



**European Sustainable Shipping Forum
8th Plenary Meeting**

Brussels, 16 October 2017

Submission from ESSF sub-group on Competitiveness

1. Sub-group recommendation(s) to the Plenary

The sub-group recommends that the Plenary **approves**:

- a) the roadmap of work package 2 ('Mapping and relevance analysis of the applicable EU and International regulatory framework') as presented in Annex 1 and
- b) the revised roadmap or work package 3 ('Reasoned analysis of the weakened position of dry/liquid bulk cargo in short sea shipping and identification of remedial actions') as presented in annex 2.

2. Required action(s) to be considered by the ESSF Plenary based on sub-group recommendation(s):

In its last meeting, the ESSF Plenary approved the launch of 3 work packages by the sub-group on competitiveness, and it asked that the action plan for work package 3 is revised to specify the need to first identify the causes of the decline in dry/liquid bulk cargo transport by short-sea shipping.

The **roadmap for WP3** has been revised and the task description includes now a '*reasoned analysis of the weakened position of dry/liquid bulk cargo in short sea shipping*' as a first element. The sub-group considers that this should appropriately address the concerns expressed by the Plenary in January 2017.

Based on the positive feedback from the 7th ESSF Plenary on the establishment of new work packages, the **roadmap for WP2** has also been proposed and is sent now for the Plenary's endorsement. The Plenary is also invited to take note of the fact that the title for the work package has been slightly changed to avoid any confusion with the fitness check exercises, which usually refers to Commission's procedures for launching a comprehensive policy evaluations.

3. Timing of required action(s) in view of upcoming deadlines and critical requirements:

Given the delays experienced in the sub-group on competitiveness in 2017, it is proposed that the activities will start on all three work packages in the autumn and that draft reports are submitted to the next ESSF Plenary meeting. The final reports will be submitted by a month before the 9th ESSF Plenary meeting in 2018, still within the current mandate of the ESSF.

4. Summary of the issue and possible alternative solution(s)

n.a.

5. Background information

Following the departure of the former WP coordinator for WP2 (Patrick Verhoeven from ECSA), the sub-group on competitiveness has supported the nomination of Benoît Loicq from EMSA as new WP coordinator.

In its last meeting, the sub-group on competitiveness has highlighted the tight connections between all three WPs, and in particular WP1 and WP2. As a result, the possibility of organising a joint meeting (following initial work in correspondence) was suggested by the group and in principle agreed by the coordinators.

At its last meeting, the sub-group elected also a new rapporteur to replace Patrick Verhoeven who left ECSA on beginning of September. New rapporteur will be Mr Martin Dorsman from KVMR.

List of annexes:

Annex 1 Draft action plan WP2: 'Mapping and relevance analysis of the applicable EU and International regulatory framework'

Annex 2 Revised action plan WP3: 'Reasoned analysis of the weakened position of dry/liquid bulk cargo in Short Sea Shipping and identification of remedial actions'

Annex 1 Draft action plan WP2: 'Mapping and relevance analysis of the applicable EU and International regulatory framework'

Draft version: 0.2

September 28th, 2017

Draft action plan 'Mapping and relevance analysis of the applicable EU and International regulatory framework'

1. INTRODUCTION

At its October 2016 meeting the ESSF's sub-group on Competitiveness discussed the 'Implementation report of the EU Maritime Transport Strategy' and decided on a way forward.

Three new work packages were identified and eventually adopted by the ESSF Plenary meeting on 24 January 2017, as follows:

- Work Package 1: Enhancing the competitiveness of EU short sea and deep sea shipping
- Work Package 2: Mapping and relevance analysis of the applicable EU and international regulatory framework
- Work Package 3: Reasoned analysis of the weakened position of dry/liquid bulk cargo in short sea shipping and identification of remedial actions

This document sets out the objectives, tasks, deliverables and timetable of Work Package 2. The ESSF Plenary will in its October 2017 meeting have to approve the present draft Action Plan.

Context and rationale

The European shipping is a diverse and complex industry, deeply rooted in the European continent but active worldwide. According to a recent Oxford Economics study, the EU controls 40% of the world's fleet and is a leader in all segments of the industry, including in offshore services. In terms of tonnage, EU shipping has increased its capacity by 70% compared to 2005. The industry's impact on the economy of the EU is significant by contributing around 147 billion Euros to the EU' economy and providing 2.2 million people with a job both on board and ashore.

