

# **Evaluation of reception facilities and disposal conditions of solid bulk cargo residues**

## **Executive Summary and Excerpts of the Final Report<sup>1</sup>:**

### **Challenges and proposed actions**

Aktenzeichen 0800Z12-1114/002/1135

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SKA21-046B04-V01

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<sup>1</sup> A complete version of the report is available in German at  
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This report was developed by PIA - Development and Assessment Institute in Waste Water Technology at RWTH Aachen University in collaboration with Leuphana University of Lüneburg on behalf of the Federal Maritime and Hydrographic Agency of Germany (BSH) and the German Federal Ministry for Digital and Transport (BMDV).

For bibliographic purposes this document should be cited as:

Dorgeloh et al. (2023) Evaluation of reception facilities and disposal conditions of solid bulk cargo residues.  
PIA - Development and Assessment Institute in Waste Water Technology at RWTH Aachen University.

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Special thanks to the participants in the project advisory group and the associated partners for their valuable input and guidance.

## Executive Summary

The project "Evaluation of reception facilities and disposal conditions of solid bulk cargo residues" was carried out in the light of the German programme of measures for the implementation of the Marine Strategic Framework Directive (MSFD) and addresses the new measure UZ2-07 "Towards a reduction of discharges of solid bulk cargo residues into the sea".

The handling of cargo residues of solid bulk cargoes is primarily regulated in MARPOL Annex V, at the level of international law. Directive (EU) 2019/883 on port reception facilities for the delivery of waste from ships (PRF Directive) serves to implement relevant regulations of MARPOL for ports in EU law. It imposes requirements on EU ports to provide adequate port reception facilities for the disposal of ship-generated waste. According to the PRF Directive, all waste on board (including cargo residues) must be disposed of in a port reception facility before leaving a port. However, the PRF Directive does not regulate the disposal of ship-generated waste (including cargo residues) at sea this is regulated by MARPOL and national law, and a discharge of ship-generated waste into the sea is permitted under certain conditions. From this point of view, the situation of land-based disposal of cargo residues of solid bulk cargoes was examined and obstacles to land-based disposal were evaluated.

For the purpose of the project, as a first step, existing data on the disposal situation of cargo residues of solid bulk cargo in German seaports was evaluated. In addition, an exchange took place with relevant stakeholders, such as port operators, ship owners, handling companies, disposal companies and representatives of the authorities, in order to evaluate how the topic of cargo residues is presented and addressed from these different perspectives.

Although the handling of ship-generated waste and cargo residues appears to be comprehensively regulated at international, EU and national level, consultation with the parties involved has shown that there are deficits in the legal regulations and implementation concerning the handling of cargo residues in practice. This already starts with the fact that there is no uniform definition of cargo residues and it is not clear at what point during the unloading of the ship one speaks of waste to be disposed of in accordance with the PRF Directive. Furthermore, the requirements for the delivery and disposal of ship-generated waste provided for in the PRF Directive, cannot be applied satisfactorily to cargo residues. For example, the prior notification of disposal provided for in the PRF Directive via the reporting tool NSW for cargo residues is impracticable for several reasons and therefore hardly ever takes place in practice. In addition, there are different responsibilities for disposal in the ports and federal states. Overall, the information available for the planning of cargo residue discharges, as well as on actual quantities of cargo residues declared and disposed of and the documentation of disposals and discharges is insufficient.

The project identified 13 issues in dealing with cargo residues. For each issue identified, specific proposals for measures are made at the legal, organizational and technical levels. Some of the proposed actions can be implemented purely organizationally, without adapting national or international legal acts, while others require this step in order to be fully effective.

It has become clear that there is not one big challenge with one solution. Instead, many smaller and larger levers need to be used to address the issue of cargo residues in order to improve the situation for all parties involved in ports where bulk cargo is handled and thus reduce the input of cargo residues into the marine environment.

