

REPORT ON THE FIFTH CONSULTATION ROUND

Assessing the impacts of the Recommendations

The ESSF PRF Correspondence Group

Harmonising the principles of Cost Recovery Systems in Article 8 of the PRF Directive

Introduction

During the third ESSF Sub-Group Meeting on Port Reception Facilities (1 October 2015), a Correspondence Group (CG) was set up to clarify and define the principles set out in Article 8 of the PRF Directive and to develop common interpretation in order to promote a more harmonized and transparent approach that would streamline the principles on which EU ports' cost recovery systems are currently based on.

Four rounds of consultation were arranged during the timeframe of 14 December 2015 to 22 July 2016 with the aim to provide specific Recommendations to COM for use in the Impact Assessment (IA) process being undertaken for the revision of the PRF Directive. As a result, the CG gave eight Recommendations to the COM which were presented to the ESSF-PRF Sub Group on 4 October 2016.

According to the revised Terms of Reference, the CG was further tasked to assess the possible impacts (environmental, economic and social) of these Recommendations to support the COM in the IA process

This fifth round of consultation was arranged from 7 December 2016 to 9 January 2017 and was also open to the ESSF PRF Sub-Group.

Round	Dates
1 st	14 th December 2015 to 15 th January 2016
2 nd	2 nd – 15 th February 2016
3 rd	22 nd March to 21 April 2016
4 th	28 th June – 22 nd July 2016
5 th	7 th December 2016 – 9 January 2017 Impacts of the Recommendations

For the purpose of assessing the impacts, the Recommendations were grouped as follows:

1. Incentive based indirect fee system (Rec. 1, 2 and 3: PRF costs, Significant contribution, method of calculating Significant contribution)
2. Right to deliver concept in the indirect fee (Rec. 5)
3. Transparency of the cost recovery system (Rec. 8)
4. Indirect fee differentiation criteria – new element (Rec. 4)
5. Green ship criteria (Rec. 7)
6. Auditable service levels (Rec. 6)

To gather views on the possible impacts, the respondents were requested to use the following matrix:

1. Environmental impacts	<ol style="list-style-type: none"> a) Waste volumes delivered to PRF (ship generated waste: garbage, oily waste, sewage) b) Discharges into sea
2. Economic impacts	<ol style="list-style-type: none"> a) To shipping (waste management costs) b) To port (operational costs, investment costs, competitiveness) c) To waste operators (business for PRF operators and SMEs)
3. Administrative burden	<ol style="list-style-type: none"> a) To port b) Member State administration c) To shipping
4. Social impacts	<p>Labour/employment conditions/effects:</p> <ol style="list-style-type: none"> a) In the port b) On board of ships, ship owners c) On SMEs (PRF operators, fishing vessels, etc.)

Altogether 14 responses were received from the following Member States and stakeholders:

EUROSHORE, Port of Bremen, Port of Rotterdam, the Netherlands, Sweden, Environmental Protection Engineering SA - EPE Greece, Poland, Port of Amsterdam, CLIA, Finland, Port of Shannon Foynes, France, Port of Tallinn and ECSA.

The input will be forwarded to the IA study Contractor (Ecorys/COWI) and COM to be evaluated in the context of the revision of PRF Directive.

The compilation of responses is annexed to this document.

1. INCENTIVE BASED INDIRECT FEE SYSTEM

The first three Recommendations aim to clarify the wording of Article 8.2(a) 'All ships calling at a port of a Member State shall contribute significantly to the port reception facilities costs irrespective of actual use of the facilities' with the objective to create more transparency in the cost recovery systems and develop common interpretation in order to promote a more harmonized approach in EU ports.

The significant contribution to the costs of PRF should be covered by a fee paid by the port users irrespective of actual use of the facilities, thereby creating an incentive to deliver waste in PRF (indirect fee).

In order to be able to address the significant contribution issue, the CG first identified different PRF costs elements, and then defined the significant contribution and calculation method for it.

RECOMMENDATION 1:

- definitions for direct operational and indirect administrative PRF costs
- indicative, non-exhaustive list of direct and indirect cost elements in CRS

RECOMMENDATION 2:

- Contribution to the costs of PRF considered to be "significant" when the indirect fee covers both the indirect administrative costs and all or at least 30% of the direct operational costs (calculated on an average ships calls approach on a yearly basis, fee differentiation with respect to category, type and/or size of ship and per waste type)

RECOMMENDATION 3:

- harmonised principle with an indirect fee of a min. 30% of the direct operational costs (DOC)
- possibility to vary the percentage per waste types (SGW)
- Calculating the percentage level of Significant contribution =

$$\frac{\text{total yearly DOC that is covered by incentive based indirect fees}}{\text{total yearly DOC for all waste delivered in the port}} \times 100$$

In general, these recommendations would require EU ports to re-assess how their cost recovery systems are structured and operated and how indirect fees are calculated.

