing of Pilot Exemption Certificates (PECs) to SSS vessels</p>	<p>Simplification of regulations, allowing operators to apply for PECs in an easier way.</p> <p>The granting of PECs depends on the specific difficulties of the ports. Thus, for the purpose of the report, only a recommendation is considered. The nature of the carried goods, intra-EU or non-EU should not be a criterion for the granting of PECs.</p>	<p>Lower costs for SSS operators, speeding up port operations</p>
<p>The use of national languages slows down compliance with administrative formalities.</p>	<p>Use of English as official administrative language</p>	<p>Use of the English language as the (second) official language for all administrative documents.</p> <p>For the purpose of the report, only a recommendation is considered. Intra and extra EU trade should benefit from this simplification.</p>	<p>Speed up administrative formalities. Avoid misunderstandings.</p>

2.1.5. *Comparison with other transport modes*

Short Sea Shipping competes with road and rail transport on certain door-to-door corridors (a maritime leg shall exist) and for certain goods (more easily on high volume, preferably not expensive goods). As a load rupture occurs, which incur handling, storage and insurance costs, maritime transport has to be cheap. It is commonly said that shippers will not choose a door-to-door solution including a Short Sea Shipping leg if it is not 20% cheaper than the full road solution. If the port costs and delays can be reduced Short Sea Shipping will attract more traffic.

It is generally acknowledged that administrative procedures are more intricate for Short Sea Shipping than those applicable to road transport.

The costs of carrying out administrative procedures in Short Sea Shipping represent a considerably higher share of the total transport costs than in road transport (roughly 3.3 % of total transport costs as compared to 0.2 % for road transport). Furthermore, the fact that the procedures are different from or additional to those of road transport, create complexity. A truck carrying a container or trailer to a port needs a set of road transport documents that are then duplicated in another format for the maritime leg.

A sample comparison between administrative procedures for short sea and road transport has been done in Annex B.

2.1.6. *Qualitative considerations*

Some stakeholders consider that the risk of unforeseen lengthy time inherent with administrative procedures in maritime transport gives maritime transport a bad image. This is partly inherent to the fact that a vessel carries hundreds of loading units while a normal road-train only two. However, streamlining and simplification of administrative and documentary procedures in multimodal transport operations should have a positive effect on the reputation of Short Sea Shipping and lower transport costs in logistics chains involving a sea leg.

2.2. **Who is affected?**

Everyone is affected by these issues. Road transport results in congestion, accidents, noise and environmental pollution that affect the citizens and industry. Building land-based infrastructure also needs careful land-use planning. The short-sea cluster is an important source of employment. These concerns are also evident at political level.

Europe at large is affected because its transport system is not used in a balanced way but emphasises the road component even over longer distances. European competitiveness and prosperity can suffer when the transport system is not used optimally. Road transport will always be needed because shipping cannot reach everyone's doorstep but better complementarity of modes in co-modality should produce more efficient results.

The main sectors likely to be directly affected are:

- European Union
- Member States

- Port Authorities
- Customs
- Maritime lines
- Ship Agents
- Maritime Authorities
- Forwarders
- Citizens.

2.3. Foreseen evolution of the problem

Things remaining equal, without further measures, Short Sea Shipping would not be able to fully respond to the challenges of the mid-term review of the White Paper on European Transport Policy and the Lisbon agenda.

2.4. Right of the EU to act

The policy to promote Short Sea Shipping is based on Article 80(2) of the Treaty.

The achievement of the Internal Market is a core objective of the EC Treaty. The fact that maritime transport is not fully incorporate in the Internal Market impairs the functioning of the whole co-modal transport system.

National policies might not always produce interoperable transport solutions that are needed for Europe to optimally work together in an area without borders. Substantial results can only be achieved by the European Commission working with the Member States and industry towards a coherent framework covering the whole of Europe.

Most of the measures impeding the smooth functioning of the Internal Market in maritime transport are the consequences of existing EU legislations and the necessary amendments to these legislations rely on EU responsibility.

Subsidiarity, proportionality and fundamental rights are fully respected.

3. OBJECTIVES

3.1. General policy objectives

The general policy objectives are:

- To promote actions and measures aimed at increasing attractiveness of maritime transport against road and other transport modes in order to diminish the unsustainable trends indicated above. European competitiveness and prosperity need to be maintained and increased, and Short Sea Shipping is an essential part of this process. Furthermore, Short Sea Shipping enhances cohesion and links to peripheral areas and islands

- To ensure that duplicated or obsolete reporting requirements are removed and to facilitate the free circulation of maritime transport between EU ports by simplifying/reducing/eliminating administrative procedures connected to intra-European market in order to reinforce efficiency and competitiveness.
- To ensure that useful information continues to be available to users. This includes information concerning the involved parties and the goods that is normally found on documents such as ships' manifests.

3.2. Specific objectives

The following table presents specific and operational objectives in relation to the general policy objectives.

Specific and operational objectives

Specific / operational objectives	Corresponding measures and instruments	Consistency with EU policies
<p>To facilitate Intra-EU maritime transport by providing for simplification or elimination of administrative procedure and Customs formalities on Community goods and between EU ports.</p> <p>To facilitate and simplify administrative procedures, reducing controls and inspection in a “European Maritime Transport Space without barriers” to a minimum feasible number.</p>	<p>Elimination of Customs formalities for intra-EU sea transport of EU, EU cleared and goods in transit goods</p> <p>Elimination of veterinary, phytosanitary, sanitary systematic formalities for intra-EU maritime transport</p>	<p>Mid Term review of the European Commission’s 2001 Transport White Paper¹⁰</p> <p>Commission Communication of 10 October 2007 on “An Integrated Maritime Policy for the European Union” (“Blue Paper”)</p> <p>Commission Communication of 18 October 2007 on port policy</p>
<p>To facilitate the free circulation of Community goods between EU ports eliminating Customs formalities on goods; to speed up Customs and all administrative formalities in order to reduce time, delay on goods and delays on vessel due to administrative procedure and Customs formalities.</p>	<p>License “Regular liner service” to be connected with operators (not with vessels) and to be granted to non regular liner services intra EU cargoes</p>	<p>Simplified Customs Procedures in Short Sea Shipping: “Authorised Regular Shipping Service”, SEC(2004) 333</p>
<p>To define a group of measures that could facilitate the free circulation of EU goods between EU ports and allow the reduction of transport costs in order to increase competitiveness of maritime sector and stimulate modal shift from road.</p>	<p>Simplification of regulations on carriage of dangerous goods; use of a second official administrative language; separation of areas in ports; coordinated inspections in ports; issuing of Pilot Exemption Certificates (PECs)</p>	<p>Programme for the Promotion of Short Sea Shipping, COM(2003) 155 final</p> <p>Mid-Term Review of the Programme for the Promotion of Short Sea Shipping, COM (2006) 380 final.</p>
<p>To integrate the information flow between different parties of different countries and elimination of physical presence of authorities (data and information network)</p>	<p>Enhanced electronic data transmission and administrative single window in ports</p>	<p>Council Conclusions concerning the Lisbon Strategy of 12 February 2007</p>
<p>To facilitate maritime transport by providing for standardisation of reporting formalities and computerisation of monitoring system</p>	<p>Rationalisation of documents requested for vessels arriving/departing from ports</p>	<p>Directive 2002/6/EC on Reporting formalities for ships arriving in and/or departing from ports of the Member States of the Community</p>

¹⁰ Commission Communication: “Keep Europe moving – Sustainable mobility for our continent – Mid-term review of the European Commission’s 2001 Transport White paper” (COM (2006)314 final of 22 June 2006).

3.3. Consistency with other policy objectives

As the objectives are about reducing the administrative burden on business and the improvement of EU competitiveness, while preserving levels of protection, they are fully consistent with the Lisbon strategy for growth and jobs, in particular by putting in place a more conducive environment for business.

It is also fully in line with the objectives of the mid-term review of the White Paper on European Transport Policy (co-modality, competitiveness, sustainability, safety, bypassing land bottlenecks).

The establishment of a European Maritime Transport Space without Barriers is an important element in "An Integrated Maritime Policy for the European Union" ("The Blue Book")¹¹.

It will contribute to transport related objectives as the promotion of quality shipping and the modernisation of national administrations. It will bring the benefit from the deployment of electronic surveillance systems implemented along the European coastline as a consequence of legislations already adopted by EU or at international level.

Maritime transport has higher energy-efficiency than other modes of transport and is, in general, less harmful to the environment. Increased use of Short Sea Shipping would generally be in line with the Community transport and environmental policies.

4. POLICY OPTIONS

Three main policy options were analysed:

- Status quo as baseline scenario ("do nothing");
- Case-by-case simplification of individual administrative formalities;
- Act on the basis of a co-ordinated set of measures simplifying, reducing, and, wherever possible, eliminating formalities for vessels sailing between EU-ports in line with the model of the Internal Market offered by land transport.

4.1. Policy option A: The do-nothing option

In this baseline scenario, the forecast of the volume of the Short Sea Shipping market is based on a growth rates equal to 3.0% until 2010 and 2.7% further on from 2006, where intra-EU Short Sea Shipping market accounted for 1.5 billion ton.km. The evolution of the Short Sea Shipping and transport markets are shown in Annex C.

¹¹ COM(2007) 575 final of 10 October 2007 which states: "nevertheless, shipping remains at a disadvantage compared to other means of transport. Other transport modes benefit from more public investment. Furthermore, a vessel travelling between two EU ports is subject to more complex and time-consuming procedures than a truck would be, because a real internal market for maritime transport in Europe does not yet exist. In order to unlock the full potential of Europe's shipping industry this disadvantage of maritime transport compared with the other modes must be eliminated through the simplification of administrative and customs formalities for intra-EU maritime services."

European competitiveness could suffer in light of the limited infrastructure resources available, if all the modes would not play their full role in co-modality. Competitiveness of Short Sea Shipping would decrease, because promotion would not advance and simplification would not take place. Administrative and documentary obstacles to developing the mode would lead to higher operating costs and, ultimately, to higher transport prices for the customer. Delays could increase owing to growing traffic volumes. European shipyards could suffer because the growth of Short Sea Shipping would not be optimal. New technological or logistics solutions might not be created for the mode thereby decreasing its competitiveness and worsening its macroeconomic environment.

Low competitiveness in Short Sea Shipping could lead to less maritime-related employment. Young people might be less attracted to the profession. The external social effects of transport would not be relieved (congestion, accidents and noise).

Short Sea Shipping is energy-efficient, and produces less CO₂ per tonne-kilometre and has lower effect on global warming than other modes. A less prominent role of the mode in Europe could decrease these positive trends. Research in new environmentally friendly technologies for Short Sea Shipping might decrease. Sea is an open infrastructure which requires much less land use planning than inland transport modes.

4.2. Policy option B: The case-by-case approach

A series of measures proposed by stakeholders during the preliminary consultation have been contemplated, which have a potential for reducing the administrative burdens on intra-EU maritime transport. These measures are considered in detail in the subparagraphs below.

The initiative of some of the measures falls clearly under EU responsibility while others can be implemented either at local or national levels, or within an EU framework. As the main objective of the European Maritime Transport Space without Barriers is to simplify, reduce or, when possible, eliminate formalities related to EU legislation, the main focus has been given to those measures.

For actions going beyond the above, recommendations have been considered at this point in time.

4.2.1. “Authorised Regular Shipping Services” Licence linked to companies

The Community Customs Code allows the simplification of certain customs procedures, in the case of those vessels performing regularly scheduled routes between two EU ports. In this case it is necessary to have a Certificate of “Authorised Regular Shipping Service”¹² (ARSS). This authorisation is given to named vessels on a specific route.

A survey conducted by the Finnish Customs found that 62% of liner services have authorised regular service permits.

The stakeholders have consistently requested linking the licence of “Authorised Regular Shipping Service” to the operator or routes of regular Short Sea Shipping service and not to

¹² Simplified Customs Procedures in Short Sea Shipping: "Authorised Regular Shipping Service", SEC(2004) 333

individual vessels as is now required in the existing regulations. Operators need more flexibility in managing their fleet. The licence certifies the quality of the operator; therefore it should be secondary which vessels they employ. Currently, when an application is lodged, it needs to indicate the names of the ports concerned and the name of the vessels assigned to regular service. If a vessel is changed and replaced by another vessel, or if a vessel is added to the service, the shipping company has to notify the authorising authorities, with the name of the new vessel. The authorisation certificate has to be physically amended. On the contrary, when the port of call is changed, a new certificate needs to be applied for.

4.2.2. *Veterinary and phytosanitary controls*

Directives 90/425/EEC, 89/662/EEC and 2000/29 allow certain veterinary and phytosanitary controls in ports to be exempted from import / export procedures. These concern the transport of products on direct and regular shipping links.

However, products transported via a third EU port or on non-regular shipping links are subject to import and export procedures even though their origin is in another EU Member State and the products have not visited a third country on the way.

In order to streamline the procedures, all transport of veterinary and phytosanitary products should be on the same footing provided they are cleared in one Member State and transported from one Member States to another by sea.

4.2.3. *Simplification of requirements for the carriage of dangerous goods*

Transport of dangerous goods by road is governed by the European Agreement on the International Carriage of Dangerous Goods by Road (ADR)¹³. Similar agreements apply to rail (RID¹⁴) and inland waterways (ADN). The transport of dangerous goods by sea is governed by Directive 2002/59/EC¹⁵ and by the IMDG Code¹⁶. International transports of dangerous goods which comply with the provisions set out in the ADR are exempt from domestic requirements.