## Challenges and Proposed Actions

Thirteen challenges were identified during the project. These are outlined in the sections below, along with proposed actions. The order in which the challenges are listed is not intended to reflect any rating or prioritization.

Each challenge is described in a matrix and one (or more) proposed actions are assigned to it. For each associated action it is stated whether it represents a solution at the technical, organisational or legal level, who should implement the action and which legislation is affected by the implementation.

An overview of the challenges (C) and the associated proposed actions is shown below:

- **C1: Insufficient accessibility and availability of information on the use of Port Reception Facilities (PRF)**

Proposed actions:

- National coordination of the data entered in the GISIS database
- Adaptation of GISIS regarding cargo residues
- National guidance on port waste management plans (PWMP) according to the PRF Directive

- **C2: No statistical recording / documentation of quantities of cargo residues**

Proposed actions:

- Evaluation of reported quantities in the National Single Window (NSW)
- Requirement on data collection of landed / disposed quantities of cargo residues

- **C3: Lack of clear distinction between cargo residues being product or waste**

Proposed actions:

- Clear classification of product residues as product or waste taking into consideration the cleanliness of cargo holds

- **C4: No distinct waste code**

Proposed actions:

- Introduction of a distinct waste code
- Guidance on data collection of landed /disposed quantities of cargo residues

- **C5: Lack of definition on cleanliness of cargo holds after unloading**

Proposed actions:

- Definition on cleanliness of cargo holds and unloading condition

- **C6: Exemption of cargo residues from the cost recovery system**

Proposed actions:

- Increasing the attractiveness of onshore disposal by inclusion in the cost recovery system

### **C7: NSW reporting data on disposal of cargo residues inconclusive**

Proposed actions:

- Adaptation NSW - reporting data
- Adaptation NSW - Declare disposals via the handling companies via NSW
- Adaptation NSW - documentation of disposal quantities of the cargo handling companies
- **C8: Insufficient options for entries in Garbage Record Book (GRB), Part 2**  
Proposed actions:
  - Provide guidance on entries in the GRB, Part 2 and insert an additional column for wash water
- **C9: National implementation of PRF Directive partly differs in German federal states**  
Proposed actions:
  - Unification of the implementation laws for the PRF Directive at the state level
  - National guidance on port waste management plans (PWMP) according to the PRF Directive
- **C10: Non-availability of PRF (volumes, disposal times, waste originating from other ports, costs)**  
Proposed actions:
  - Exchange between relevant stakeholders to coordinate joint disposal solutions
  - Definition of cleanliness of cargo holds and unloading condition
- **C11: No official confirmation in case of PRF unavailability**  
Proposed actions:
  - Official confirmation as evidence in case of unavailability of PRFs
- **C12: No local disposal option (for wash water)**  
Proposed actions:
  - Assessment of the environmental acceptability of the disposal option
- **C13: Limited possibilities for control by authorities**  
Proposed actions:
  - National coordination of the data entered in the GISIS database
  - Adaptation of GISIS regarding cargo residues
  - National recommendation for action on port waste management plans (PWMP) according to PRF Directive
  - Clear classification of product residues as product or waste
  - Adaptation NSW - documentation of disposal quantities of the cargo handling companies
  - Specify and clarify entries in the GRB, Part 2
  - Official confirmation as evidence in case of unavailability of PRFs