By defining the term "significant contribution" ports would have a common baseline from which their indirect fee should be calculated. Ports therefore would move onto a more level playing field since the cost recovery systems would become more transparent, also affecting the competition element based on fees under the PRF Directive.

Therefore, one of the objectives of the PRF Directive, namely to incorporate the polluter pays principle will be met by following this recommendation, while at the same time a better level playing field is developed, as all ports will address the same costs, presenting a more harmonised system to the industry. This in turn is likely to result in ships landing waste more systematically, in every port call as they perceive the fee system to be fair and equitable between ports in Europe.

If this recommendation is not followed the existing miss-match of fees/charges under different CRS in EU ports will remain; there will be a lack of transparency and the existing problems with the different cost recovery systems will continue.

SUMMARY:

a) ENVIRONMENTAL IMPACTS

Waste volumes delivered to PRF

remain same – 10
increase - 5

Waste volumes delivered to port reception facilities (garbage, oily waste, sewage) was considered to remain the same by majority of respondents (10). Harmonizing the system of calculation of indirect fee (by implementing a “DOC + administrative costs”) in all the MS ports may impact the structure of the CRS and introduce more transparency for port users, but does not mean that the amount of waste delivered will increase.

However the split between ports would change. When service and costs will be more transparent and harmonized, a more equal distribution of the waste streams over all the ports is expected.

Some respondents (5) felt that increased transparency and harmonization may lead to more waste deliveries. It was considered that the transparent information on PRF cost for a ship is essential in order to affect user behavior. Furthermore the level of incentive (percentage figure ranging from 30-100%) may also affect the waste volumes delivered to PRF.

It was also mentioned that improved information and monitoring system for SGW could lead to increase in waste amounts delivered to PRF.

Discharges into the sea will

remain same – 8
decrease – 8
increase – 1

Regarding the discharges into the sea (illegal, legal) half of the CG was of the opinion that the situation would stay the same. It was mentioned by one respondent that the PRF directive requires already a cost recovery system comprising a significant non-special-fee component which is an effective incentive for ships to use PRF.

Illegal discharge of waste to sea occurs but the quantity of such criminal actions was considered low by some respondents. Increasing transparency in the calculation of the “significant contribution” may not impact the behavior of non environmental friendly crews or PA’.

However, the others felt that the transparency of the fee system and publically available tariffs is one of

the main influences to effect behavior and that minor decrease is possible. If all EU ports would adopt an indirect charging regime there is no incentive but to use these facilities.

Harmonization may also lead to more reasonable prices/fees which may also lead to fewer discharges at sea. More frequent inspections and stricter enforcement might also help.

b) ECONOMIC IMPACTS

FOR SHIPPING waste management costs will
remain same – 10
increase slightly – 4
decrease – 3

Majority of the CG thought that waste management costs (payment of fees) will remain same (10), some (4) felt that the costs will increase slightly and some (3) that the costs will decrease.

It was thought that structuring of the fee system does not affect the actual costs of SGW handling, and should not lead to increase costs for shipping. There should be no change in total costs as the total amount of SGW delivered is expected to remain the same.

On the other hand some Port authorities would need to reconsider their CRS. This will lead to a cost re-evaluation and might introduce some “cost increase” for the shipping industry. Therefore the payment of fees may increase in those EU ports which do not yet have the indirect incentive part implemented.

However, it was also stated that the economic impact to shipping is expected either to remain the same or decrease assuming that the application of the recommendations will increase harmonization, moving onto a more level playing field so that the cost recovery systems would become more transparent and cases of unreasonable, excessive and unduly charges for disposing ship-generated wastes at PRF ashore will be avoided at EU ports.

Economic impact to the port

None – 2, Minimal – 9, Significant – 1

Economic impact to the port, including operational and investment cost and competitiveness was considered minimal by majority of CG (9), significant by one and no impact at all by two respondents.