Regulations on dangerous/hazardous/polluting goods are different in sea transport and land road transport, representing a clear bottleneck. The IMDG Code and Directive 2002/59/EC contain specific provisions for the carriage of dangerous/polluting goods at sea entailing early advance notifications and declarations.

¹³ Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) of 30 September 1957. This Agreement has been introduced in EU legislation by Council Directive 96/55/EC on the approximation of the laws of the Member States with regard to the transport of dangerous goods by road.

¹⁴ Regulations concerning the international carriage of dangerous goods by rail (RID) stipulated in Appendix B, Annex 1 of the Convention concerning international carriage by rail (COTIF), which defines uniform rules concerning the contract for international carriage of goods by rail (CIM). These regulations have been introduced in EU legislation by Council Directive 96/49/EC on the approximation of the laws of the Member States with regard to the transport of dangerous goods by rail.

¹⁵ Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system and repealing Council OJ L 208 of 5.8.2002, p. 10

¹⁶ International Maritime Dangerous Goods (IMDG) Code adopted in 1960 by the International Maritime Organisation.

Although declarations are similar for each mode of transport, there are differences between road and maritime sector, in particular:

- Classification of substances can differ in some cases;
- The two codes differ in terms of severity of application, with the IMDG Code being stricter (for instance quantity of dangerous goods that can be carried);
- In case of IMDG, any quantity of goods which are classified as dangerous must be declared: When goods are packed in limited quantity packaging, they do not have to comply with the ADR rules (with the exception of a transport document), if certain limits are not reached. On the contrary, for sea transport any quantity of dangerous goods must be declared according to the provisions of the IMDG Code. Whatever the quantity of goods, a full declaration must be made and the Dangerous Goods Manifest completed;
- The ADR allows carrying some materials under a Limited Quantity Exemption rule, which states that UN tested and approved packaging is not required for dangerous goods in limited quantities. However, the packaging used for the transport by road of dangerous substances must be:
 - Suitable for the purpose;
 - Designed and closed to prevent escape of the dangerous substance;
 - Compatible with the dangerous substance;
 - Capable of being re-closed repeatedly, without escape of contents;
 - Capable of meeting any special conditions for a particular substance in the approved carriage list;
 - Of a design that has been UN approved.

In case of a conflict between the two, the IMDG Code prevails. This can happen a truck carrying dangerous goods is then boarded onto a Ro/Ro ship. The following table shows all documentation required in the case of road transport and sea transport of dangerous goods.

For the above reasons the transport of some dangerous cargoes is restricted, complicated and costly at sea that goods are carried on land.

A possible solution to this bottleneck would be streamlining of the rules on dangerous goods.

The rationale of this measure would be that certain parts of the RID and ADR rules would be accepted for shipping services. This would eliminate the need for double documentation for the carriage of the same goods in intermodal transport chains involving a sea leg.

The general rules concerning transport, stowage and segregation of dangerous goods would continue to apply, in accordance with the IMDG Code, but some extensions in the types and quantities of dangerous goods on board of the vessels would be permitted in line with the

ADR Agreement. In addition, the UN packaging is not required for dangerous goods in limited quantities as the ADR Agreement allows it under a Limited Quantity Exemption rule.

4.2.4. *Enhanced electronic data transmission*

The Commission announced in the action plan attached to its 2006 White paper on transport policy that it would propose in 2009 measures for the deployment of e-maritime systems. Indeed several vessel traffic monitoring systems are currently already in place or about to be implemented in the European Union. Each one fulfils a different objective.

There are also several networks for sharing information on vessels' traffic between Member States. It is hence necessary to carry out an EU-wide integration of these systems with the SafeSeaNet network within this framework. The integration of maritime surveillance systems will provide a much more enhanced tool for the monitoring of vessels and traffic tracking.

In addition, it will be necessary to set up a "single window" for the electronic transmission of administrative documentation only once so that it can be automatically delivered to the administrations requiring it.¹⁷ This can considerably speed up necessary administrative and documentary procedures. The "single window" will lead to a single transmission of data from ship to shore and help avoiding several transmissions of data with the same contents.

This will ease administrative procedures for ships entering or leaving ports, as well as customs and other procedures. Indeed, the e-maritime system should be fully compatible with the eCustoms project.

4.2.5. *Co-ordinated inspections by administrative services*

Another simplification measure is that of organising a "one-stop shop" for inspections, by which all the authorities that need to board the ship when in port (e.g. veterinary, phytosanitary, environmental, health, safety, customs etc.) for inspections do it in a coordinated way and at the same time. They may also empower other authorities to carry out their specific controls. In this way delays can be reduced and vessels' turnaround times improved. Member States should encourage administrations at port level to plan their

¹⁷ Decision 70/2008/CE¹⁷ on a paperless environment for Customs and trade requires that Member States put in place no later than 15 February 2013 a Single Window for all administrative procedures for imports and exports procedures.

The Single Window concept has been defined at UN level as a "system that allows traders to lodge information with a single body to fulfil all import or export-related regulatory requirements"¹⁷.

Currently, vessels need to interface with several parties in ports, in order to carry out all the administrative procedures. This has an important influence on costs, the speed of goods handling process and the system's overall reliability. Establishing a single desk, where all paperwork would be dealt with, would be highly beneficial. Indeed, all of the administrative formalities will be processed electronically or in coordination between entities.

In order to put in place an efficient Single Window which will not be an addition layer, but will replace existing administrative interface, the general obligation of Decision N° 70/2008/EC shall be complemented by other provisions, both EU and national level. Member States should adopt a legal framework to regulate one-stop-shopping services, with coordination at European level. Many stakeholders have to be involved as the European Commission, individual port administrations, Customs, veterinary departments, maritime health, etc.

This Single Window will benefit to the long distance maritime trade as well as it will facilitate administrative formalities for maritime transport including both intra-EU goods and non-EU goods.

inspections jointly, in order to reduce the economic negative impact on Short Sea Shipping without reducing the quality of the inspections.

The advantage of this "one-stop shop" setting is the speeding up of administrative procedures and the time reduction in carrying out the formalities for ships and cargoes. Moreover, a framework would be established, in which transport operators and agents responsible for processing documental formalities would be able to carry out all procedures at the same time with a single administrative counterpart.

4.2.6. *IMO/FAL forms*

Directive 2002/6/EC on reporting formalities for ships arriving in and/or departing from ports¹⁸ requires EU Member States to accept a uniform set of ship arrival and departure forms based on IMO/FAL forms when those forms are applicable.

The objective of Directive 2002/6/EC is to simplify and streamline administrative formalities and documents by introducing uniformity in documentary formalities.

The IMO/FAL Convention was revised in 2005. The Commission could amend this directive to align its Annexes with the Revised IMO/FAL Convention. As this alignment results from an international regulation, its impact is not assessed in this report.

Apart from this alignment, several pieces of EU legislation require vessel-related information to be submitted. This information is often repetitive but has to be submitted separately for each procedure. Rationalisation could be foreseen in the context of Directive 2002/6/EC in order to streamline and clarify the application of the requirements of Directives 2000/59/EC¹⁹ and 2002/59/EC²⁰ and Regulations (EC) N° 725/2004²¹ and (EC) N° 562/2006²² with regard to this directive. This alignment is a prerequisite for the rationalisation of administrative documents required by the various pieces of EU legislation.

4.2.7. *Pilot exemption Certificates*

Nowadays the general rule is for a vessel to have pilot in certain waters and when entering/leaving a port for safety reasons. These services are not free, and their costs are charged upon ship operators. Pilot Exemption Certificates can, in certain cases, be delivered to the ship's master or deck officers to carry out this pilotage themselves without using an external pilot.

¹⁸ Directive 2002/6/EC of the European Parliament and the Council on reporting formalities for ships arriving in and/or departing from ports of the Member States of the Community, OJ L 67, 9.3.2002, p. 31

¹⁹ Directive 2000/59/EC of the European Parliament and of the Council of 27 November 2000 on port reception facilities for ship-generated waste and cargo residues OJ L 332 of 28.12.2000, p. 81

²⁰ Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system and repealing Council OJ L 208 of 5.8.2002, p. 10

²¹ Regulation (EC) No 725/2004 of the European Parliament and of the Council of 31 March 2004 on enhancing ship and port facility security OJ L 129 of 29.4.2004, p. 6

²² Regulation (EC) N° 562/2006 establishing a Community Code on the rules governing the movement of persons across borders OJ L 105, 13.4.2006, p. 1

Shipping services frequently calling in some ports should, as a rule, have access to Pilot Exemption Certificates. The benefits this measure would entail would translate into lower costs for Short Sea Shipping operators and faster turnaround times of vessels in ports. The actions required for the implementation of this proposal would need to be taken at national levels and coordinated among national authorities.

Pilot Exemption Certificates or corresponding arrangements should be available in English so that the master or deck officers would necessarily not need to speak the official language(s) of the country delivering such certificates. This would be without prejudice to safety circumstances in certain waters where knowledge of the official language(s) of the country is considered necessary.

4.2.8. Alternative language for administrative procedures

National language requirements often represent a bottleneck to the development of Short Sea Shipping. Article 17 (e) of Directive 2001/25/EC on the minimum level of training of seafarers²³ stipulates that, if there is no common languages, communication between ships and shore can be conducted in a common language with reference to the Chapter V of the SOLAS Convention.

Member States are encouraged to assess the feasibility of using a language commonly used for communications at sea as an alternative language for all administrative maritime documents and procedures, for sea-shore communications as well as administration-to-administration communications. In practical terms, it would mean that the personnel operating in ports and interacting with vessels' crews (Custom authorities, port authorities, health inspectors, immigration officers, etc.) would be expected to understand and speak a second language. All procedures, including paperwork would be allowed to be carried out in this second language.

4.2.9. Separation of areas in ports

Another measure for consideration could be the physical separation in ports of areas reserved to Short Sea Shipping (in particular for container traffic and ro-ro traffic). One or more piers could be exclusively dedicated to vessels performing intra-EU Short Sea Shipping, with apposite administrative offices for the administrative procedures. The benefit of this measure, again, would be a more rational management of port traffic and a speeding up of vessels' turn-around times in ports.

There is a disadvantage of economies of scale and (in some cases) high infrastructure costs, but there are also several benefits that could be considered, in particular:

- Elimination of the problem of priority given to deep-sea vessels in some ports;
- Optimized and faster round trips;
- Shorter dwelling times and a higher frequency.

²³ Directive 2001/25/EC of the European Parliament and of the Council of 4 April 2001 on the minimum level of training of seafarers, OJ L 136 of 18.5.2001, p. 17

- This option might not be suitable for all ports but could be considered when deciding on land use in ports where such a solution could be feasible.

4.3. Policy option C: Act on the basis of a co-ordinated set of measures simplifying, reducing, and, wherever possible, eliminating formalities for vessels sailing between EU-ports in line with the model of the Internal Market offered by land transport

This option builds upon the measures presented in option B and foresees their implementation as a consolidated package while adding further simplification to them by considering the elimination of some procedures.

The concept of European Maritime Transport Space without Barriers aims to simplify, facilitate or, when possible, exempt from the administrative formalities on arrival to the port ships operating between two EU ports.

Documents related to Community goods carried between two EU ports are generally to be checked at the port of departure and the port of arrival. However, documents of goods carried by a land transport between two points located in the EU, without transiting a third country, are not subject to systematic controls. Documents shall only be in the vehicle for possible spot checks.

The elimination of systematic administrative procedures would not lead to the full abolishment of transport documents. However, controls should not be systematic but be based on random checks (risk analysis) as far as feasible.

A further simplification could be for ships operating in triangular traffic between two EU ports while also calling a third-country or free port. The call in a third country should not be considered to "infect" the vessel itself of the goods (products) carried onboard. This measure has been frequently called upon by the stakeholders.

One could also think of eliminating all procedures on Community goods and products carried on any vessel between two EU ports. This would achieve a real Internal Market for Short Sea Shipping and give a real boost to its development.

5. ANALYSIS OF IMPACTS

5.1. Policy option A: The do-nothing option

Administrative burden are longstanding issue for maritime transport. Tentative to improve the situation has already been done either locally, as the development of electronic data transmission systems developed in some ports or by EU measures in favour of intra-EU transport as the Customs facilitation for Authorised Regular Shipping Services. On the other hand, new requirements for instance, for food security, security or environment have been added. They entailed specific formalities and inspection procedures. The situation has globally improved but at a too low pace, while the amount of goods carried by sea is expected to increase and the port congestion is becoming a crucial problem.

With the foreseen growth of traffic flows, the raising rate of feederage in Short Sea Shipping, as well as the mandatory introduction of tracing and tracking systems and the need to improve

shipping environment performances, the European shipping sector is going through a transition phase. The time is appropriate to simplifying, reducing or, when possible, eliminating formalities, which will contribute to creating a better business environment, and gives a positive signal for a modal shift and more investments in this sector.

For further description of this option, see section 4.1 above.

5.2. Policy option B: The case-by-case approach

As a general consideration, the achievement of the Internal Market benefits in Short Sea Shipping is a political goal that has a considerable positive impact as such. This goal has been mentioned in the “Blue Book” on an integrated maritime policy and frequently referred to by politicians at the highest level (such as by the President of the Commission or Commissioners). Consequently, the expectations are high.