## Challenge 1 - Insufficient accessibility and availability of information on Port Reception Facilities (PRF)

Description of the challenge	<p>For the disposal of cargo residues and wash water containing cargo residues, it is necessary that the different relevant stakeholders receive sufficient information for their respective purposes. Relevant stakeholders are shipowners, shipbrokers and agents, port operators, disposal companies and authorities (water police, state and federal authorities).</p> <p>Shipowners and shipbrokers require up-to-date, reliable and practical information on acceptance possibilities and conditions as well as contacts for the disposal of cargo residues in ports. For this purpose, the IMO provides a public information platform in the form of the <b>GISIS database</b>, the "Global Integrated Shipping Information System". Information on the delivery of ship-generated waste, including cargo residues, can be entered there in the Port Reception Facilities (PRF) module. All German seaports are listed in the GISIS database. However, the data fields on cargo residues available in the database largely either contain no information or the information is not suitable for practical use, so that a separate enquiry about the basic availability of PRFs for cargo residues must be submitted to the port via the ship's agent for each individual disposal case. It is therefore currently not possible for shipowners or ship crews to plan disposal based on the data stored in the GISIS database.</p> <p>(see evaluation of the GISIS database (Annex 7.2.3))</p> <p>Port operators are required according to Article 5 of the PRF Directive to assess the need to provide a PRF, considering the needs of the ships normally calling at the port in question, and to set out the type and capacity of the PRF in a <b>port waste management plan (PWMP)</b> and make it available to the public. During the project, a total of 14 PWMPs were evaluated. In discussions with representatives of port operators, it was confirmed that no information on quantities of cargo residues is available to them. Such information does not exist as an overview of quantities actually disposed of or notified, so that the planning of PRFs tends to be based on assumptions and each notification is considered on a case-by-case basis.</p> <p>(see evaluation of the port waste management plans (Annex 7.2.4))</p> <p>In the module "port details", the GISIS database offers the possibility to link relevant information such as contacts of the port operator, the port's website and the PWMP. However, this possibility is currently only rarely used.</p>
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(see evaluation of the GISIS database (Annex 7.2.3))

The evaluation of the considered PWMPs has shown that the requirements of the PRF Directive regarding the contents of the PWMPs are implemented very unevenly. While in some plans the requirements of the PRF Directive are fulfilled in detail and the plans are kept very up-to-date, in many other plans even basic information is missing. Although the contents are specified by the PRF Directive, the plans are not comparable due to the different level of information. The actuality of the plans also varies to a great extent.

The PWMPs are subject to official approval. Depending on the federal state, different authorities are in charge of this. In Lower Saxony, for example, this is the Trade Supervisory Office. Both in the advisory group and in further discussions, it was reported that the authorities often lack the background information needed to review the content of the plans and that there is no "checklist" or detailed recommendations for action for the approval of the plans. Thus, there is no nationally uniform examination of the plans. Instead, the review depends strongly on the cooperation of the port operators with the respective competent approval authorities.

(see evaluation of the port waste management plans (Annex 7.2.4)).

<b><u>Proposed Action 1 (C1)</u></b>	<b>National coordination of the data entered in the GISIS database</b>
Objective and detailed description of the action	<p>The information published in the GISIS database needs to be provided by the competent authorities of the IMO Member States. The competent authority in Germany is the Federal Ministry for Digital and Transport (BMDV). Port Operators cannot enter or update their data in the GISIS database themselves, but report them to the BMDV for entry.</p> <p>One measure to make the already existing GISIS database more usable in practice is therefore to optimize the data quality and completeness of the reported data through national coordination on the part of the BMDV in cooperation with the federal states. For this purpose, uniform specifications of the contents to be submitted could be developed according to the already existing data fields of the GISIS database and the participating federal states and port operators could be requested to provide the corresponding data.</p> <p>The relevant stakeholders should be informed about this and invited to use the tool.</p> <p>From a legal point of view, this measure would be easy to implement, since it would not necessarily require the adaptation of laws.</p>
Level of implementation	organizational
Implementation of the action through	BMDV and federal states
Affected legislation	Only enforcement and coordination, no amendment of laws necessary
Further remarks	-



<b><u>Proposed Action 2 (C1)</u></b>	<b>Adaptation of GISIS regarding cargo residues</b>
Objective and detailed description of the action	The requirement of the PRF guideline to make information available and accessible to the public could also be implemented in such way, that the data fields available in the GISIS database are aligned with the information requirements for PWMPs.
Level of implementation	organizational
Implementation of the action through	Administrator of the GISIS database (IMO Secretariat)
Affected legislation	Marine Environment Protection Committee (MEPC) decision to mandate the IMO Secretariat to modify the relevant functions of the GISIS database (current specifications: IMO, Global Integrated Shipping Information System (GISIS) – Manual for Administration on the Use of Reporting Facilities, Circular Letter No. 2639, 8 July 2005, see <a href="https://wwwcdn.imo.org/localresources/en/OurWork/Environment/Documents/Circular%20letter%202683.pdf">https://wwwcdn.imo.org/localresources/en/OurWork/Environment/Documents/Circular%20letter%202683.pdf</a> )
Further remarks	-