Through a series of identified focus areas, the European Commission 'Implementation report of the EU Maritime Transport Strategy' aims at ensuring the competitiveness of European shipping, the achievement of a proper balance between international and European regulations, and the implementation of the better regulation principle.

The Work Package 2 should focus on implications on short sea shipping which's position is under severe pressure. Shipping markets are still depressed, competition from other transport modes is very strong and the shipping sector is facing the challenge to further

improve its environmental performance. Short sea shipping is confronted with a declining share in the intra EU-trade. Although also influenced by statistical factors, the decline of the share from over 40% in the 90's of the last century to nowadays 33%, points to structural factors influencing the competitive position of European short sea shipping.

As the work of the three work packages carried out in the sub-group on Competitiveness is very interlinked, particular attention should be paid to the coordination between the work package co-ordinators. Especially the coordination with Work Package 1 is crucial. Given the competitiveness of the sector is also influenced by the regulatory environment it faces, the output of Work Package 2 can be used as an element for the final conclusions of Work Package 1.

2. OBJECTIVES, TASKS, DELIVERABLES AND TIMETABLE

2.1 Objectives

The main objectives of Work Package 2 are as follows:

- To map out existing and upcoming EU and international regulation affecting short sea shipping
- To provide an opinion on the 'fit for purpose' of the regulatory framework
- To identify remedial action and a communication strategy

2.2 Tasks

2.2.1 Mapping out existing and upcoming EU and international regulations affecting short sea shipping

With support of the European Commission, the task will be to list existing and upcoming EU and international regulations affecting short sea shipping. In the context of the focus areas under the European Commission's document 'Implementation report of the EU Maritime Transport Strategy', a number of legislative and non-legislative initiatives have been adopted since 2009 on:

- Safety and security
- Digitalisation and simplification
- Environmental sustainability and Decarbonisation
- The EU as a strong global player
- The maritime profession

Since the focus of this work is on short sea shipping and given the limited time and scope of the exercise, it is suggested to primarily look at digitalisation and simplification, and environmental sustainability and decarbonisation.

2.2.2 Define characteristics of short sea shipping

Due to its particular characteristics, some regulatory initiatives have a particular impact on short sea shipping compared to its impact on deep sea shipping, for instance the fact that it calls more frequently in EU ports, operates in a geographical similar region, etc.

The task will be to define those characteristics that are typical to short sea shipping and that can be a reason why a regulatory initiative might have different, eventually unforeseen, impacts on it.

2.2.3 Provide an opinion on the ‘fit for purpose’ of the regulatory framework

The main task will be to look at whether regulatory initiatives take the particular characteristics of short sea shipping well into account and do not – be it unintentionally – create a burden to the development of short sea shipping.

The final output will be an overview table listing all regulatory initiatives in the one column assessed against the short sea shipping characteristics. The table will identify whether particular characteristics are / are not well taken into account and might suggest some alternatives.

This matrix can then be combined with the outcome of Work Package 1 to draw joint conclusions and recommendations, and so achieving the agreed common objective to identify remedial action and a communication strategy.

2.3 Timetable

The co-ordinator shall report to the sub-group on Competitiveness and report about progress. A draft report should be delivered to the group by [date to be decided]. The final report should be delivered no later than mid-2018, coinciding with the end of the current ESSF's mandate.

The work-plan shall be executed immediately after the approval of the ESSF plenary. The progress and results shall be reported to the ESSF Plenary as appropriate.

2.4 Working method

Most of the work will be done by correspondence. Meetings will be organised, most probably in Brussels, if need be. Sub-group meetings will be used for discussion on specific issues.

The sub-group members have to deliver their expertise and also contribute in making written text suggestions, to provide for an in depth analysis of all the areas covered by this action plan.

The co-ordinator will liaise with the other co-ordinator(s) to take care of streamlining and optimizing the different work packages.

Annex 2 Revised action plan WP3: 'Reasoned analysis of the weakened position of dry/liquid bulk cargo in Short Sea Shipping and identification of remedial actions'

Draft version: 0.3
20 September, 2017.

Draft action plan 'Reasoned analysis of the weakened position of dry/liquid bulk cargo in Short Sea Shipping and identification of remedial actions'

1 INTRODUCTION

At its October 2016 meeting the ESSF's sub-group on Competitiveness discussed the 'Implementation report of the EU Maritime Transport Strategy' and decided on a way forward. Three possible new work packages were identified, one of which will deal with *the weakened position of dry/liquid bulk cargo in Short Sea Shipping* with a view to enhance competitiveness of EU Short Sea Shipping and Deep Sea Shipping.