Apart from expectations, any simplification can, from the outset, be considered positive in decreasing administrative burden of businesses in the EU. The positive impacts of such simplification can only be overturned, if negative economic, environmental or social consequences emerge to a degree that is not sustainable. This does not seem to be the case for the European Maritime Transport Space without Barriers.

For the purpose of the impact assessment study, the case-by-case measures were grouped in two clusters:

- **Cluster B1:** The extension of the Authorised Regular Shipping Service Customs facilitation, the recognition of some non-maritime requirements for dangerous goods on vessels, and the avoidance of duplication in data requested for different vessel-related legislation (see points 4.2.1, 4.2.2 and second part of 4.2.6 above);
- **Cluster B2:** Other measures mentioned in chapters 4.2.3 to 4.2.9 (excluding the first part of 4.2.6) with potentially higher start-up administrative costs.

5.2.1. Economic impacts

The Consultation’s results have been used for quantifying the average delays in ports. They have been processed on the basis of the evidences of some qualitative information gathered in the course of some interviews performed. There are many differences between ports and procedures, not only in terms of the magnitude of the delay but also in terms of probability of delays on arrival or departure.

The following table shows the different values of overall delay (probability), on arrivals and departures. The percentage only refers to the total number of answers received on the specific issue of delays. The percentage of answers within each time range has been associated to the probability of happening of the specific event. The overall delay is expressed as a probability value, weighted against different percentages for each time range.

General delay on arrival and on departure (hours)

	Weight	= 1	1-6	6-12	12-24	>24	Delay on goods	Delay on vessel
Average time chosen		1	3	9	18	48		
Formalities on GOODS	50%	41%	9%	5%	9%	0%	1.42	0.52
Formalities on VESSELS	40%	48%	3%	0%	1%	1%	0.8	0.56
Dangerous Goods	5%	55%	14%	0%	0%	0%	0.95	0.55
Phytosanitary	2.5%	32%	5%	0%	5%	5%	3.45	0.32
Animal origin	2.5%	18%	5%	0%	0%	5%	2.5	0.18
Weighted average delay							1.48	0.47

Source: PwC elaboration on Consultation data (2008)

The Table above shows that delays on goods are higher than delays on vessels.

All Member States even transit or landlocked countries will benefit from the cost reduction and the social benefits of the modal shift.

5.2.1.1. Cost decrease for reduction of time spent for administrative procedures for goods

The reduction of the time required for carrying out the different administrative procedures would produce a proportional reduction in the delays on goods caused by the formalities.

The cost decrease has been calculated taking into account the time costs arising from the application of intrinsic values of time to specific goods. Time costs are an implicit factor of the generalised transport cost function, although not directly perceived as a monetary expense by the stakeholder demanding a transport service (e.g., the shipper), or affected by a delay in the door-to-door transport chain (e.g. the consignee).

For the purpose of the calculation, time saved is associated only with the time reduction in ports for carrying out the different procedures and not with the time spent by the operators preparing different documents (usually this phase starts before vessels' arrival).

Freight transport's value of time is usually composed by three factors²⁴:

- Inventory costs corresponding to the traditional notion of immobilization of an asset, as typically used in any company's accounting procedures when estimating the costs of storage and warehousing. While the goods are being transported, they do not generate any added value, and therefore generate a financial cost to its owner, which is usually estimated on the basis of standard rates.
- Loss of value related to the delay with which the consignment reaches its destination, as a deviation factor for the user in planning its activity;

²⁴ See RECORDIT – Deliverable 1, (2001), and TRANSTOOLS Deliverable 2, (2005).

- Spoilage costs, defined as the loss of value resulting from a deterioration of the quality and usability of the goods as a consequence of the delay.

The HEATCO²⁵ deliverables incorporate those factors when deriving standard EU-27 reference figures. Thus those figures can be applied as “safer” reference values of time for measuring the benefits related to the decrease of delay probability.

In terms of costs saved in relation to the reduction of delays on goods, the advantages of the implementation of the different measures correspond to an average ranging between 16.2 million Euros (facilitation of Dangerous goods and Customs procedures) to 102.4 million Euros per annum (reduction/elimination of all formalities, including non-customs procedures).

5.2.1.2. Cost decrease for reduction of time spent during ship calls

The time spent by vessels in port is connected to operative activities and is not due to the carrying out of administrative procedures (both customs and administrative). It is very unlikely that a vessel is subject to delays because of activities connected with administrative procedures. When such delays do occur, they are normally not higher than 1 hour.

Similarly to what has been done for delays on goods, in order to calculate such potential delays, it has been evaluated the probability of reduction of delays. In this case too, it has been assessed the impact relative to the reduction of time for port operations.

In order to calculate the time-related costs of ships, an average hourly cost of rent of a ship has been considered.

In terms of cost saved in relation to the reduction of delays on vessels, the advantages (quite minimal) of the implementation of the different Policy Options correspond to an average ranging between 0.1 million Euros (facilitation of Dangerous Goods and Customs procedures) to 1.38 million Euros per year (maximum elimination of formalities).

5.2.1.3. Impacts on the level of fraud

Because of the lacking of statistical data and information, potential impact of administrative facilitation on fraud pattern cannot be quantified. Main types of frauds would be a wrong declaration of the product origin (including smuggling); whether to avoid paying the VAT or paying less Customs dues on imported products. As vessels which would benefit from the European Maritime Transport Space without barriers would only carry EU, EU-cleared goods or goods under Customs supervision (under a "transit" regime), the risk of fraud would not be higher than in road transport where similar goods are being carried. In addition, the loading of illegal products when the vessel is on high seas has been indicated as a potential risk. However modern port communication systems, in association with other surveillance methods (LRIT, AIS etc.) reduce to a large extent this risk.

²⁵ HEATCO: "Developing Harmonised European Approaches for Transport Costing and Project Assessment", Research Project from the sixth Framework Programme, European Commission DG TREN

5.2.2. *Environmental impacts*²⁶

The external costs of the different transport modes have been taken from the 2004 ISIC study. They do not reflect the recent or pipeline decisions, as the proposal for Euro VI standards for heavy duty vehicles, which will reduce NOx and particulate matters from 2012 or the IMO decision on low sulphur fuels for maritime transport. The share of conventional pollution in the total external costs (comprising infrastructure costs, congestion costs, accidents and climate changes costs) is 30% for road and 50% for maritime transport.

Figures presented in paragraph 5.3.2. concern the overall effects of reducing/eliminating administrative procedures. These effects can be split among the measures contemplated in Policy Option B. In order to do this, these measures have to be assessed as concerns their capability or effectiveness in making Short Sea Shipping more competitive and therefore actually generate the modal shift forecast. In other words, a focus must be made to investigate the so-called “internal” benefits of the measures.

Hence, some of the final results of the analysis are to be anticipated here by stating that the implementation of the group of measures in cluster B2 comprising ITS measures would have a higher internal benefits/costs ratio than the simpler cluster B1 measures, by approximately 4:1. On the basis of such indications the shares of the modal shift (and consequently of the environmental benefits) are assumed to be 20% for cluster B1 measures and 80% for the cluster B2 measures.

Application of such shares to the overall external benefits for each Option: the values obtained represent the environmental benefits of the Option (per scenario).

According to the 20%-80% shares attributed to Cluster B1 and B2, the environmental benefits in the reference year (2020) can be estimated at:

- Cluster B1: 3.2 million Euros in the Low Scenario
- Cluster B1: 6.4 million Euros in the High Scenario
- Cluster B2: 12.6 million Euros in the Low Scenario
- Cluster B2: 25.2 million Euros in the High Scenario

The cumulated environmental benefits over time are equal respectively to 42-84 million Euro (Low-High scenario) and 163-326 million Euro (Low-High).

Islands or quasi islands, which rely on Short Sea Shipping for most of their supply will benefit from the cost reduction induced by the proposal but not from the reduction of environmental costs.

²⁶ The modal shift to short sea shipping is calculated on the basis of the indications taken from the ISIC (Integrated Services in the Intermodal Chain) model which point out a percentage of modal shift to short sea shipping in presence of specific policies dedicated to such mode.

5.2.3. *Social impacts*

5.2.3.1. Impacts on safety and security

Safety and security regulations have been significantly developed in the past few years “aspects”. The main actions could be summarised as follows:

- creation of EMSA (European Maritime Safety Agency) to ensure high, uniform and effective levels of maritime safety and prevention of pollution by ships in the Community.
- the development of several security provisions in particular:
 - Regulation (EC) N° 725/2004 on enhancing ship and port facility security with the aim to introduce and implement security measures;
 - Regulation (EC) N° 884/2005 laying down a procedure for conducting Commission inspections in the field of maritime security;
 - Directive 2005/65/EC on enhancing the extension of security measures from the ship-port interface to the whole port area.
- Directive 2002/59/EC putting into place SafeSeaNet, a European electronic information system which deals with ship movements and cargoes. This monitoring and information system has been developed with the aim of enhancing the safety of efficiency of maritime traffic, improving the response of authorities at sea²⁷.

Simplifications or relaxations of current legislative solutions already in place do not involve a radical change of procedures of interface between the various entities in port, but could increase dangerous or hazardous situations. However, the electronic data transmission of data will allow different authorities in ports (mainly customs agencies) to set up and organise controls and inspections activities focused on the “higher risk situation” following a risk analysis process. While it is not possible to estimate a specific figure illustrating the impact of modern port communication systems and other surveillance methods (LRID, AIS etc.), it is difficult to numerically quantify the extent to which removing information flows would lead to higher security and safety costs. For the purpose of the impact assessment, all the safety and security costs are considered as non-variable.

5.2.3.2. Impacts on employment

Available information does not allocate a cost for a potential employment reduction in Customs or professions working on formalities like the ship or Customs agents. Those professions are being reorganised, to cope with modernisation challenges (e-Customs), an extension of their missions and the growth in world trade induced by the globalisation. The European Maritime Transport Space without Barriers would have an effect on employment with a lower magnitude than those required to meet these existing challenges. The reduction of Customs and other administrative burden on intra-EU maritime transport could even help

²⁷ In October 2007, SafeSeaNet was implemented in Spain, Ireland, France, Italy, Belgium, Netherland, German, Poland, Denmark and was under test in UK, Romania, Bulgaria, Greece, Slovenia, Lithuania, Latvia, Estonia, Sweden

the Customs to better deal with their core activity, which is the clearance of imported / exported goods.

5.2.4. *Administrative costs*

The administrative costs born by Member States comprise cost of design/development, training cost, monitoring cost (start-up) and on-going costs. The most impacted administrations are Customs and Port Authorities.

Dangerous goods procedures - The harmonisation of dangerous goods procedures with other modes of transport (road and rail), while requiring a strong commitment in the design stage, leads to a substantial simplification of activities in port, without changing current organisational methods. Because of the need to activate transversal agreements between different modes of transport, it is assumed that the effort in terms of administrative costs has an impact on many stakeholders in the maritime and road/rail sectors. Such financial effort translates into the launch of a working group with on average 9 FTE²⁸s for each MS and 5 FTEs for the EU, supporting and coordinating the activities. In this case, the work programme requires an average duration of 3 years. The consequent global financial effort amounts to about € 35.64 million. A cost due to a training programme for the different local structures in ports will have to be considered. The cost for each individual training amounts to €1000. The financial effort for this training phase is assumed to amount to about €11 million. Finally, it is necessary to consider the creation or the strengthening of structures linked to the control and monitoring of dangerous goods' traffic in ports. It is assumed that in each port, on average, 1 FTE is dedicated to this, with a financial effort of about € 13.5 million at the EU level.

Extending the ARSS Licence – This measure does not lead to changes in organisation and/or control systems of customs in port. However it requires efforts due to changes and/or simplifications in the way authorisations are issued ex-ante. Administrative costs connected with this measure are assumed to refer to the legislative aspects, with an impact on the central administrations. A financial effort of about € 1.35 million at EU level has been considered. In addition, the cost of a training scheme for central customs and for local port operators needs to be taken into account. The financial effort in this training phase is assumed to be less than € 1 million. Finally, it is necessary to set up structures for the monitoring of the Licences issued corresponding to a financial commitment slightly higher than € 1 million.

Electronic data transmission and single window - Different projects currently ongoing within the EU have been considered and analysed in order to calculate the cost of these measures. The average start-up cost (design and development cost) has been set at € 2 million per port; total development time has been assumed to be 4 years: the average cost and time for the development of such an electronic data interchange system has been obtained via the elaboration of relevant information gathered from various similar projects. Design and development costs have been differentiated between Member States. It has been considered, for each MS, a qualitative level of IT friendliness of countries, depending on the existence of e-information projects (planned or operational), current operating systems that allow paperless administrative procedures. Countries with low degrees of IT friendliness would face higher costs than countries with medium or high degrees of IT friendliness. The final result is

²⁸ FTE: Full Time Equivalent job

that such system would present a total start-up cost at EU level of 58.3 million Euros. Annual development costs and running costs would amount to 1.31 million Euros.

Use of an alternative language – The only costs which emerge are the costs for the training of the staff in ports in a second language. It has been assumed a heterogeneous financial effort, depending on the current level. Costs for language training also depend on the total number of ports in countries and on the average number of staff (only front-office) per port that need to take these language classes. It has been assumed an average number of staff of 75 (customs, port authority, etc) and a single course programme cost of 1000 €. On the basis of what has been assumed, it can be inferred that this measure requires a financial effort of about € 5 million.