<b><u>Proposed Action 3 (C1)</u></b>	<b>National recommendation for action on port waste management plans (PWMP) according to PRF-Directive</b>
Objective and detailed description of the action	As a further action, the development of a national recommendation for action with requirements for PWMPs is recommended. The recommendation can specify the basic requirements of the PRF guideline for PWMPs for those who are creating the plans. By this, the quality of the PWMPs can be improved and the approving authorities can additionally be supported with a corresponding checklist for the required content of the plans. This recommendation for action could also, in connection with the measure "National coordination of GISIS data", already call for relevant and uniform content for later submission to the GISIS database.
Level of implementation	legal
Implementation of the action through	BMDV and federal states
Affected legislation	National guideline for action, no adaptation of laws required
Further remarks	-

## Challenge 2 - No statistical recording / documentation of quantities of cargo residues

Description of the challenge	<p>There is no statistical recording of the quantities of cargo residues declared, landed or disposed of. However, information on the actual quantity of cargo residues is of great interest to port operators, in order to assess, within the framework of their PWMPs, the extent to which a PRF should be provided and how its capacities should be designed. Therefore, there is also no adequate data basis for assessing the adequacy of PRFs. No data on quantities of cargo residues and their utilization behavior are available. The lack of documentation of quantities has several reasons and contributes to several challenges in this report (see challenges C4, C7, C13).</p> <p>One reason is that in Germany, depending on the relevant federal state law, cargo residues are either handed over to the PRF (e.g. in Schleswig-Holstein) or disposed of directly via the cargo handling company (e.g. in Lower Saxony, where the cargo residue handling company acts as the PRF). Both options are permitted under the PRF Directive, which defines the term PRF very broadly as "any fixed, floating or mobile device capable of providing the service of collecting waste from ships". Most commonly, ports use disposal companies as PRF for cargo residues. Handling companies are not considered PRFs because their primary purpose is to receive cargo, not to dispose of cargo residues. In case of disposal to the PRF, the disposal is pre-notified through the National Single Window (NSW). After the disposal, the quantities disposed of are reported back via the NSW. In the case of disposal via the handling company, this feedback to the NSW does not take place, since in this case there was also no pre-notification via the NSW. The quantities of disposed cargo residues reported via the NSW could be used for an evaluation. Currently, however, the law does not foresee an evaluation, since the NSW is a mere reporting tool.</p> <p>Cargo residues, which are handed over via the cargo handling companies, are then collected by their shore-based disposal companies under various collective waste codes. There is also no documentation of these quantities on board or with the shipping companies. Since there is no specific waste code for cargo residues at present, the quantities cannot be clearly identified in the documentation of the disposal companies either (see challenge C4).</p>
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	Another reason for the lack of uniform data on quantities is the lack of a clear distinction between product and waste (see challenge C3). The respective port operators also do not record the quantities of cargo residues disposed of within their port.
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<b>Proposed Action 1 (C2)</b>	<b>Evaluation of reported quantities in the National Single Window (NSW)</b>
Objective and detailed description of the action	<p>Within the NSW, the cargo residues declared and subsequently landed via the PRF are recorded in terms of quantity and fed into the European SafeSeaNet. Currently, the NSW is a mere reporting tool and is not legally intended for evaluation, so that an evaluation of the quantities reported via this reporting channel currently cannot be carried out. This information is therefore available in the system and could be used for an evaluation in order to obtain an overview of which quantities are disposed of via the PRF in the ports.</p> <p>For a central evaluation at the national level, an explicit extension of the authorization for data processing in Section 5 of the Maritime Reporting Portal Act would probably be advisable. The Havariekommando as the German authority responsible for the NSW could then adapt the NSW in such a way that the information available in the system can be consolidated and evaluated.</p>
Level of implementation	organizational, regulatory
Implementation of the action through	Havariekommando, BMDV (subordinate authority)
Affected legislation	Adaptation of § 5 Maritime Reporting Portal Act (Federal Law) (German: § 5 Seeschiffahrt-Meldeportal-Gesetz (Bundesgesetz))
Further remarks	-