This document sets out the objectives, tasks, deliverables and timetable of such a possible new work package. The ESSF Plenary will in October 2017, approve the work package.

1.1 Context and rationale

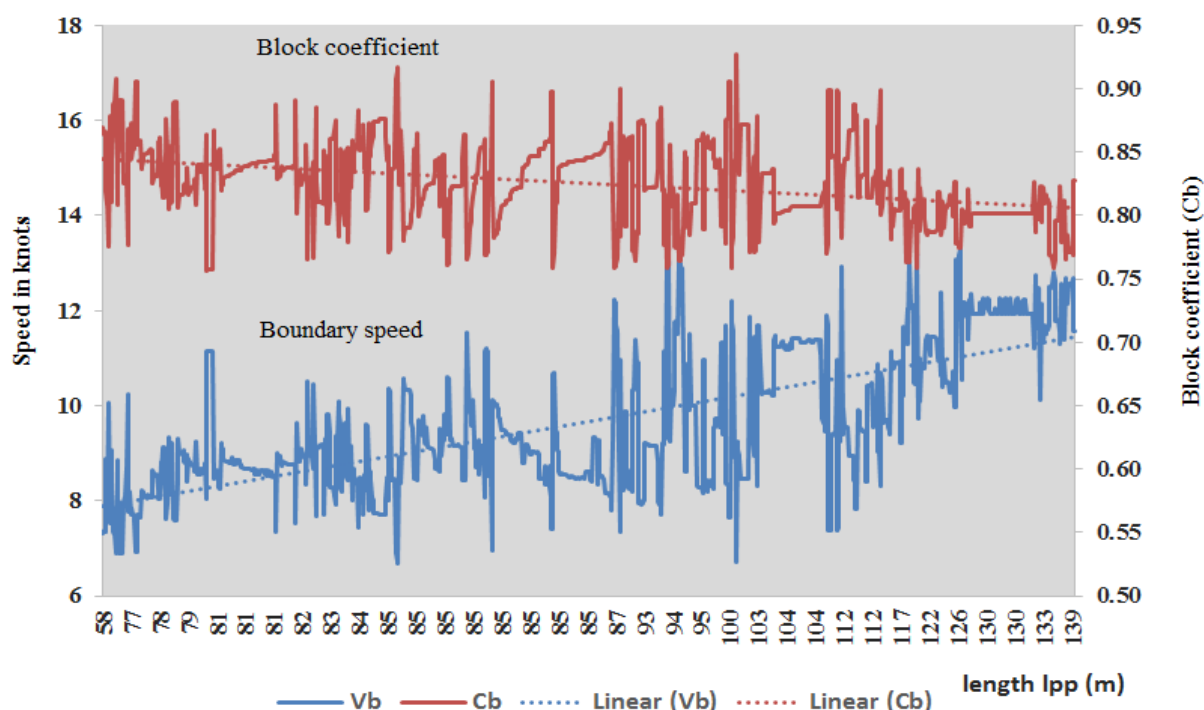
Shipping is a key driver of world economic growth and prosperity and Europe is a major player, controlling some 40% of the world's shipping tonnage. In Europe, Short sea shipping is the second largest mode of transport for intra-EU and total European trade. The European Commission (EC) promotes Short Sea Shipping due to its high environmental performance and energy efficiency. In addition, Short Sea Shipping has the potential to solve road congestion problems affecting many parts of the European continent. Despite the political objectives of decreasing road transport and transfer cargo to rail and sea, Short Sea Shipping is struggling. In Europe, research projects funded, both at national and EU level have addressed these challenges and the recommendations have been to: Focus on the whole supply chain; New or improved technologies; or all of this in combination with larger vessels. In comparison, there has been less attention on the need for improving the cost competitiveness of short sea shipping versus road transport.

The benefit of trucks is that they transport small batch sizes, i.e. 20 – 25 tons, allowing shipments door to door at high frequencies. In scheduled maritime shipping, frequencies can be two or three times a week or at best daily. Also, while trucks are standardized and built in huge numbers, short sea vessels are less standardized and typically built in series from a few up to one hundred. Moreover, the main truck manufacturers have used huge resources during the last decades on reducing the trucks lightweight and improving their engines – in other ways – reducing the fuel consumption of the trucks.