Separation of areas in port - A qualitative analysis has been developed through interviews. The reaction to this measure raised controversial feedbacks from the contacted stakeholders. Answers ranged from "not feasible" to "already implemented", according to the layout and availability of free areas at terminals. Furthermore, major remarks concerned the cost-opportunity of separating lanes for trailers disembarked from Ro-Ro vessels: such a separation, together with the necessity to cope with Ro-Pax traffic, would imply the organisation of three lanes (non-EU goods, EU-goods, Schengen traffic) which would not fit with the actual space availability of most ports in EU.

The availability of space in ports and terminals resulted to be the main constraint in separating areas for this purpose. A trade-off appears to exist between the surface utilisation rate of terminals and the cost of implementing the separation.

However, the separation of areas in ports may lead to additional benefits in terms of FTE costs saved. The total amount of savings in personnel costs per year is estimated to amount to 700-750,000 Euros per year, leading to a Net present Value of 11.7 million Euros on a 2009-2040 time horizon. The implementation of the Policy, even only at the major 25 ports throughout EU, would imply much higher costs.

The separation of areas in port could have a stronger impact on Short Sea Shipping if the status of Authorised Regular Shipping Service is extended also to the vessels calling at one or more non-EU ports, namely "infected vessels". With the extension of this status, in fact, it will be possible to separate EU goods from non-EU goods and transit declarations. In this way, when a vessel calls at an EU port, EU goods, maintaining their Community status, would not need any customs procedure and could be disembarked without any other administrative formality. Non-EU goods, instead, would have to be declared as for standard of import / export.

5.3. Policy option C: Act on the basis of a co-ordinated set of measures simplifying, reducing, and, wherever possible, eliminating formalities for vessels sailing between EU-ports in line with the model of the Internal Market offered by land transport

This option builds upon the measures presented in option B and foresees their implementation as a consolidated package while adding further simplification to them by considering the elimination of some procedures.

5.3.1. *Economic impacts*

5.3.1.1. Cost decrease for reduction of time spent for administrative procedures for goods

The reduction of the time required for carrying out the different administrative procedures would lead to a reduction in the delays on goods caused by the formalities.

In terms of costs saved in relation to the reduction of time spent on procedures in relation to goods, the advantages of eliminating all administrative procedures including Customs and other procedures could be estimated at the region of 2171 million Euros within the time frame 2009-2040 or 678 million Euros within the time frame 2009-2020.

It's fundamental to clearly distinguish the administrative procedures due for trade purpose and the ones due for safety purpose. The latter ones cannot be eliminated, because their elimination may cause hazards and dangers during the navigation and within port calls.

Information on goods, service line, vessels and operators allow different authorities in ports (mainly customs agencies) to set and organise controls and inspections activities focused on the "higher risk situation" following a risk analysis process.

5.3.1.2. Cost decrease for reduction of time spent during ship calls

The time spent by vessels in port is connected to operative activities and is not due to the carrying out of administrative procedures (both customs and administrative). Delays caused by activities connected with administrative procedures are not frequent. When occurring, the average value of such delays does not exceed 1 hour.

Similarly to what has been done for delays on goods, in order to calculate such potential delays, it has been evaluated the probability of reduction of delays. In this case too, it has been assessed the impact relative to the reduction of time for port operations.

In order to calculate the time-related costs of ships, an average hourly cost of rent of a ship has been considered.

In terms of cost saved in relation to the reduction of delays on vessels, the advantages (quite minimal) of the implementation of the different Policy Options correspond to an average ranging between 0.1 million Euros (facilitation of Dangerous Goods and Customs procedures) to 1.38 million Euros per year (maximum reduction/elimination of formalities).

5.3.1.3. Impacts on the level of fraud

The qualitative assessment in paragraph 5.2.1.3. is applicable to Option C.

5.3.2. *Environmental impacts*²⁹

By improving the internal efficiency of Short Sea Shipping, the elimination or reduction of administrative procedures determine a modal shift from road and rail to maritime transport,

²⁹ The modal shift to short sea shipping is calculated on the basis of the indications taken from the ISIC (Integrated Services in the Intermodal Chain) model which point out a percentage of modal shift to short sea shipping in presence of specific policies dedicated to such mode.

which will induce a global reduction of the external costs. In order to assess the positive impact in terms of reduction of external costs, a top-down approach has been adopted, based on the calculation of the overall modal shift (in terms of ton.km shifted from other modes to Short Sea Shipping in each year of the time horizon).

The total number of ton.km in the short-sea transport of EU goods can be evaluated as amounting to 759,201 million ton.km, while in the year 2020 it will amount to 1,115,906 million ton.km, with an annual growth rate of 3.0 % until 2010 and 2.7% afterwards.

Two scenarios (Low and High) have been chosen to ensure the robustness of the analysis. In fact, the comparison between the “Low” and “High” scenarios will allow considering the sensitivity of such results to the extent of the gap between the two percentages used.

The modal shift to Short Sea Shipping assumed in the Low scenario is calculated on the basis of the indications taken from the ISIC model which point out a percentage of modal shift to Short Sea Shipping in presence of specific policies dedicated to such mode. Such percentage is equal to 0.097%. This (0.097%) is assumed as the overall modal shift to Short Sea Shipping deriving from the implementation of the European maritime transport space without barriers in the Low Scenario.

The modal shift to Short Sea Shipping deriving from the implementation in the High Scenario is twice that of the Low Scenario, which is 0.194%.

Since in the base-line scenario, in 2020 the Short Sea Shipping of EU goods will account for 1,115,906 million ton.km, considering the additional modal shift it results that:

- In the Low Scenario the Short Sea Shipping of EU goods in 2020 is equal to 1,116,986 million ton.km (+1,081 million ton.km shifted to Short Sea Shipping compared to the baseline);
- In the High Scenario the Short Sea Shipping of EU goods in 2020 is equal to 1,118,067 million ton.km (+2,161 million ton.km shifted to Short Sea Shipping compared to the baseline).

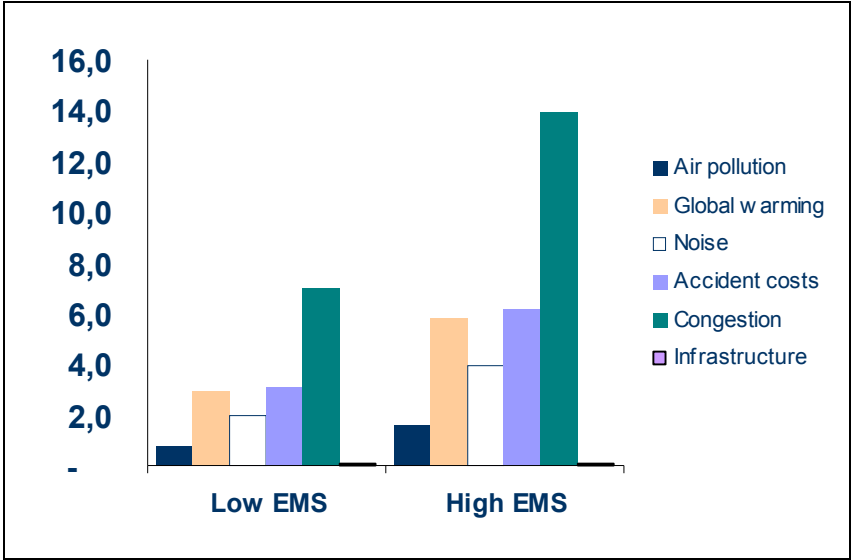
The detour factor is the ratio that represents the share of additional transport (though it might be negative in certain cases) that is generated by the shift from a mode to another mode of the same door-to-door delivery. In other words, when shifting from road (or from rail) to Short Sea Shipping, a good has to travel through a higher number of kilometres in order to reach its final destination; the detour factor quantifies much higher such new route is. The detour factor assumed in this project is the deriving average of 19%. Moreover, from the same studies an average share of road vs. rail modal shift respectively of 68% and 32% is derived out of total ton.km shifted from these two modes to Short Sea Shipping.

As a consequence of such figures, i.e. deducing the detour factor:

- In the Low Scenario, the amount of transport shifted from road and rail in 2020 is 905 million ton.km (618 million ton.km from road, 287 million ton.km from rail);
- In the High Scenario, the amount of transport shifted from road to rail in 2020 is 1,810 million ton.km (1,236 million ton.km from road, 574 million ton.km from rail).

The savings results from the difference of externals cost between the new situation (with a modal shift) and the baseline. It results from the differences of externalities between maritime transport and road and rail transport per ton.km. Externalities include impacts on air pollution, global warming, noise, accidents, transport congestion and infrastructure costs. The benefits for the two low and high scenarios are broken down as shown in the following table in year 2020.

Environmental benefits per scenario in 2020 (million Euro) Source: PwC and Bocconi (2008)



These figures give the range of external costs which can be allocated to the full elimination, where possible, of administrative procedures within the European Maritime Transport Space without barriers (EMS). For measures with a more limited impact on elimination of administrative costs, the effect on environment is considered to be a proportion of these external costs.

5.3.3. *Social impacts*

The qualitative assessment in paragraph 5.2.3. is applicable to Option C.

5.3.4. *Administrative costs*

The elimination of administrative formalities for vessels between EU-ports should reduce the present workload of administrations in ports. Member States will have to adapt their risk analysis methods, which will trigger new inspections schemes. A start-up phase for designing and training will be necessary. Change in procedures follows the same logic in terms of development and implementation as the use of electric data transmission and the setting-up of a single window and similar administrative costs will be born. However there is an important overlap between these measures. It is possible to assume that training, project, monitoring and on going costs (where evaluated) can be substantially reduced, if Policy Option B and C would be both proposed compared to the sum of their respective costs. There are synergies that can be exploited in order to obtain consistent economic savings. Policy Option C combined with Option B start-up costs are estimated at € 118.62 million) and ongoing costs

per year at € 34.94 millions. Design and development costs (€ 100.3 million) account for most of the start-up costs.

6. COMPARING THE OPTIONS

6.1. Cost and benefits of measures

Comparison of costs and benefits for all measures yields highly positive results. By means of relatively small costs of implementations, considerable benefits can be obtained at the community level. Though, if only internal benefits are considered (i.e. the benefits related to the operation of Short Sea Shipping as such), the comparison proves to be tighter.

The measures concerning a single window and electronic data transmission affect the whole maritime transport of goods in Europe, whether it is intra-EU or not and will bring even greater benefits. This remark is valid even in Member States and ports where the efficiency of electronic exchange of data is already now at a high level.

In the following table costs and benefits associated to the different scenarios and for the different Policy Options are computed on a 2009-2040 time span period. All values are expressed in their Net Present Value.

Cost Benefit Analysis: Monetised costs and benefits vs. baseline scenario (M € - Net Present Value - 2009-2040) - Source: PwC and CERTeT, 2008

Ref	Impact on modal shift	Cluster of measures with low administrative costs		Cluster of measures with higher administrative costs		Elimination of administrative procedures	
		LOW	HIGH	LOW	HIGH	LOW	HIGH
A	Investment + training costs	45.7	45.7	68.0	68.0	107.3	107.3
B	Operational costs	224.2	224.2	391.7	391.7	510.2	510.2
C = A+B	TOTAL COSTS	269.9	269.9	459.7	459.7	617.5	617.5
D	Personnel cost savings	11.7	11.7	232.7	234.7	244.4	244.4
E	Ship cost savings	0.17	0.17	25.9	25.9	26.0	26.0
F	Time cost savings	261.6	261.6	1917.9	1919.0	2171.6	2173.1
G = D+E+F	TOTAL INTERNAL BENEFITS	273.5	273.5	2176.5	2179.6	2442.1	2443.6
H	External benefits	37.4	74.8	145.3	290.5	182.7	365.3
I = G+H-C	TOTAL NET PRESENT VALUE	40.9	78.46	1862.0	2010.3	2007.2	2191.4
	IRR	8.9%	12.0%	61.3%	62.5%	60.7%	61.9%
(H+G) / C	B/C RATIO	1.125	1.29	5.05	5.37	4.25	4.55

G / C	INTERNAL BENEFIT / COST RATIO	1.01	1.01	4.73	4.73	3.95	3.95
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The following comments arise from the analysis:

- All policy options show a positive a Net Present Value (NPV) and Internal Rate of Return (IRR) in each scenario. The IRR ranges from 9% to 62%. The adoption of policies towards the implementation of a Maritime Space without Barriers appears to generate a higher amount of benefits than the burden of costs implied;
- Investment costs are always lower in NPV than operational costs. It means that all policy options do not entail the necessity of large scale investments (bearing in mind the EU-wide scope of the policies), but they imply a significant amount of direct effort from the stakeholders concerned. In particular, the development and maintenance of Information and Communications Technologies features created for the policy implementation is higher compared to the initial investment cost for the hardware/software development;
- The relevance of time cost savings, i.e. of the improvement of punctuality rate in door-to-door transport is outstanding compared to the remaining categories of benefits, and including “external” ones. It demonstrates that the largest share of benefits is widespread over a large panel of stakeholders (forwarders, logistics operators, shippers/consignees, industries, etc.) that have their primary interest in receiving goods in a shorter time, and with a lower probability of delay;
- The costs will be shared between administrations and port authorities for the design, development and training phase (line A), but will be born by port authorities for the yearly costs (line B). The personal cost savings will beneficiate to the administration (around 20%) and the private sector (around 80%) (line D). The cost for administrations of all the options should be counterweighted by the personal cost savings and are not significant.
- Electronic data transmission and single window measures (in cluster B2) will induce the highest investment and operating costs. The integration of these systems in a more integrated system capable to meet the industry needs and covering transport from door-to-door will further increase the benefits of the measure.