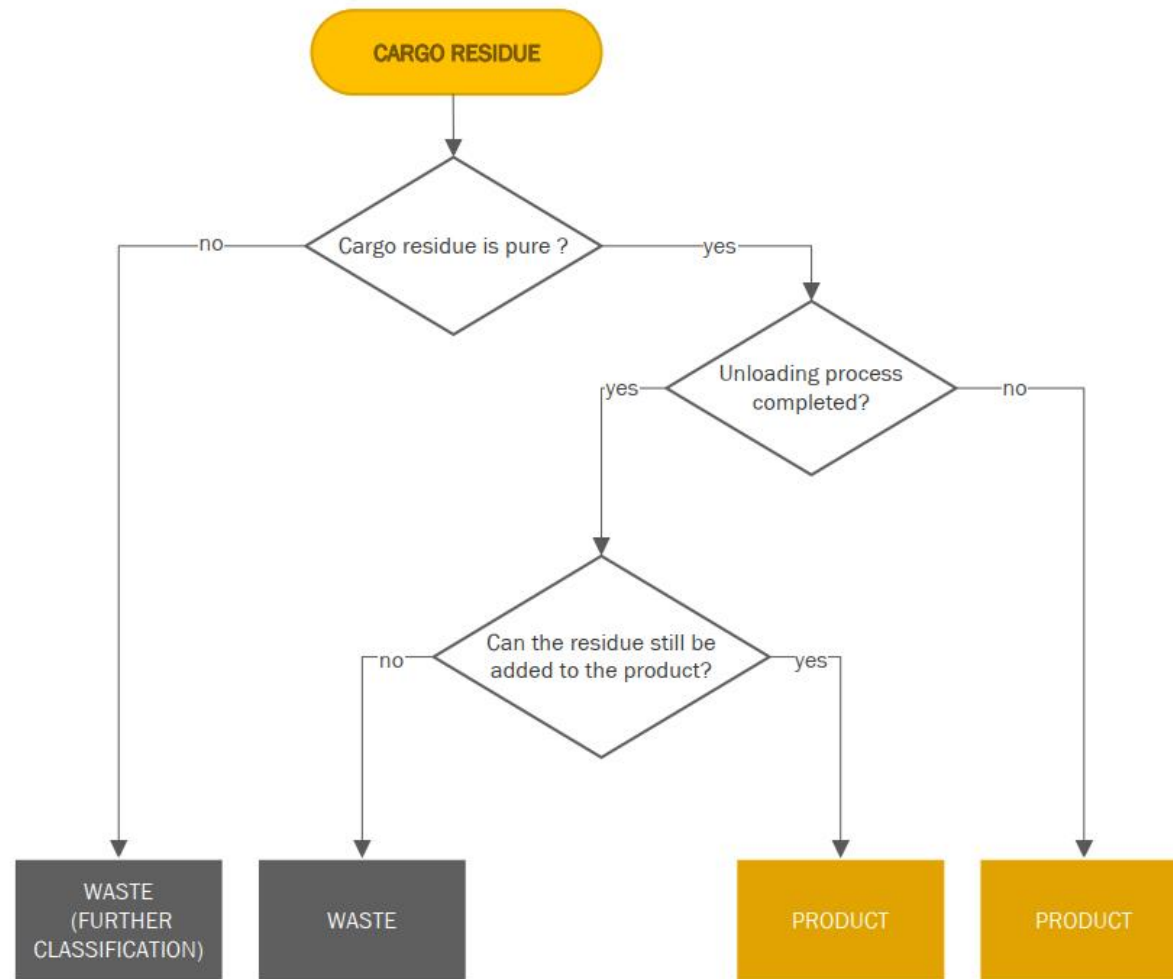
<b><u>Proposed Action 2 (C2)</u></b>	<b>Requirements on data collection of landed / disposed quantities of cargo residues</b>
Objective and detailed description of the action	<p>As described in the challenge, there is no recording of the quantities of cargo residues that are discharged directly through the cargo handling companies. However, if information on the total quantities of cargo residues should be obtained, these quantities should be included.</p> <p>As a measure, it would be possible to develop national requirements for the collection and recording of these quantities and to collect and analyze these data at a national level.</p> <p>For example - in order to use this existing system - reporting via the NSW would be feasible if, in addition to delivery to the PRF, the possibility of delivery to the cargo handling company could also be declared and the corresponding quantities would be recorded in the system (see challenge 7). In this way, when evaluating the total reported quantities, it would also be possible to see the percentage of cargo residues that is disposed of via the PRF and the percentage that is disposed of via the cargo handling companies.</p> <p>In this context, Challenge 3 "Lack of clear distinction of cargo residues as product or waste" would have to be considered as well.</p>
Level of implementation	organizational
Implementation of the action through	BMDV/Federal States
Affected legislation	Dependent on choice of implementation; mandatory reporting would be required in relevant state laws
Further remarks	-