Increasing vessel size or reducing operational speeds are two well-known principles for reducing the fuel consumption and cost per transported unit. First; larger ships – and shipments - tend to be more energy efficient per freight unit transported than smaller. However, in short-sea trades available cargoes and the required frequencies will often limit the opportunities for increasing the vessel size, or vessel sizes might be limited due to port restrictions.

Second, reducing operational speeds, the explanation is that the power output required for propulsion is a function of the speed to the power of three and beyond. This implies that when a ship reduces its speed, the power required and therefore the fuel consumed per transported unit is considerably reduced. However in Short sea trades such as in Europe, vessels often compete with road transport both cost and time wise, this limits the opportunities for reducing their operational speeds.

While speed reductions and economies of scale in vessel and shipment sizes often require changes in the supply chain due to longer transport times, port requirements and storage facilities, it is possible to introduce more energy efficient designs without changes to the logistics. Traditionally, ships have typically been built to operate at their boundary speeds based on hydrodynamic considerations. For any given hull form, the boundary speed can be defined as the speed range where the resistance coefficient goes from nearly a constant to rise rapidly and make further speed increases prohibitively costly. In the figure block coefficient and boundary speed has been plotted for the North European General fleet, i.e. vessels with dwt from 1000 – 25 000 ton (Lindstad et al 2016).



Main observations are that the smallest vessels have the highest block coefficients, i.e. around 0.85. Second, when the vessel sizes increase the block coefficient is gradually reduced, i.e. to around 0.80 for the largest vessels. Low boundary speeds as such is not a problem if vessels are operated at that speed, but in reality most of the general cargo fleet are powered to operate at designs speeds 2 to 4 knots above their boundary speeds. In comparison, deep-sea bulkers and tankers are generally designed to operate at their boundary speeds, with power reserves to do no more than 0.5 – 1.5 knots higher. Historically marine fuel was cheap and even if consumption doubles compared to operating at the boundary speed, the additional fuel cost was less than the additional income due to more freight work produced. More recently, higher fuel prices due to the introduction of the 0.1% sulphur limits in the North Sea and the Baltic in combination with increased environmental concerns has challenged this practice. There is hence a need for developing designs, which use less fuel per tons of goods transported. One option to achieve this will be to investigate alternative designs with focus on varying vessel length and width, to enable more slender designs and hence lower fuel

consumption and emissions per transported unit, compared to more full body conventional short sea designs operating at similar speeds.

The work package 3 will utilize state of the art knowledge within ship design & building and in addition build upon on the results of work already done by the sub-group on Competitiveness and Finance. Particular attention will be paid to the two other possible new work packages and the co-ordinators of the work packages will align work and progress on a regular basis.

2. OBJECTIVES, TASKS, TIMETABLE and ORGANIZING

2.1 Objectives

The overall objective of work package 3 are:

- To analysis the weakened position Short sea dry and liquid bulk versus road transport and identification of remedial actions

In Europe, the three main vessel types used in short sea shipping are General Cargo, Ro-Ro and Tank vessels. The focus of this study will be on Tank Vessels and General cargo vessels. The tank vessels transports Wet bulk, i.e. oil products, chemicals and other liquid products. The General Cargo vessels are generally less specialized than the tankers and transports: containers, project cargo, break bulk and pure bulk.

2.2 Tasks

1. Reasoned analysis of the weakened position of dry/liquid bulk cargo in short sea shipping
2. Identification of remedial actions – to be addressed as a second step
3. Briefly explore the achievable potential cost reductions
4. Summarize the results in a report
5. Present the results

The work done in this work package draws upon the operational experience of Ship Designers, Shipbuilder, Ship-owners, Industry stakeholders and other experts.

2.3 Timetable

The co-ordinator shall report to the sub-group on Competitiveness and report about progress. A draft report should be delivered to the group end of July 2017. The final report should be delivered end of 2017. Intermediate reports might be written if the need to do so arises.

The work-plan shall be executed immediately after the approval of the ESSF plenary. The progress and results shall be reported to the ESSF Plenary as appropriate.

2.4 Working method

The co-ordinator will decide on the working methods; most of the work will be done by correspondence. The Sub-group members have to deliver their expertise and also contribute in making written text suggestions, to provide for an in depth analysis of all the areas covered by this action plan.

If the ESSF plenary decides to approve this and other work packages that are relevant for this work package (see footnote 1), the co-ordinator will liaise with the other co-ordinator(s) to take care of streamlining and optimizing the different work packages.

Most of the work will be done by correspondence. Meetings will be organised, most probably in Brussels, if need be. Sub-group meetings will be used for discussion on specific issues.

References

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