6.2. The main economic, environmental and social impacts of the preferred option

The preferred action will implement administrative simplification in view to induce a transport modal shift reducing congestion, infrastructure, safety and various pollution costs. It will bring the following benefits.

Macro-category	Impact on:	Detailed description	Indicators	Effect
Economic	Higher efficiency and reduction of total transport costs	Reduction of personnel costs: reduction or standardisation of procedures could generate the savings in terms of FTE	Full time equivalent involved in carrying out administrative procedures	Benefit
Economic	Higher efficiency	Reduction of personnel costs: reduction or standardisation of procedures could generate the savings in terms of equivalent FTE	Average delay (hours) in door-to-door arrival of goods	Benefit

Economic/ Environmental	Competitiveness of shipping industry	Cost decrease for time reduction of ship calls (minimal): Reduction of potential delay in port because of the elimination/simplification of administrative procedures. Other impacts (negligible): Reduction of waiting times in port and possible extension of the origin/destination time: lower waiting time in port. Sailing times can therefore be extended, thus realising energy and economic savings; Decrease of overall sailing time: shipping frequencies can be increased (qualitative)	Benefit	Benefit
Economic	Competitiveness of shipping industry and relative increase of total transport costs	Administrative costs: short-term increase of administrative costs, due to the harmonisation of procedures and to the management of the organisational stage of the standardisation programme; Long-run decrease of administrative costs.	All administrative costs (no personnel cost)	Benefit
Environmental	Modal shift	Reduction of external costs caused by modal shift: Modal shift (Environmental effect): modal shift determines lower emissions of pollutants (shipping is environmentally friendlier than road/rail transport); Modal shift and additional costs of transport. Linked to the last part of the voyage by road/rail. Maritime transport cannot cover the overall transport of goods. The last part needs to be carried out with another mode of transport	Emissions, Global warming, Noise, Congestion, Accident costs, Infrastructure, Vehicle costs	Benefit

6.3. Preferred approach

Individual measures present clear benefits and their combination will permit to a certain extent to synergize their benefits. All of them merit to be implemented. However, as some of them are associated with almost no administrative costs, while other imply investment in technology and training and shall be encompassed in a wider consistent approach and other depends much on local and technical conditions, their modalities shall be differentiated.

The preferred approach is Options C which builds upon the measures presented in option B and foresees their implementation as a consolidated package while adding further simplification to them by considering the elimination of certain procedures:

- Elimination of systematic controls and documentary requests for Internal Market maritime transport and associated carriage of goods or products in line with inland transport. Information on goods under Customs and other types of supervision (veterinary and phytosanitary) would still be available and have to be presented at spot checks.

The EU legislation, which requires the transmission of data at the arrival or departure of vessels at ports relate to:

- Entry and departure notification (Directive 2002/59/EC and Directive 2002/6/EC) including the Maritime Declaration of Health;
 - Waste management formalities (Directive 2000/59/EC);
 - Security notification prior to entry into ports (Regulation (EC) N° 725/2004);
 - Port state control of shipping (Directive 95/21/EC);
 - Dangerous goods procedure (Directive 2002/59/EC);
 - Customs Declaration (Regulation (EEC) N° 2913/92³⁰);
 - Veterinary checks on products of animal origin (Directive 89/662/EEC);
 - Veterinary and zootechnical checks on live animals and products (Directive 90/425/EEC);
 - Phytosanitary inspections (Directive 2000/29/EC).
- In this scenario, the extension of the "Authorised Regular Shipping Service" facilitation to operators on authorised routes would not be an option since all goods carried between EU ports would be subject to spot checks only. However, this option would have clear positive effects and could be recommended in today's situation.
 - Rationalisation of vessel-related and goods-related reporting and forms required by Directives 2002/6/EC, 2000/59/EC, 2002/59/EC and Regulation (EC) N° 725/2004.

Further enabling measures would also need to be implemented, namely:

- Electronic transmission of administrative data;
- Setting-up an administrative single window;
- Simplification of the sea transport of dangerous goods with the recognition of equivalence for some IMDG and ADR rules. As this measure will require further consultations of the stakeholders of the various transport modes, it is envisaged at a later stage.

These proposals would be implemented under wider proposals, which will be included in the action plan for the deployment of e-maritime systems in 2009.

In addition, the recommendations should be given that Member States implement further enabling measures, each time the local conditions permit to do it in an efficient manner, namely:

- Coordinate the inspections carried out in the ports by the various administrative services ("one-stop administrative shop");

³⁰ Council Regulation (EEC) N° 2913 of 12 October 1992 establishing the Community Customs Code

- Extend the scope of Pilot Exemption Certificates;
- Introduce the use of the language most commonly used at sea as an alternative to the national language(s) in administrative communication;
- Create areas in ports dedicated to Short Sea Shipping where that can facilitate the operations for this mode.

These recommendations or enablers, in particular that of a “one-stop administrative shop” might be later converted into stronger instruments based on an evaluation to be undertaken within three years.

This combination and co-ordinated implementation of the measures will allow costs savings and productivity benefits to be utilised while the same level of essential information continues to be available.

While allowing considerable reduction of administrative burden, the approach does not risk fundamental objective of lowering standards. It would give legal certainty regarding guidance and help lowering the costs to businesses in several Member and, subsequently, to consumers. It should be stressed that the available evidence indicates that standards would not be lowered and that therefore these estimated cost savings are not offset by other, negative impacts elsewhere.

6.4. Impact of the preferred approach on stakeholders

The preferred option leading to the elimination of some of the systematic administrative formalities and the simplification of administrative procedures for all stakeholders:

European Union	<p>Costs: Administrative costs, such as management of the legislative process and monitoring feedbacks will be negligible;</p> <p>Benefits: increase of modal shift from road to maritime, achievement of the internal market and reduction of external costs.</p>
Member States and maritime Authorities	<p>Costs: Start-up administrative costs at national level will be compensated by benefits;</p> <p>Benefits: increase of modal shift from road to maritime, increased efficiency and better allocation of administrative services. Possible reduction of frauds.</p>
Port Authorities	<p>Costs: Administrative costs (mainly development of the project at port level and on going costs related to updating running and controlling of programmes activated); increase of administrative costs resulting from the development of the new programme;</p> <p>Benefits: increase in labour productivity and reduction of time for each call (controls of physical documents no longer performed).</p>
Customs	<p>Costs: Administrative costs (mainly for developing the project at port level and on going costs related to updating running and controlling of</p>

	programmes activated) should be compensated by benefits; Benefits: increase in labour productivity and consequent reduction of time for each call (controls of physical documents no longer performed).
Maritime lines	Costs: increase of technology costs for the alignment of harbour communication and single window tools. Increase in costs for computerisation of procedures; Benefits: net reduction of total transport costs due to the decrease of administrative costs; potential reduction of internal costs due to the decrease of delays on vessels; increase of utilisation rates of vessels.
Ship Agents	Benefits: increase in labour productivity, as a consequence of reduction of time spent preparing different documents and carrying out administrative procedures).
Forwarder	Benefits: reduction of costs in relation to a proportional decrease of administrative procedures and customs formalities (free circulation of EU goods within EU ports); reduction of costs related to a decrease of probability of delays mainly of the goods (door-to-door transport); potential decrease in the price of transport services. Potential increase in the service level, due to the increase of punctuality rate on goods.
Citizens	Benefits: reduction of costs for the transport of goods and potential increase in the price of transport services: reduction of emissions, noise, pollution, road congestions, accidents, caused by the modal shift from road to maritime.

6.5. Uncertainties and sensitivity analysis

A difficulty encountered was the lack of statistical data on the 'EU or non-EU' origin of goods carried by maritime transport. Best assumptions on goods volume were thus made in co-operation with EUROSTAT. The “percentage of EU goods in regular services”, has been chosen for a sensitivity analysis.

The goal was to find the switching value of the parameter, i.e. the value for which the internal return of the simplification of Customs procedure turns to zero and to verify “how far” the switching value from the value used in the analysis is.

The reference value used in the analysis is 90%, meaning that regular intra-EU shipping services authorised by the Customs to have simplified procedures are assumed to carry a 90% average of EU goods. The sensitivity analysis showed that the switching value is reached at 68%. According to the sources scanned and the redemption of the stakeholders’ survey, it appears that a 68% ratio of EU goods in regular services is a low value, thus validating the assumption made.

The figures also probably underestimate the effect of a reduction of procedures on the attractiveness of Short Sea Shipping. Shippers seem to be more sensitive to the risk of unexpected long delays than the actual average time lost in doing procedures. The modal shift induced by the reduction of administrative procedures may thus be underestimated.

Two scenarios of modal shift (low and high) have been used to ensure the robustness of the analysis. The expected effect that a significant reduction of administrative burdens can probably induce as the actual modal shift will not only be related to costs as calculated, but will be largely amplified with a better regularity and reputation of the transport mode. Simplification measures will convince more shippers to use maritime transport if they are more visible. The efficiency of the preferred measure will be augmented if it has an intrinsic promotional virtue, not assessable by the modelling tools used for the study.

As show in the following table, in a shorter term the cluster B1 shows negative result in both scenarios: the NPV and IRR are lower than zero and the Benefit/Cost ratio is lower than 1. In fact its benefits would apply on a limited range of the market and would not prove to make up for the corresponding costs in just 11 years. This is due to the fact that the highest costs arise in the start-up period and in the years afterwards they are lower and constant, whereas benefits are only registered after the implementation and would grow in time – so that the shorter the time horizon, the lower the possibility that they compensate for the implementation costs.

Cost Benefit Analysis: Monetised costs and benefits vs. baseline scenario (M € - Net Present Value - time horizon 2009-2020)

		POLICY OPTION B1		POLICY OPTION B2		POLICY OPTION C	
Rif	Impact	LOW	HIGH	LOW	HIGH	LOW	HIGH
A	Investment + training costs	45.7	45.7	68.0	68.0	107.3	107.3
B	Operational costs	98.2	98.2	158.3	158.3	213.7	213.7
C = A+B	TOTAL COSTS	143.8	143.8	226.3	226.3	321.0	321.0
D	Personnel cost savings	5.0	5.0	82.0	82.4	87.0	87.0
E	Ship cost savings	0.07	0.07	9.2	9.2	9.2	9.2
F	Time cost savings	111.1	111.1	678.9	679.2	813.5	813.9
G = D+E+F	TOTAL INTERNAL BENEFITS	116.2	116.2	770.1	770.7	909.7	910.1
H	EXTERNAL BENEFITS (external costs saved by modal shift)	9.8	19.5	34.7	69.4	44.5	88.9
I = G+H-C	TOTAL NET PRESENT VALUE (NPV)	-17.9	-8.1	578.5	613.8	633.2	678.0
	IRR	-3.6%	1.0%	60.3%	61.5%	59.8%	61.1%
(H+G) / C	B/C RATIO	0.88	0.94	3.56	3.71	2.97	3.11
G / C	INTERNAL BENEFIT / COST RATIO	0.81	0.81	3.40	3.41	2.83	2.84

Source: PwC and CERTeT elaboration (2008)

7. MONITORING AND EVALUATION

The measures should provide the first tangible effects on modal shift in the year following their implementation.

The core indicators to assess the progress are the time and delays spend in administrative procedures in Short Sea Shipping as well as the evolution of the share of the different segments of Short Sea Shipping in the total transport volume in the Internal Market.

The Commission will monitor the progress in the establishment of the European maritime transport space without barriers and pay attention to any problem in the implementation phase and envisage further actions to address them if needed.

It will monitor the implementation of the Internal Market in maritime transport collect information by stakeholders and disseminate concrete data on best practices. A staff report should be issued three years after the adoption of the action plan, at the occasion of the forthcoming Commission Communication on the promotion of Short Sea Shipping.

Annex A: Administrative procedures applicable to intra-EU maritime transport

Summary of the main procedures

	Specific procedure/paper	Specific References
Safety and Navigation	Entry and departure notification	Directive 2002/59/EC
Environment	Loading/unloading of bulk carriers; Waste management procedure.	Directive 2001/96/EC Directive 2000/59/EC
Port and ship security	Security notification prior to entry; Procedures on Port state control of shipping (Paris Moue); Dangerous goods procedure “Dangerous Goods Declaration”; “Dangerous Goods Manifest”.	Regulation (EC) N° 725/2004 Directive 95/21/EC Directive 2002/59/EC IMO/FAL FORM (N°7)
Custom procedures	IMO/FAL forms (1, 3, 4, 5, 6); Cargo Manifest.	Directive 2002/6/EC
Control Immigration	Immigration procedure: “Border Control”.	Regulation (EC) N° 562/2006
Phytosanitary measures and agriculture	Phytosanitary inspections.	
Veterinary	Veterinary checks on products of animal origin; Veterinary and zootechnical checks on live animals.	Directive 89/662/EEC Directive 90/425/EEC
Health	Maritime Declaration of Health;	IMO/FAL forms ³¹
Payment of dues	Dues on cargo form; Declaration of vessel dues.	French code and port regulations ...