The supply of PRF is legally required under MARPOL. The issue is how to finance the operation, how to incentivize the use of PRF and how to share the costs of providing the services among the port callers. The fee system should not imply disproportionate costs for the port. For the financing of the necessary investment, the split of direct versus indirect components is not relevant as long as the total revenue covers the costs.

Depending on the current CRS, port may need to reconsider the fee system (significant impact). This would probably lead to establishing a better “financial balance” for PA by introducing or reconsidering their indirect administrative costs.

The different role of the port or Port authority in EU ports was raised by one respondent. In some of the biggest EU ports (Administrative fee system), the port collects administrative fee to cover IT expenses and administrative work involved in the collection of fees and the refunding to PRFs. The burden is on the PRF with all the risks.

FOR Business (PRF operators and SMEs) the impact was evaluated as minimal/some by 7 respondents and no impact by 4.

If the clarification and harmonization indeed increases waste disposal there could be some possible impact on business of PRF operators depending on SGW distribution pattern between European ports and new SGW types delivered.

A more level playing field will enhance competition.

c) ADMINISTRATIVE BURDEN

Administrative burden to port/Member State administrations/ shipowners
increase – 9, remain same – 5, decrease - 2

For ports that might have to change the way they work today, in order to follow the recommendations, there might occur an additional administrative cost in the initial phase - need to restructure or adjust the cost recovery system. This requires some additional planning and implementing the new system. Also this may require a modification of the national regulations and port fees and WRHP will have to be modified consequently

The administrative burden to Member State administrations will also increase respectively (verify the costs the port uses in their calculations, when approving the modified waste handling plans).

For ship owners the application of above recommendations is expected to increase harmonisation and therefore decrease administrative burden for ship operators that are currently facing a different way of 'significant contribution' calculation in every port.

The alignment of the different systems currently in place in ports should reduce the administrative burden for ship operators.

d) SOCIAL IMPACTS

Regarding social impacts (labour conditions/effects on Employment) majority felt that there will be no impacts (7).

More transparency in the port's CRS may facilitate ship agents' work.

The social impact is related to the success (or lack of success) of a PRF.

If all went well the business will boom and more employment will be required.

If the tariff/fee structure is not so attractive, more discharges at sea will take place or activities will be realised in countries with less developed environmental standards.

2. RIGHT TO DELIVER concept included in the indirect fee

RECOMMENDATION 5:

- right to deliver in all CRS (definition in Directive)
- a new section in WRH Plan “which rights the ship has for paying the indirect fee”

When the ship pays an indirect fee, it should have a right per se to land waste without additional charges. The objective of this Recommendation is to enhance this inherent principle of incentive based fee and improve the transparency of the current cost recovery systems.

It is expected that the inclusion of the definition in the Directive will clarify the delivery right of a ship. This will improve transparency as shipping will know what waste service is included in the indirect fee. Based on the two main cost recovery systems implemented in EU ports, ships have either a right to deliver a certain amount of waste with or without limits to the port for a set fee (indirect fee differentiated based on category, type and size of a ship) (No Special Fee system) or get a defined refund if they deliver certain amount of waste to nominated PRF companies (Administrative Fee Systems).

If the Recommendation is not implemented the ship has no certainty of its rights under all of the current cost recovery systems in EU ports. Lack of transparency will remain, along with confusion in the industry.

SUMMARY:

a) ENVIRONMENTAL IMPACTS

Waste volumes delivered to PRF

remain same – 6
increase - 8

Waste volumes delivered to port reception facilities (garbage, oily waste, sewage) are expected to increase by 8 respondents and remaining same by 6 respondents.

The “right to deliver” should already be inherent in all cost recovery systems, if not, this needs clarification. Therefore it is expected, that ports, which have not implemented this “right” before, will receive more wastes in future.

However, the amount of wastes will decrease in other ports, as the total amount of waste generated by the ships remains the same.

Also the volumes delivered could be reduced, since ships will probably deliver in each port the “free” volumes. So from a perspective of PRF efficiency, recycling opportunities etc. this could create a ‘negative effect’.

If the right to deliver covers also sewage, the amount that will be delivered will increase.

Discharges into the sea will

Remain same – 7

Decrease – 10

When a certain port has not implemented this “right” so far, most probably ship operators and crews will land more waste in other ports offering this “right”. There is no evidence that such difference between ports results in illegal discharge of wastes at sea.

However, application of this recommendation can provide transparency to ship operators and easy access to landing options will minimise the need for onboard storage and remove the incentive to find ‘alternatives’ to shore landing. Besides that extended storage onboard inevitably increase the risk of accidental discharges to sea.