³¹ Attached to IMO/FAL Form No.1 (General Declaration), only on arrival

List and description of the main procedures

Id		Description of Procedures
1	All vessels (second part only some ships)	<p>Entry and departure notification (related to Directive 2002/59/EC), establishing a Community vessel traffic monitoring and information system (VTS) :</p> <p>Notification prior to entry into ports to the port authority: (a) at least 24 hrs in advance; (b) at the latest, at the time the ship leaves the previous port, if the voyage is less than 24 hrs; (c) if the port of call is not known or it is changed during the voyage, as soon as this information is available". General information: ship identification, port of destination, estimated time of arrival, no. of persons on board.</p> <p>Automatic Identification System (AIS) obligatory for ships > 300 GT. AIS can be picked up by other vessels or coastal stations within 40 miles; Ships must be fitted with a Voyage Data Recorder (VDR);</p> <p>Ships entering the area of applicability of a VTS (Vessel Traffic Service) operated by one or more States must comply with the rules of that VTS.</p>
2	All vessels	<p>Waste management (Directive 2000/59/EC).</p> <p>A form is filled in by the shipmaster and sent to the harbourmaster via the ship agent. The ship agent can enter electronically the information in the VTM system of the Port authority if any, or send it directly to the harbourmaster by fax or e-mail.</p> <p>Deadline is 24 hours prior to arrival, if the port of call is known, or as soon as the port of call is known, if this information is available less than 24 hours prior to arrival, or at the latest upon departure from the previous port, if the duration of the voyage is less than 24 hours.</p> <p>Possibility of exemptions for scheduled services, on condition that they have an arrangement for disposal of waste</p>
3	Bulk carriers	<p>Loading / Unloading of bulk carriers: Procedures related to Directive 2001/96/EC</p> <p>Notification by the master to the terminal before arrival: estimated time of arrival, general information about the ship</p> <p>After receipt of Notification of estimated time of arrival, the terminal must provide the master with information about the terminal</p> <p>Before loading/unloading, the master shall agree with the terminal representative on the (un)loading Plan, prepared according to the BLU Code. Signature of the terminal representative. Ship Checklist to be completed and signed jointly by the master and terminal representative. At the end of (un)loading, written agreement by the master and terminal representative that it has been done according to the Plan.</p>
4	All vessels	<p>Security notification prior to entry:</p> <p>No compulsory model from the ship to the port. Content of the form is a list of items of information, detailed in Regulation (EC) N° 725/2004: identification of the ship, ETA, confirmation that the ship has a valid ISSC (International Ship Security Certificate), security level of the ship, etc.</p> <p>Form is filled by the shipmaster and sent to the harbourmaster. Harbourmaster transmits the form if necessary to the Port Facility Security Officer concerned with the ship. Deadline is at least 24 hours before ship's arrival to the port. Means of transfer: fax, telex, e-mail, etc.</p> <p>Possibility of exemptions for scheduled services, also for international services</p>
5	All vessels (random checks)	<p>Procedures related to Directive 95/21/EC on port state control of shipping</p> <p>Member States to carry out inspections on at least 25% of the annual no. of ships entering ports. Inspection = check on compulsory documents (list in Annex II) + check on overall condition of the ship</p> <p>Some categories of ships have priority in inspections, and some other ones must have expanded inspections.</p> <p>Detailed rules on the inspections</p> <p>Paris Memorandum of Understanding on Port State Controls. A harmonized system of Port State Control. The MOU consists of a the main body in which the Authorities agree on:</p>

		<p>their commitments and the relevant international conventions</p> <p>the inspection procedures and the investigation of operational procedures</p> <p>the exchange of information</p> <p>the structure of the organization and amendment procedures</p>
6		<p>Dangerous goods procedure (Directive 2002/59/EC)</p> <p>Before taking on board, a Declaration must be delivered to the master (Cargo information), with the list of all dangerous goods on board. At the latest at the moment of departure, shipmaster to Notify competent authority (General information + Cargo information) in the port of arrival. Information to be exchanged electronically.</p> <p>Possibility of exemption for scheduled services</p>
7	Vessels (dangerous goods)	<p>IMO Dangerous goods manifest (IMO/FAL form 7)</p> <p>It is notified in advance to the harbourmaster by the shipmaster, by fax, email, telex.</p>
8	All vessels	<p>Reporting formalities: IMO/FAL Declarations. Procedures related to Directive 2002/6/EC on reporting formalities for ships arriving in and/or departing from ports of EU Member States: IMO/FAL form 1 "General Declaration", IMO/FAL form 3 "Ship's stores Declaration", IMO/FAL form 4 "Crew's effects Declaration", IMO/FAL form 5 "Crew List", IMO/FAL form 6 "Passenger List".</p> <p>Deadline: day of arrival or departure</p>
9	All vessels	<p>Cargo Manifest: Contains identification of vessel, carrier, code no., master's name, voyage, port of loading, port of discharge, list of goods carried on board,</p> <p>Signed by the shipmaster and given/sent to Customs no later than 24 hours after ship arrival and before ship's departure. Means of transfer: paper, electronic.</p> <p>A cargo manifest is not developed only for customs purposes, it has in the first place a commercial function.</p>
10	All vessels	<p>Border controls on persons: Regulation (EC) N° 562/2006</p> <p>Ship's captain to draw a list, in duplicate, of the crew and of any passengers. At the latest upon arriving in the port, the list must be given to the border guards. If the list cannot be sent to the border guards, a copy will be sent to the appropriate border post or shipping authority, which shall forward it to the border guards. One copy of the two lists duly signed by the border guard shall be returned to the ship's captain, who shall produce it on request when in port.</p> <p>Ship's captain to notify the border guards of the ship's departure in due time. The second copy of the previously completed and signed list must be returned to the border guards or shipping authorities</p> <p>Cross-border movement at external borders shall be subject to checks by border guards. Checks shall be carried out in accordance with this chapter.</p> <p>All persons shall undergo a minimum check in order to establish their identities on the basis of the production or presentation of their travel documents.</p> <p>"The minimum check shall be the rule for persons enjoying the Community right of free movement...Member States may authorise seamen holding a seafarer's identity document³² (SID) to enter into the territory of the Member States by going ashore to stay "in the area of the port where their ships call or in the adjacent municipalities without presenting themselves at a border crossing point, on condition that they appear on the crew list, which has previously been submitted for checking by the competent authorities, of the ship to which they belong"³³</p> <p>No specific forms for the lists of crew and passengers are imposed by the Regulation (EC) N° 562/2006. The lists must be drawn up in duplicate</p>

³² Seafarer's identity document has to be issued in accordance with the Geneva Convention of 19 June 2003 (No 185), the London Convention of 9 April 1965 and the relevant national law

³³ Cf. Regulation (EC) N° 562/2006 (point 3.1 of Annex VII)

11	Some vessels (random)	Phyosanitary inspections: Member States shall organise at random occasional checks, at any time and at any place where plants, plant products or other objects are moved. Systematic import inspection of regulated material moving between two places within the Community over non-Community territory is not needed if there are no specific risks identified, but the possibility for occasional checks should always remain.
12	Some vessels (random checks)	Veterinary checks on products of animal origin: Procedures related to Directive 89/662/EEC on Products to be accompanied by a health certificate Checks at origin. If products were imported from outside the EC, then the Member State of origin must perform documentary checks. Checks at destination: local authorities can perform veterinary checks.
13	Some vessels (random checks)	Veterinary and zootechnical checks on live animals and products. Procedures related to Directive 90/425/EEC. Animals to be accompanied by health certificates and/other documents Checks at origin: If products were imported from outside the EC, then the Member State of origin must perform documentary checks. Checks at destination: local authorities may perform vet. and zootechn. checks.
14	All vessels	Maritime Declaration of Health: Attached to IMO/FAL Form No.1 (General Declaration), only on arrival. The document includes the identification of the vessel, master's name, deratting certificate or exemption, number of passengers, number of crew, the list of former ports of call (for the last 4 weeks), a set of questions about cases of illness on board, to be answered by yes or no and particulars of every case of illness or death occurring on board must be mentioned in a schedule annexed to the declaration. The Declaration is certified true and correct by the ship master. One copy is attached to the IMO/FAL Declaration No. 1. Another copy is sent to the port's health services. Deadline: prior to entrances, no fixed deadline
15		Collection of port dues on Cargo (French code and port regulations): the dues on cargo forms includes the shipper and consignee names and addresses, ship name and flag, port of departure and destination, kind of goods, number of packages; NST number, references and level of dues, total amount to pay, mode of payment, (cash or guarantee) and is certified by consignee or his local agent. The form is used by Customs to collect the money for the benefit of Port Authority only for bulk cargo (for general cargo and containers, port dues are directly included in Custom duties – in this case a copy of the manifest is sent to the Port Authority)
16	All vessels	Collection of port dues on vessels or passengers (French code and port regulations): The “declaration of vessel dues” (DN) form includes the ship name and flag, number of the voyage, names and addresses of the operator of the ship and his local ship agent, port of departure and destination, characteristics of the ship, number of passengers and level of dues, total amount to pay, and is certified by the ship agent.

Checks on ship safety certificates

The certificates that are routinely checked by the authorities on arrival or departure are: Certificate of Registry, International Tonnage Certificate, Cargo Ship Safety Construction Certificate, Cargo Ship Safety Equipment Certificate, Cargo Ship Safety Radio Certificate, International Loadline Certificate, International Oil Pollution Prevention Certificate, Certificate of Fitness of Cargo Gear, Safe Manning Document, Deratting Certificate, Certificate of Insurance for Oil Pollution Damages, Certificate of Class, Safety Management Certificate, Document of Compliance.

Customs procedures

- The Community Customs Code³⁴ allows the simplification of certain customs procedures, in the case of those vessels performing regularly scheduled routes

³⁴ Council Regulation (EEC) N° 2913 of 12 October 1992 establishing the Community Customs Code; OJ L 302, 19.10.1992, p.1 and Regulation (EC) N° 450/2008 of the European Parliament and of the

between two EU ports. In this case it is necessary to have a Certificate of “Authorised Regular Shipping Service” (ARSS). This authorisation is given to named vessels on a specific route.

In relation to “non regular shipping service” operator, if goods are in free circulation, the proof of Community status is always required on arrival in a port.

The following table shows the customs procedures in the EC for Community and Non-Community goods³⁵.

Selected Customs Procedures in the EC

	Non-regular shipping services	Authorised regular shipping services
Community goods	<p>All ‘other’ (no ARSS) shipping services carrying Community goods are obliged upon arrival at an EC port to present information to the Customs authorities.</p> <p>Proof of Community status always required on arrival in a port.</p> <p>Custom procedures:</p> <p>Presentation of goods - made by (either) the person who has brought the goods into the Customs territory of the Community or the person who assumes responsibility for their onward carriage</p> <p>Summary Declaration - made by (either) the person who conveyed the goods into the Community, the person who assumes responsibility for their onward carriage, the shipping company, or the representative of any of the above</p> <p>The Customs office at the place of unloading should be contacted to agree which commercial documents are acceptable. The acceptable documents are: bills of lading, container manifests, loading lists, shipping company’s, consignment records (on computerised inventory systems)</p> <p>Unloading and storage of goods: goods may only be unloaded from a ship after presentation, lodging of a summary declaration and with Customs permission at places approved by Customs.</p>	<p>No need to prove the status of Community goods (free circulation).</p>

Council of 23 April 2008 laying down the Community Customs Code (Modernised Customs Code); OJ L 145 of 4.6.2008, p. 1

³⁵ Cf. commission staff working paper: “Guide to Customs Procedures for Short Sea Shipping” (Revised Working Version 3 updated on 14 January 2004).

Non Comm. goods (transit)/Non-Community goods	<p>Presentation and summary declaration are the same as in the case of Community goods.</p> <p>Restrictions on the movement of goods after unloading</p>	<p>Transit procedure:</p> <p>Presentation to the Customs office of departure and destination of Transit Declaration, Guarantee.</p> <p>There is a standard procedures and two types of simplified transit procedures (level 1³⁶ and level 2³⁷):</p> <p>system based on Shipping Service's own manifest;</p> <p>no requirement for a transit guarantee for goods carried under T1³⁸ or T2F³⁹.</p> <p>Less paperwork, because the manifest replaces various transit documents.</p>
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The simplified customs procedure of an "Authorised Regular Shipping Service"⁴⁰ has been made available to operators but most of them would like a further improvement of this facilitation, e.g. to have it linked to companies or routes instead of ships. A survey conducted by the Finnish Customs found that 62% of liner services have authorised regular service permits.

³⁶ Level 1, simplified procedure (individual manifest for goods): receive authorization from competent authorities, load vessel, manifest, complete 2 copies (one to Office of Departure and one to Accompanies Cargo) of separate manifests as transit declaration endorsed by Office of Departure, goods unloaded and Manifest as transit declaration presented to office of destination.

³⁷ Level 2, simplified procedure (single manifest for all goods): receive authorization from competent authorities, load vessel, single manifest to Port of unloading.

³⁸ T1 = declaration made on the Community transit document that the goods are placed under external Community transit.