Regarding legal discharges into sea: these may decrease especially when the fee systems would be known up to 2 years in advance (f.ex. cruise industry), would improve the planning operation and reduce the risk of unwanted situations at sea.

b) ECONOMIC IMPACT

Economic burden to shipping - waste fees will

remain same – 8,

increase – 5 ,

decrease – 3

The right to deliver is related to the indirect fee. When a ship has ‘sufficient storage capacity’ it may choose whether to use this right or not, but the incentive to deliver is included in the indirect fee.

The “right to deliver” might affect the split of ports where waste is landed. As the total volumes are expected to remain same, the total costs will also remain unchanged as the economic burden in general. However, the right to deliver should include a realistic volume of waste which may be delivered free of charge (included in the indirect fee which needs to be paid irrespective of the delivery).

Otherwise, incentivizing ship operators to deliver minimum amounts of waste under a right to deliver would needlessly burden all parties involved. Therefore the exception in Article 7 is relevant (minor amounts, sufficient storage capacity).

If, the effect will be that a PRF needs to collect smaller volumes, then the efficiency will be impacted and the cost will rise.

Decrease - This recommendation could decrease ship operators’ cost as shipowners will know the amount of waste they are able to deliver when charged with X fee (transparency). In such a way it will be more clear what extra charges occur from extra amounts of waste.

Economic impact to the port (operational cost and investment cost, competitiveness)

- Minimal / some – 9
- None – 2
- Significant – 1

The majority felt that there will be some or minimal economic impact to the port’s operations. In general the impact depends on the current structure of fee system (whether the right is already included in the indirect fee).

One respondent felt that the implementation of a right to deliver may increase significantly PA costs when they are directly operating the waste management (e.g : if the maximum delivering amount is modified, more reception facilities may be required).
A potential that ships will deliver smaller volumes in more ports.

FOR Business (PRF operators and SMEs) the impact was evaluated as minimal/some by 7 respondents, significant by 1 and no impact by 7.

Possibly some impact on the PRF operators depending on waste types and distribution pattern between European ports. More waste is expected to be landed in ports that do not have 'right to deliver'

Costs of providing reception facilities may increase for PRF operators which had not implemented this rule in the past. Treatment costs may increase in the same way.

c) ADMINISTRATIVE BURDEN

Administrative burden to port/Member State administration/ shipowners
Remain the same – 8, increase – 5, decrease – 2

It was thought that administrative burden in general would stay the same (8 respondents). However, in those ports that need to restructure the current CRS to include right to deliver, some increase can be expected.

After an initial increase of administrative burden associated with need to evaluate the fee system, in the long run, the administrative burden will eventually decrease once the basic principles are defined and communicated to the port users / defined in the WRH Plan (which rights the ship has for paying the indirect fee).

From the PRF point of view, the more ships will deliver "free waste" volumes, the more paper work, waste receipts, etc. to be handled.

d) SOCIAL IMPACT

Labour conditions, effects on Employment: No impact (7), some impact (1).

Majority of the respondents were of the view that there will be no social impacts – no change expected. In some cases the application of this Recommendation can create extra employment

3. TRANSPARENCY OF THE COST RECOVERY SYSTEM

RECOMMENDATION 8:

- Fair and non-discriminatory
- Transparent, including the basis for calculation of the fees
- Reflecting the costs, accounting for all costs incurred for the disposal of SGW

The aim of this Recommendation in providing definitions for the terms "Fair and non-discriminatory", "Transparent" and "Reflecting the costs" (Article 8.3) is to improve the overall transparency in ports cost recovery systems since all ports would have same understanding of wording of Article 8.3. It is considered essential that all waste related fees (both the incentive based indirect fee from all ships, as well as any additional fees, if any, based on Article 8.2(b)) should be same for ships of similar type and size and be proportionate to the waste a ships produces. Furthermore, the relationship between the fees charged to ships and the actual PRF costs should be in balance in CRS.

However, lack of transparency between ports, continued lack of harmonisation in the fees charged by ports, confusion among industry, will continue if the interpretations of these terms are left open to the Member States.

a) ENVIRONMENTAL IMPACTS

Waste volumes delivered to port reception facilities (garbage, oily waste, sewage)

The amount of waste delivered

- increase - 7
- stay same - 6

In general the improved transparency of the CRSs enables ships to plan more efficiently and minor increase/increase would be the result. With more transparency of where vessels can get rid of their residues the less likely it is that they will feel compelled to look for alternatives.