³⁹ T2F = Declaration made on the Community transit document that Community goods are travelling to, from, or between a part of the Customs territory of the Community where the provisions of Directive 77/388/EEC (VAT) do not apply ('non-fiscal territories') under internal Community transit.

⁴⁰ Simplified Customs Procedures in Short Sea Shipping: "Authorised Regular Shipping Service", SEC(2004) 333

Annex B: Comparison of administrative procedures for road and maritime transports

It is generally acknowledged that one of the main obstacles to the development of Short Sea Shipping is represented by the presence of cumbersome administrative procedures, which are more intricate than those applicable to road transport.

- This Annex presents a comparison between the administrative procedures applicable to maritime transport and those applicable to road transport.

Administrative procedures in road transport

In the following table an overview of transport documents required in international road transport across Europe is presented.

Overview of road transport procedures

Document	Requirements
International Consignment note	Must be carried on each vehicle at all times
Community authorisation	Must be carried on each vehicle at all times
Valid Insurance certificate	Not mandatory
Vehicle registration document	Carried by the driver
Letter of Authority	If the vehicle does not belong the driver
Vehicle tax disc	The tax disc should be displayed: no vehicle taxation within EU
Driver licence	Carried by the driver
Driver passport	Carried by the driver
Plating certificate	Attached to the vehicles
Tachograph record	Tachograph record
Good vehicle text certificate	

It is important to underline that road vehicles carry only few certificates. There is no border crossing routine reporting for European Road Transport (ERT), apart from the International Consignment Note. The control of these certificates is limited to checks at the external borders of the EU and to random roadside checks. Random roadside checks may occur at any time within the EU when the truck driver is required to produce these documents.

Moreover, the following table shows the difference between Short Sea Shipping and road Customs formalities in relation to the vehicles into the Customs territory.

Comparison of Customs formalities in Short Sea Shipping and road transport

Subjects	Short Sea Shipping	Road transportation
Community goods	<p>A) No “Authorised regular shipping services”</p> <p>Need to prove the status of Community goods because of re-entry of the Community at an</p> <ul style="list-style-type: none"> - Presentation of goods - Proof of community status <p>(T2L document or commercial documentation such as a ship manifest)</p> <p>B) “Authorised regular shipping services”</p> <p>No need to prove the status of Community goods because of authorisation of the vessel (free circulation).</p>	<p>No proof of Community status when goods are transported within the EU (and do not cross external borders)</p> <p>Proof of Community status when goods re-enter the Community at an external border point:</p> <ul style="list-style-type: none"> - Presentation of goods - Proof of Community status <p>(T2L document or commercial documentation such as the CMR)</p>
Non-Community goods	<p>Cargo Declaration or Manifests</p> <p>Transit (T1) Document⁴¹</p> <p>“Authorised Regular Liner Service”:</p> <p>Simplified transit declaration</p>	<p>Transit (T1) Declaration</p>

Community goods carried by road, which remain within the EU and do not cross an external border point, do not need to provide evidence of their status. By contrast, a Community port constitutes an external border point where proof of the Community status of goods must be always provided except for goods carried by a vessel authorised as a regular shipping service.

Comparison between maritime and road administrative costs

In order to evaluate the average costs of administrative procedures, as for maritime transport, the following assumptions have been set:

- Time consumption and delays are considered only for “roadside checks/inspections” and a probability of control has to be considered: for the purpose of the Impact Assessment it has been set at 2.0%⁴²;
- Because of the presence of few documents, the time for the preparation of documents has been assumed to be 1h;

⁴¹ There are 2 types of simplified transit procedures: system based on Shipping Service’s own manifest; no requirement for a transit guarantee for goods carried under T1 or T2F.

⁴² Source PriceWaterhouse Coopers in relation to the Directives on “Better Road Safety Enforcement in the European Union” 2006/22/CE (15/03/2006).

- Time requirement for one inspection: 1 hour and 4 employees (2 drivers and 2 inspectors);
- Personnel cost: 20€/h;
- Average tonnage for trucks 21 tons;
- Average fee for renting a truck: 70 €/h (18 hours per day).

Consequently, the cost for one roadside inspection could be set at almost € 200.

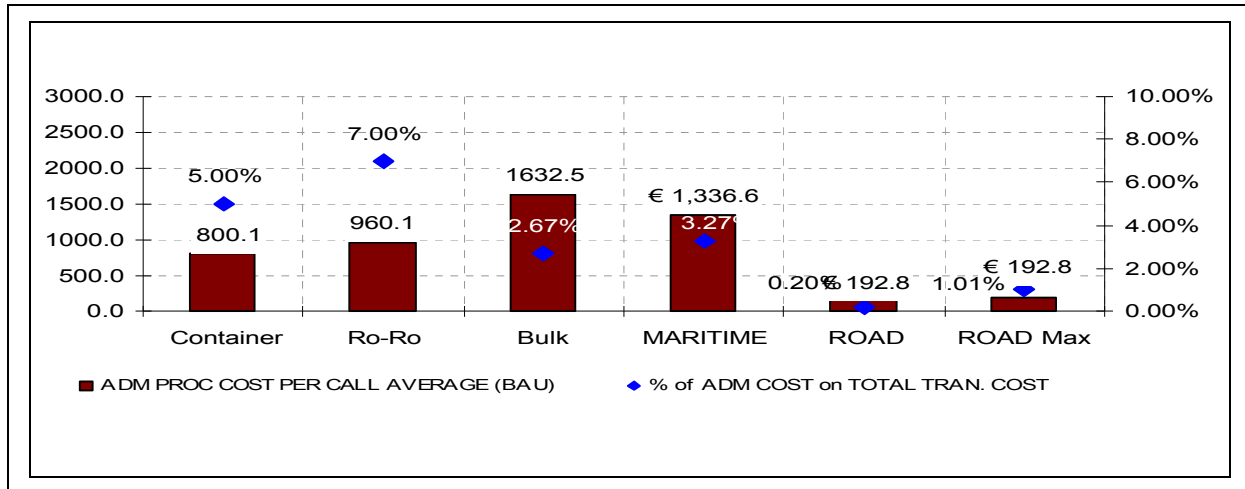
In order to better understand the poor competitiveness of maritime transport against road transport, a comparison between different administrative costs has been developed per vessel and truck.

In line with the assumptions made above, the following table shows the costs of different administrative procedures. Different types of maritime transport and the all-road solution are considered. Data refer to standard goods.

Total cost per call for standard goods (€, €/tons)

Prob.(Cost)	Container	Ro-Ro	Bulk	Avg MARITIME (weighted)	ROAD
TOTAL internal Cost [€/call]	800.1	960.1	1632.5	€ 1,336.6	195.2
TOTAL Internal cost [€/tones]	0.27	0.38	0.20	0.22	0.18-0.89
Average transport cost	5.36 (€/tones)	5.36 (€/tones)	7.64 (€/tones)	9.15 (€/tones)	90.0 (€/tones)
Market share	10.5%	12.8%	69.5%	100%	
ADM on total transport cost	5%	7%	2.67%	3.27%	0.20%

Total cost per call for standard goods (€, €/tons)⁴³



As it can be inferred from the figure above, for maritime transport the average cost per call generated by the various administrative procedures could range between € 1.050 and € 1.850. The administrative cost for a generic truck is almost € 200 per inspection.

It can be assumed an average cost of:

- 0.22 €/tons for maritime transport (roughly 3.27% of total transport costs);
- 0.18 €/tons for road transport (roughly 0.2% of total transport costs -- considering the probability of 2.0 % for the inspection on trucks).

The cost per ton differs by 22% but the relative impact on the transport cost is more significant. The overall value can increase in relation to the percentage of annual percentage of truck inspections.

⁴³ Data related to general cargo have to be considered on average of the total.

Annex C: Evolution of Short Sea Shipping market (Baseline scenario)

Possible evolution of the maritime transport in the baseline scenario

In 2006 the market for Short Sea Shipping in the EU accounted for more than 1.5 billion ton.km. In the baseline scenario, the forecast of the volume of Short Sea Shipping market can be based on the growth rates derived from available assessments.

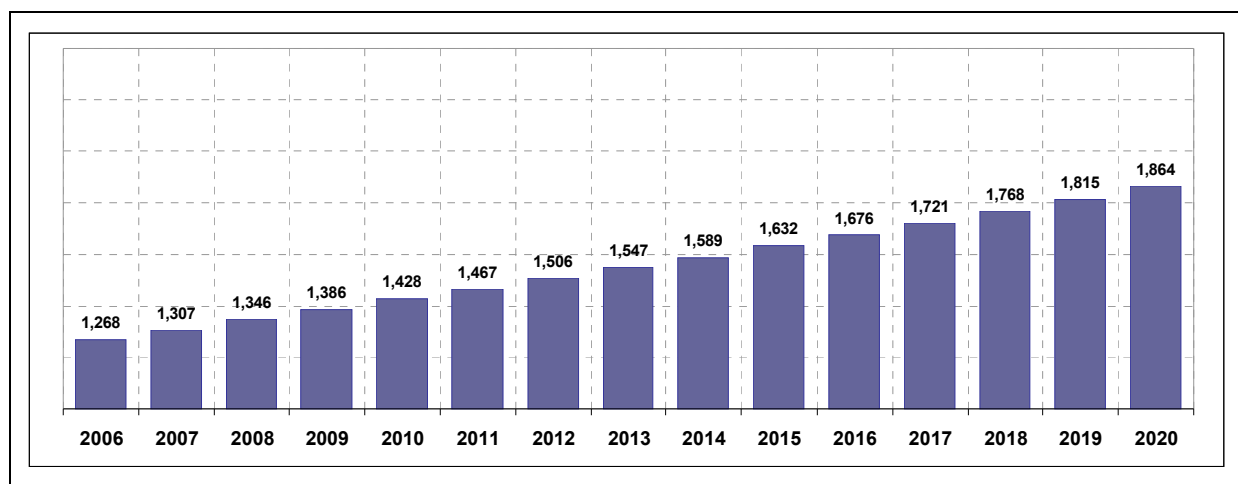
The annual growth rate of the last ten-year period, when Short Sea Shipping trade grew from 1,150 million ton.km in 1995 to 1,545 in 2006, reaches +2.7%. The recent ASSESS study⁴⁴ outlines for the Short Sea Shipping market a medium-run (2005-2010) growth path equivalent to +16%. Such growths correspond to an annual rate of 3.0% from 2005 onward.

It is assumed that the Short Sea Shipping sector can benefit in the short run from an acceleration of its recent growth and therefore grow in the base-line scenario at a higher rate than the historical one. In the medium-long run, though, the growth is assumed to get back to slightly lower rates.

The assumed annual growth rates are therefore equal to 3.0% until 2010 and 2.7% until 2020 and further on.

As shown in the table below, the Short Sea Shipping market in the EU would therefore reach, in the base-line scenario, some 1.4 billion ton.km in 2010 and 1.86 billion in 2020.

Short Sea Shipping market in EU-27, projections in the base-line scenario (million ton.km)



The projection of this growth to 2040 (which is the time-horizon considered in the analysis) yields a Short Sea Shipping market of some 3.17 billion ton.km.

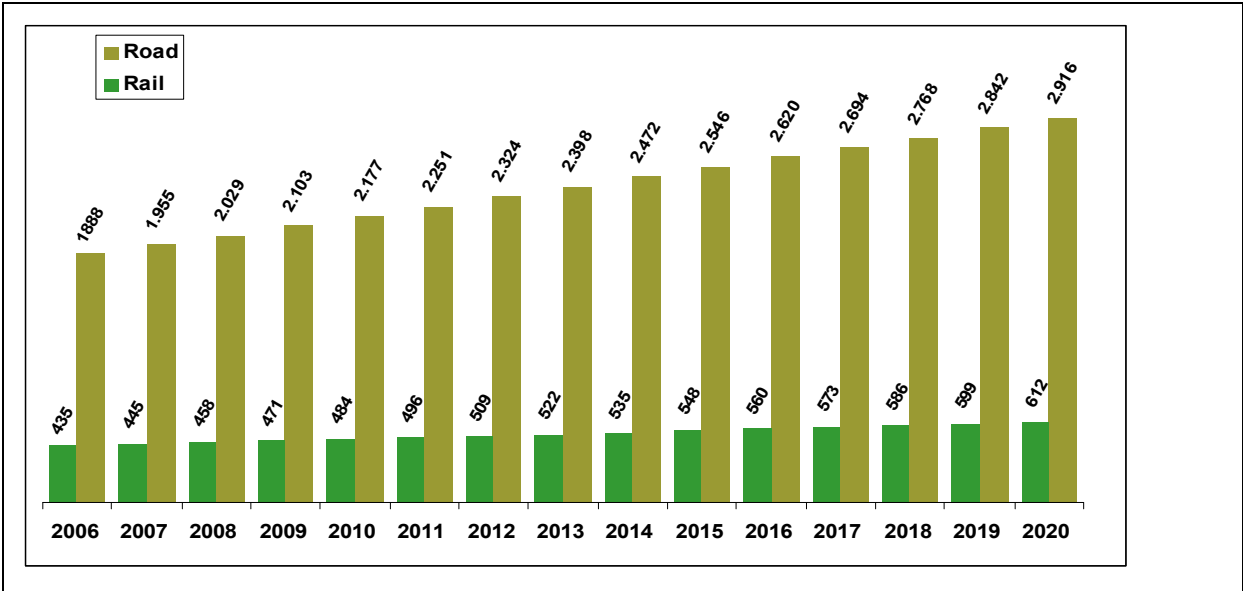
The market of freight transport by other modes is also assessed in the base-line scenario.