The PRF directive already requires the fee system to be non-discriminatory and to reflect the actual costs incurred for the disposal of waste. In order to achieve this, the amount of the fees and the basis on which they have been calculated should be made clear for the port users. The problem is apparent lack of sufficient and appropriate implementation. Therefore, the above definitions could add more clarity and achieve harmonized implementation of this provision, but no effect on the waste volume delivered to the PRF is expected.

Discharges into the sea will remain the same (7) or decrease (7).

More transparency with respect to the calculation of the fee will not affect the extent of illegal discharges to the sea. On the other hand it is believed that there would be at least some decrease regarding legal discharges: these may also decrease as increased transparency, especially when the PRFs would be known up to 2 years in advance, would improve the planning operation and reduce the risk of unwanted situations at sea.

b) ECONOMIC IMPACT

Economic burden to shipping - waste fees will remain same - 8,
decrease – 6

Whether there would be any economic burden to shipping (payment of fees), 8 respondents felt that the situation would stay the same and 6 thought that economic impact to shipping would be decreased.

It was felt that there should be no impact as ships will in general deliver the same amount of waste. The fees will be more transparent and breakdown available to them.

However, it was mentioned that benefit from receiving transparent information from the waste services available for indirect fee facilitates the planning of waste management on board.

Overall more transparency will facilitate shipping industry in making the choice of “where to land”, as the opportunity to compare the effective prices of landing will be easier. This may reduce the administrative costs due to the ships schedule planning.

Also if the relationship between the fees charged to ships and the actual PRF costs are better balanced there is a possibility for decreasing economic burden for shipping.

Shipping industry’s view was that proper application of this Directive’s provision could decrease the fees paid by shipowners as currently ships are overly and sometimes unduly charged for the PRF facilities they are using.

Also increased transparency should lead to more competition among ports and PRF providers and therefore reduce costs.

Economic impact to the port (operational cost and investment cost, competitiveness)

- Minimal / some - 6
- None - 8

Eight respondents considered that there will be no economic impact to the port whereas six thought that there will be some or minimal impact.

It was considered that there will be no economic effect for the ports, as the amount of investment costs incurs irrespective of the transparency of calculation.

Transparency was always part of the Directive. However the breakdown will now be more defined and will take into account the time ships spend at sea between ports and the size and personnel on board.

More transparency could also facilitate the elaboration of the WRHP (discussions regarding the effective cost of providing PRF).

Regarding possible **impacts on Business for PRF operators and SMEs**, majority felt that the impacts would be minimal (6) or stay the same (2).

It was assumed that there might be some/minimal impact to PRF operators, mainly due to competition reasons. In general, there is competition between different PRF, either when several facilities offer their service or when one facility has won the call for tender due to its most efficient offer. It was emphasized by one respondent that the publication of calculation details behind such offers will not end in lower costs for the shipping industry.

c) ADMINISTRATIVE BURDEN

Administrative burden to port/Member State administration/ shipowners
Remain the same – 8 , increase – 6, decrease – 1

Eight respondents felt that administrative burden to ports and/or Member State administration would increase or slightly increase and six thought it would stay the same. For ship owners the administrative burden was considered to decrease.

The collection and evaluation of data for the calculation basis for the fees should already be common practice for ports and PRF providers.

Respectively MS enforcement authority needs to make sure that the relationship between the fees charged to ships and the actual PRF costs are in balance in CRS. This is already a requirement so no change to the present regulatory framework.

For some ports the collection and evaluation of data in order to publish the calculation basis for the fees will increase the administrative burden.

Shipping: Administrative burden for the ship's/crew side will be decreased if the extra section in WRH Plan "which rights the ship has for paying the indirect fee" is added and is accessible to the ship in advance.

However, after an initial increase of administrative burden associated with need to revise the fee system and the modification of the WRHP, in the long run, and once the basic principles are defined the administrative burden might eventually decrease.

d) SOCIAL IMPACT

Regarding social impacts (labour conditions, effects on employment) the impact was considered by six respondents as none.

No impact is expected.

4. INDIRECT FEE DIFFERENTIATION CRITERIA – A NEW ELEMENT

RECOMMENDATION 4:

- include differentiation by the type of trade a ship is engaged in

Based on the Article 8.2(a), the incentive based indirect fee may be differentiated with respect to, inter alia, the category, type and size of the ship; The objective of this Recommendation is to broaden the criteria and give more options for ports to base the indirect fee on type of trade/frequency of port visits. Short sea shipping as a type of trade is often based on long term contracts within a specific region, and usually do not qualify for exemption (Article 9)

In general, this Recommendation would enable ports to recognise vessels engaged in short sea shipping (especially those that cannot get an exemption under Article 9) when differentiating the fee for the provision of PRF. This could result in lower costs for ships if the port sets additional criteria based on the frequency of ship's port calls.

If the recommendation is not applied then the current differentiation system would prevail and these ships would not be able to benefit from a reduced fee.

a) ENVIRONMENTAL IMPACTS

The amount of waste delivered to PRF

- remain same – 13, increase – 2

Majority of the respondents (13) considered that ship-generated waste volumes delivered to port reception facilities will remain the same while two considered the deliveries to increase.

In general the waste volumes generated on board and the amounts to be delivered to PRF remain same. Application of such fee differentiation for Short Sea Ships (SSS) operating on the spot is not expected to have any significant impact on the amount of waste delivered by those vessels.

Discharges into the sea will remain the same. This was supported by 12 respondents. One felt that discharges would decrease.

Application of such fee differentiation for SSS will not have any impact on the discharges into the sea.

Regarding illegal discharges at sea: no impact expected.

Regarding legal discharges: especially sewage (MARPOL Annex IV) may decrease as reduction of costs of delivery combined with increased transparency, especially when the PRFs would be known up to 2 years in advance, would improve the planning operation and reduce the risk of unwanted situations at sea.

b) ECONOMIC IMPACTS

The waste management costs (payment of fees) would either

- increase - 11
- remain same – 5, or
- decrease - 9

Application of fee differentiation for SSS (the ones operating on the spot, ie. non-regular services - not fulfilling the criteria to get the exemption under Article 9) is expected to decrease the costs of these ship operators. These vessels, although may not operate on scheduled timeline, they do call the same ports frequently. Implementing this recommendation will benefit to short sea shipping by introducing opportunities of cost reductions.

On the other hand, there should be no impact as ships will in general deliver the same amount of waste. The charges will be more transparent and breakdown available to them. This will outline the charge per ship group and quantity allow to land without any extra charge. If the total of waste costs is distributed between ships calling at the port based on frequency, it might result in other callers paying more (in the 100 % NSF system).

Economic impact to the port incl. operational cost and investment cost, competitiveness:

- none - 5
- minimal / some - 9

No effect is expected as long as the total revenue received from all ships is the same.

The breakdown will now be more defined and will take into account the time ships spend at sea between ports and the size of ships and personnel on board. This will outline the charge per ship group and quantity allowed to land without any extra charge.

This may also allow PA to review their contracts with PRF operators regarding this specific traffic. Notwithstanding, costs of maintaining PRF services in the ports will not reduce.

Impacts on Business for PRF operators and SMEs were considered as none by one respondent, minimal or having some impact by 11 respondents and as significant by one respondent.

PRF operators may adapt their cost to short sea shipping. This may reduce their profit regarding the low quantities of waste produced. PRF operators will see their income reduced, or it should be compensated by fees collected from non-discharging ships.

No effect is expected under the provision that any revenue from short sea traffic is compensated by the fees to be born from other ships engaged in long distance trade.

c) ADMINISTRATIVE BURDEN

Administrative burden to port/Member State administration/shipowners

- increase (in port) – 11
- stay same - 1
- decrease (in shipping) – 3

In general it was thought that administrative burden for ports would increase since the CRS would need to be refined (may require a change in the calculation of port dues for the ships concerned). It would be an additional administrative task to develop a system which favours short sea traffic, which at the same time is non-discriminatory and which at the end provides the same revenue needed to finance the system.

On the other hand, the administrative burden for the ship's/crew side will be decreased for SSS. This should reduce the administrative costs for ships involved in regular routes for a certain amount of time. Total costs of delivery, as the total volume stays the same, should remain.

d) SOCIAL IMPACTS

Labour/employment conditions/effects: None – 6, some – 1.

No impact is expected from ship operators' side.

Some impact expected as it will help an important SSS/EU market.

This measure may introduce a cost reduction for short-sea shipping industry. The charge (for PA and PRF operators) of providing PRF services in ports will not change.