For this reason, the trend-line growth according to the volumes of transport since 2002 is considered, which is equal, for road transport, to a slowing growth from +3.5% in 2007 to

⁴⁴ DG TREN, ASSESS – Assessment of the contribution of the TEN and other transport policy measures to the midterm implementation of the White Paper on the European Transport Policy for 2010, Brussels 2005.

+3.2% in 2020 (when the total road freight market would amount to 2.9 billion ton.km), and for rail transport to an accelerating growth from +2.3% in 2007 to 2.5% in 2020 (when the rail transport of goods would be equal to 612 million ton.km).

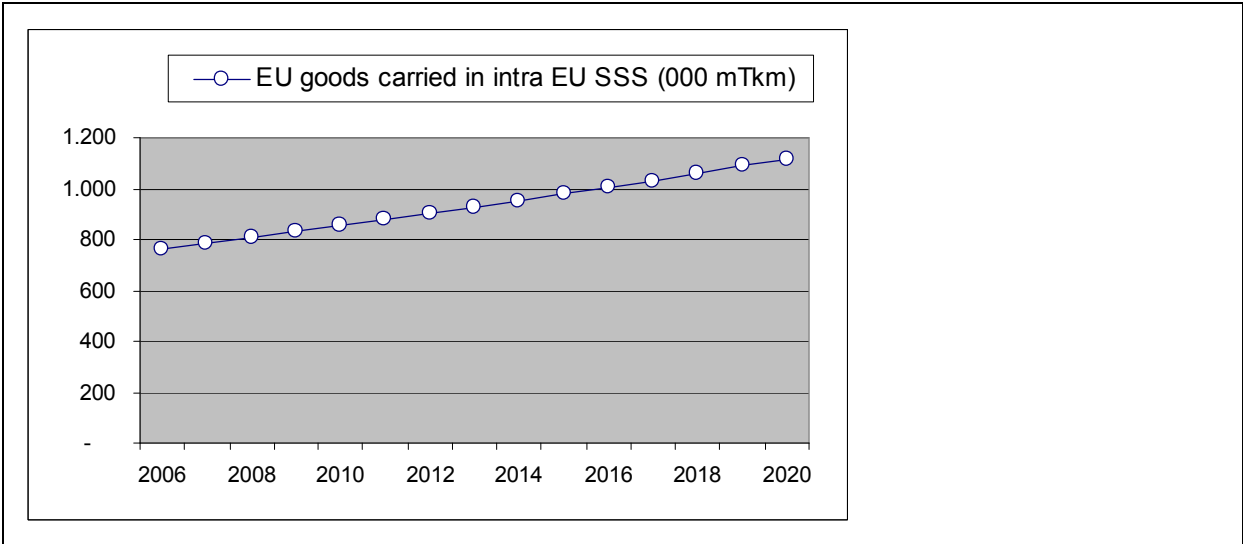
Road and rail freight transport in EU-27, the base-line scenario (million ton.km)



The total amount of ton.km comprises some double counting and the counting of non EU goods, while in the modal shift assessment only the EU goods share has to be considered. By utilising jointly a bottom up and a top down approach it has been possible to assess the share of EU goods carried by intra EU lines and connections. The EU goods share has been assessed in 59.9% of the total.

In the table below the quantification of EU goods (tons) on which the modal shift assessment has been carried out is shown.

EU goods carried in intra EU Short Sea Shipping, baseline scenario (000 million ton.km)



Therefore, the total number of ton.km can be assessed as equal to 759,201 million and in 2020 it will be 1,115,906 million. After the year 2020, a slowdown of growth for all modes has been assumed. (1.5% yearly till 2040).

Considering assumptions on vessels sizes and load factors, the output resulting from the database on the number of intra-EU lines and their frequency, it has also been possible to estimate the average number of tons transported each year by intra-EU services. Regarding bulk traffics some other evidences have been collected, either on the overall number of tons-kilometre and on the bulk share out of the total Short Sea Shipping traffic.

Number of tons transported per year in intra EU Short Sea Shipping

Vessel type	Avg vessel's load	% embarks/disembark per call	LU per line	conv. factor LU / tons	tons x line	tons x call	n. of loops per year
Ro-Ro	280	0,35	560	13	7.280	2.559	195,1
Ro-Lo	220	0,24	300	13 /11,28	3.659	881	153,0
Container	560	0,24	1120	11,28	12.634	2.985	67,2
Ro-Pax	64	0,49	128	13	1.664	821	415,5
Bulk	16.000	1	16000	1	16.000	8.000	-

It is possible to extrapolate the number of tons carried by Authorised Regular Shipping Services on the total and overall volume of EU goods and non-EU goods carried each year by intra-EU maritime transport.

Number of tons, divided in ARSS and non ARSS, EU goods and non EU goods share

Vessel type	Tons transported by ARSS per year	EU goods share (%)	EU goods carried by ARSS per year	Non EU goods carried by ARSS /year
Ro-Ro	119.781.397	0,90	107.803.257	11.978.140
Ro-Lo	13.537.357	0,90	12.183.621	1.353.736
Container	162.210.774	0,90	145.989.696	16.221.077
Ro-Pax	31.722.578	0,90	28.550.320	3.172.258
Bulk	-	-	-	-
Total	327.252.105,4		294.526.894,9	32.725.210,5

	Tons transp. by NON ARSS services/ year	EU goods share (%)	Non ARSS (EU goods)	Non ARSS (non EU goods)
Ro-Ro	73.414.404	0,5	36.707.202	36.707.202
Ro-Lo	8.297.090	0,5	4.148.545	4.148.545
Container	99.419.507	0,5	49.709.753	49.709.753
Ro-Pax	19.442.870	0,5	9.721.435	9.721.435
Bulk	-	-	-	-
Total	200.573.871,1		100.286.935,5	100.286.935,5

Finally, considering the overall number of tons of EU goods and the ones of non-EU goods, without considering the service status, the following results were found:

Number of tons per year divided in EU goods and non EU goods tons

	Overall tons transported by intra-EU services per year	EU goods Overall tons	Non EU goods Overall tons
Ro-Ro	193.195.801	144.510.459	48.685.342
Ro-Lo	21.834.446	16.332.166	5.502.280
Container	261.630.280	195.699.450	65.930.831
Ro-Pax	51.165.449	38.271.756	12.893.693
Bulk	800.000.000	400.000.000	400.000.000
Tot.	1.327.825.977	794.813.830	533.012.146

Annex D: Main assumptions for the Impact Assessment

The impact assessment made assumption on the size of the vessels, number of ship calls per line and vessels' load factor, which affect the number of lines operated in the EU market, the number of Bills of Ladings (hereafter B/L), which are fundamental variables in the cost benefit analysis, given the total traffic in terms of ton.km. In fact, should the size of the vessels and/or the load factor increase/decrease, the number of lines and of B/Ls grows in a more/less than proportional way compared to the ton.km foreseen. Similarly, the share of Regular lines (Authorised Shipping Services) on the total number of lines is a variable that will affect the cost benefit analysis.

The calculation (for the assessment of the time related cost of FTEs) are based on the number of B/Ls (on which controls will be effectively performed), rather than on the number of loading units or ton.km.

Different assumptions have been used for different types of cargoes. In particular, it has been studied the number of lines in the Short Sea Shipping container market and in the Ro-Ro market, while for the dry bulk market, because of its nature (tramp), an approach based on the number of ton.km (explained later in this document) has been selected. Also the "mixed traffic" routes are examined, such as the Ro-Lo segment and the Ro-Pax one.

A database⁴⁵ has been set up, containing all the data available on Short Sea Shipping connections, in which all the intra-EU liner maritime connections are shown, both for container traffic and for Ro-Ro traffic.

Further elaborations on that database allowed the assessment of the number of intra-EU lines, their average frequency, the average number of ports called per line and the overall number of line loops per year. Matching the containers connections' data and the Ro-Ro ones it has been estimated the share of lines entirely dedicated and the share of mixed traffic lines. At a later stage, with further elaborations on the data on Ro-Ro lines, we analysed operators and fleets, as well as the number of lines used for the transport of passengers and private cars (Ro-Pax).

In this way it is possible to define the different typologies of intra-EU maritime cargo traffics, and to set the basis for further considerations on different cargo specificities (average load factors, average number of ports called per line and average liner frequency, conversion factors from loading units to bill of ladings).

The assumptions concerning the variables are shown in the table below:

⁴⁵ Elaboration on European SSS Info data.

Avg. capacity of intra-EU vessels (per type of cargo)

	Container	Ro-Ro	Ro-Lo	Ro-pax	Bulk
Vessel size	800 TEU	350 LU	100 LU + 200 TEU	80 LU	20,000 tons
Load Factor of vessels	70%	80%	80% (LU), 70% (TEU)	80%	80%
Number of lines in the EU Short Sea Shipping market	308	136	39	74	50,000 ⁴⁶
Avg number of port calls per line	4.23	2.84	4.15	2.03	2
Avg number of B/L's per line per vessel	448	400	170	91	4
Avg number of line loops per year	67.2	195.1	153.0	415.5	-
Number of Bills of Lading	9,277,669.5	10,615,153.9	1,016,094.9	2,811,288.4	200,000.0

The assumptions made on average vessels' capacities and load factors were assessed (considered for each type of vessel), validated by the experts and stakeholders interviewed during the study⁴⁷:

- Average vessels' capacities (considered per each type of vessel);
- Average vessels' loads (considered per each type of vessel);
- The share of cargo embarked/disembarked in each port of call within the line (considered per each type of vessel);
- Conversion factors⁴⁸ from the number of LU⁴⁹ to the number of B/L;
- Conversion factors⁵⁰ from the number of tons to the number of B/L;

Estimation of environment benefits

The review of existing studies (including the EC Handbook on external costs) show that the 2006 ISIC analyses prove to be the most fitting ones to the present external cost assessment problem:

- Figures are expressed in terms of Euro/tkm

⁴⁶ The number of Bulk connections shown in the table (50,000) is not taken into consideration within the overall number of intra EU lines, because it is not part of liner traffic.

⁴⁷ Based on our elaborations and data from previous study, interviews to experts and validation of the gathered data at the Antwerp meeting April 15th 2008

⁴⁸ 1.4 LU per B/L in Ro-Ro traffic and 2,5 TEU per B/L in containerised one

⁴⁹ Containers and Loading Units

⁵⁰ 1.4 LU per B/L in Ro-Ro traffic and 2,5 TEU per B/L in containerised one

- Figures are given also for SSS (recovering a usual lack of the most part of external cost reviews, including the EC Handbook, in which reference marginal or average external costs for seaborne transport are not given).

However, the ISIC figures do not reflect the recent or on-going decisions, as the proposal for Euro VI standards for heavy duty vehicles, which will reduce NOx and particulate matters from 2012 or the IMO decision on low sulphur fuels for maritime transport. The share of conventional pollution in the total external costs (comprising infrastructure costs, congestion costs, accidents and climate changes costs) is 30% for road and 50% for maritime transport.

The ISIC figures are shown in the table below.

Key figures of external costs, Euros/ ton-km

Key figures (in euro/tonkm)	Road	Rail	SSS
Air pollution	0,0089	0,0046	0,0056
Global warming	0,0026	0,0046	0
Noise	0,0028	0,0009	0
Accident costs	0,0043	0,0014	0
Congestion	0,0113	0	0
Infrastructure	0,0043	0,0037	0,0034

Source: EC ISIC project (2006)

Annex E: List of abbreviations

Acronvm	Definition
ADN	Agreement on the carriage of Dangerous goods by inland waterways
ADR Code	Agreement on the carriage of Dangerous goods by Road
AIS	Automatic Identification System
ARSS	Authorised Regular Shipping Service
B/L	Bill of Lading
CERTeT	Centro di Economia Regionale dei Trasporti e del Turismo (Universita Bocconi)
DG	Dangerous Goods
EDI	Electronic Data Interchange
EMS	European Maritime Space
EMSA	European Maritime Safety Agency
ERT	European Road Transport
FTE	Full Time Equivalent
GT	Gross Tonnes
HEATCO	Harmonised European Approach for Transport Costing
ICT	Information and Communications Technology
IMDG Code	International Maritime Dangerous Goods Code
IMO	International Maritime Organisation
IMO/FAL	Convention on the Facilitation of international maritime traffic
IRR	Internal Rate of Return
ISIC	Integrated Service in the Intermodal Chain
ISSC	International Ship Security Certificate
LRIT	Long Range Identification and Tracking of ships
MoU	Memorandum of Understanding
MRCC	Maritime Rescue Coordination Centre
MTCP	Maritime Transport Co-ordination Platform
NPV	Net Present Value
PDG	Packaged Dangerous Goods
PEC	Pilot Exemption Certificate
PwC	PricewaterhouseCoopers
RID	Regulation on the carriage of Dangerous goods by rail
Ro/Ro	Roll-on Roll-off ship
Ro-Pax	Roll on/Roll off - Passenger Vessel
SOLAS Convention	International Convention for the Safety of Life at Sea
SSS	Short Sea Shipping
SSN	SafeSeaNet
VDR	Voyage Data Recorder
VTS	Vessel Traffic Service