5. GREEN SHIP CRITERIA

RECOMMENDATION 7:

- the green ship criteria is defined to increase harmonisation between ports
- identify the possible criteria that ports can use to reward vessels providing evidence

In order to harmonise the current Green Ship Criteria used in some EU ports, the objective of this Recommendation is also to promote the concept of incentivising vessels to enhance their waste management on board. Investing in new technologies (design, equipment) as well as focusing on efficiency in operations will reduce the quantities of ship generated waste. This positive activity producing reduced quantities of ship-generated waste would need to be acknowledged in the form of price reductions in ports waste fees.

Developing a harmonised system to recognise Green Ship Criteria in the EU ports' cost recovery systems is expected to lead to an improvement and investments in waste management on board ships as significant incentive schemes are recognised and applied more broadly in EU ports.

Not including a harmonised system to recognise green ships will lead to insufficient incentives for improving waste handling on-board ships. If the status quo is retained, there will be no full benefit of implementing the green ship concept (as already referred to in in the Directive) as it is not applied widely and consistently across EU ports.

a) ENVIRONMENTAL IMPACT

Waste volumes delivered to port reception facilities (garbage, oily waste, sewage) was considered to increase (11 – segregated waste), remain the same (5) and decrease (general waste – 7).

Incentives for waste reduction concepts on board ships will in general decrease the waste volumes (oily waste, garbage) delivered to ports.

Better waste management on board and understanding the value of waste will increase segregated waste streams.

However, a concept to retain sewage on board and to discharge it into PRF although discharge to the sea is permitted according to MARPOL regulations will increase the amount of sewage delivered to PRF.

Discharges into the sea will remain same – 7 or decrease - 6

Ship operators and crews opting for a “green concept” are not among those criminals which carry out illegal discharge operations at sea.

We will see more waste delivered by these ships and some types of waste could be decreased due to the type of fuel used. As more storage capacity, enhanced waste management and understanding of value of waste, the discharges will decrease.

Another aspect however is, when legal discharge of sewage is avoided by collecting or treating sewage on board on a voluntary basis

b) ECONOMIC IMPACT

Waste management costs for shipping will decrease (10), remain the same (2) or increase (4).

Application of Green Ship criteria is expected to decrease the costs of greener ships as they are rewarded for producing reduced quantities of ship-generated waste.

Since less waste is to be delivered to PRF and the segregated waste streams have a higher economic value it is expected that the costs for shipping will decrease.

The goal of this recommendation should be a reduction of costs for the ships. If not implemented correctly, there would be an increased risk of illegal discharges and decreased volumes delivered ashore.

It is assumed that the cost of segregated waste handling is less than mixed waste, and the waste fee should reflect this.

However, one respondent raised a concern: 'It is not so easy for the port to reduce fees in their cost-recovery-system based on that. Most indirect costs will remain, only direct costs might decrease slightly, but then it has to be considered that the handling of garbage is not so expensive in most countries. And also for the other waste types the indirect costs will remain independently of the volumes'.

It was also mentioned that the more complex the waste handling, the higher the cost. Whereas the operational costs decrease, investment costs will increase in case of sewage and possibly Annex VI waste.

Ships that are equipped with exhaust gas cleaning systems are creating more waste. On top of sludge, they produce a kind of waste water by using scrubbers. This type of waste should be delivered and creates extra costs for the waste collector'.

Impact to ports operational and investment costs:

- some/minimal (8),
- none (1) and
- significant (4)

Majority of the respondents felt that there would be minimal/some economic impact to the port.

Regarding garbage, ports need to collaborate with the local environmental/waste authorities and waste operators to organize segregated waste reception services.

However regarding sewage deliveries to PRF, the costs generated by these ships will increase. Reduction of fees for ships generating increased expenses will create a significant challenge.

Economic impact to waste operators (business for PRF operators and SMEs)

Minimal/some – 5

none – 2

significant – 7

The economic impact was considered significant by 7 respondents due to the increase of segregated waste streams (less waste delivered, but economic chances for segregated waste streams)

New opportunities for PRF operators who want to invest in innovative waste technologies (circular economy, waste as a resource, waste has a value). However, the increased opportunities may not materialise in the smallest/more remote ports where waste volumes may not be sufficient to support segregated waste reception service in a profitable way.

When ships produce lower volumes of solid waste, the variable disposal expenses are reduced as well, however the fixed costs to maintain and operate the system will be the same. Increased disposal of sewage will require additional investments and will increase the variable costs.

c) ADMINISTRATIVE BURDEN

Administrative burden to port/Member State administration/shipowners

- increase – 7
- stay same - 2

Administrative burden for ports was considered to increase by 7 respondents whereas for shipping the impact would remain the same (2).

For those ports where there is no incentive for 'Green Ships' there is increase in administrative burden. Increase is due to the differentiations/modifications of the CRS, inspections, changes to the WRH Plan.

This recommendation is not expected to have any major impact to the administrative burden for ships.

d) SOCIAL IMPACTS

Four respondents considered that there would be some impact on labour conditions and effect on employment whereas no impact was deemed by 4.

A variation of the waste volumes (less solid waste, more segregated waste, less oily waste, more sewage) may affect employment, as the number of employees required to offer the service might change.

EU Green shipbuilding projects

6. AUDITABLE SERVICE LEVELS – Recommendation

RECOMMENDATION 6:

- to provide auditable service levels in the WRH Plan

The provision of auditable service levels is an inherent aspect of what should be in a Waste Reception and Handling (WRH) Plan. EMSA Technical Recommendation already incorporates this but it is considered necessary to evaluate whether legally more binding Guidance or inclusion of this principle in the Directive would be needed.

The aim is to provide certainty that the port would provide a quality PRF service to the shipping industry. Provision of PRF by the ports is likely to improve if the link between the

Port authority/administration (responsible for WRH Plan) and the PRF providers will be tested and monitored for efficiency and the provision of quality of PRF will be under continued scrutiny.

a) ENVIRONMENTAL IMPACTS

Waste volumes delivered to port reception facilities (garbage, oily waste, sewage) will

- remain the same (7) or
- increase (4)

It was felt by four respondents that if better services and incentives are provided as availability, adequacy and quality of PRF will be checked regularly, waste deliveries would increase.

However the elements to be covered by a WRH were thought to be already clear enough. There is no evidence, that auditable service levels might increase the amount of waste discharged in a specific port.

Complaints about inadequate PRF's (complaints are very rare) could be tackled easier.

Discharges into sea were evaluated to remain the same (7) or have a minor decrease (4).

It was thought that the volume of wastes discharged illegally at sea is not influenced by any audit of WRH plans and therefore illegal discharges at sea are not expected to change. On the other hand some felt that minor decrease could happen if better services and incentives are provided.

b) ECONOMIC IMPACTS

Waste management fees for shipping will

- remain same (6)
- increase (3)
- decrease (2)

Waste management fees will remain same, this is the viewpoint of 6 respondents, but 3 felt that they will increase whereas 2 thought the fees would decrease.

No economic impact to shipowners is expected from the application of this recommendation. As the shipping industry does not develop, approve or audit WRH plans, there is no direct impact.

However, all expenses for additional audits will increase the costs of the whole system which have to be borne by the users, i.e. by the shipping industry. Updating the WRHP according to the shipping industry expectations may increase the quality of service.

The costs of implementing the auditable service may be reported on the service cost.

The economic impact was considered to decrease by one respondent: 'The reason for this recommendation is the apparent lack of proper implementation by EU member states at the moment of the current EU Directive already in place. Any increase in administrative costs should therefore not be borne by the ship operators as they are not responsible for checking compliance by ports and Member States. Better service levels should decrease costs for the operators'.

Economic impact to the port, incl. operational cost and investment cost, competitiveness
have minimal/some impact (7), significant (2) and no impact (2)

The persons who will audit WHR plans will require remuneration for their work. This mandatory WRHP audit services will create a new charge for PA and increase the indirect costs of the fee system.

Impacts on Business for PRF operators and SMEs

- none - 4
- minimal/some - 3
- significant - 3

None - The impact is mainly for the port that has to get the plan approved and, according to the recommendation, audited in addition. The PRFs are not directly affected.

Minimal - PRF operators may increase the quality of their service regarding the advices of the auditor.

c) ADMINISTRATIVE BURDEN

Administrative burden to port/Member State administration /shipowners

- increase - 9
- remain same - 3
- decrease

This recommendation is not expected to have any major impact to the administrative burden for ships but for ports it is expected to increase administrative burden.

More administrative burden for port authorities because of an external audit. Presently approval and continuous re-approval of WRH plans is considered sufficient.

The recommendation may lead to implement a new mandatory and expensive service for PA. In some smaller ports, such auditable services may not be very useful due to the few changes in the port operations.

d) SOCIAL IMPACTS

Labour/employment conditions/effects:

- a) In the port
 - b) On board of ships, ship owners
- No impact (3)
 - Increase for the better (1)
 - Additional auditors might be needed (3)