### Challenge 3 - Lack of clear distinction between cargo residues being product or waste

Description of the challenge	<p>The former PRF Directive 2000/59/EC did not include cargo residues under the term "ship-generated waste" in Art. 2(c). Under the current Directive (EU) 2019/883, cargo residues are included in the term "ship-generated waste" according to Art. 2 (3). According to recital (34) of the directive, cargo residues remain the property of the cargo owner even after the cargo has been unloaded at the transshipment terminal and "(...) may have an economic value". The cargo owner then decides whether to classify that residue as product or waste.</p> <p>There is currently no clear distinction as to when product residues are still product and when they are cargo residues and thus waste to be handed over to a PRF within the terms of the directive. As a result, there is no uniform way of dealing with cargo residues, and thus the people involved literally do not talk about "the same thing". Discussions with representatives of the parties involved have shown that for the practical handling of cargo residues the definition within the PRF-Directive is not sufficient. The question as to when a cargo residue is considered to exist within the meaning of the directive was answered in very different ways. This shows that in practice it is unclear when exactly cargo residues become waste.</p> <p>At the same time, there is no uniform point in time during the unloading of the ship at which cargo residues are no longer a valuable product according to the perception of the market, but are classified as waste based on quality or quantity.</p> <p>See also challenge 5 "Lack of definition of cleanliness of holds" in the context of this challenge.</p>
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<b><u>Proposed Action 1 (C3)</u></b>	<b>Clear classification of product residues as product or waste taking into consideration the cleanliness of cargo holds</b>
<p>Objective and detailed description of the action</p>	<p>Criteria for an unambiguous classification of product residues as product or waste are proposed. For this classification, the stage of the unloading process should also be considered.</p> <p>Based on a cargo residue, a distinction can be made as to whether it is pure or not. If it is not pure and can therefore no longer be added to the cargo, it would clearly be classified as waste. If the product residue is pure and it is possible to add it to the cargo that has been unloaded, i.e. the unloading process in the wider sense has not yet been completed, it would be classified as a product. If, however, the unloading process has already been completed to such an extent that the product residue can no longer be added to the cargo, e.g. because the hatches have been closed, the ship has already sailed or it is no longer possible to add the product ashore for other reasons, this product residue would then have to be classified as cargo residue and thus as waste and handed over to a PRF. The share that was categorized as product would be added to product onshore.</p>

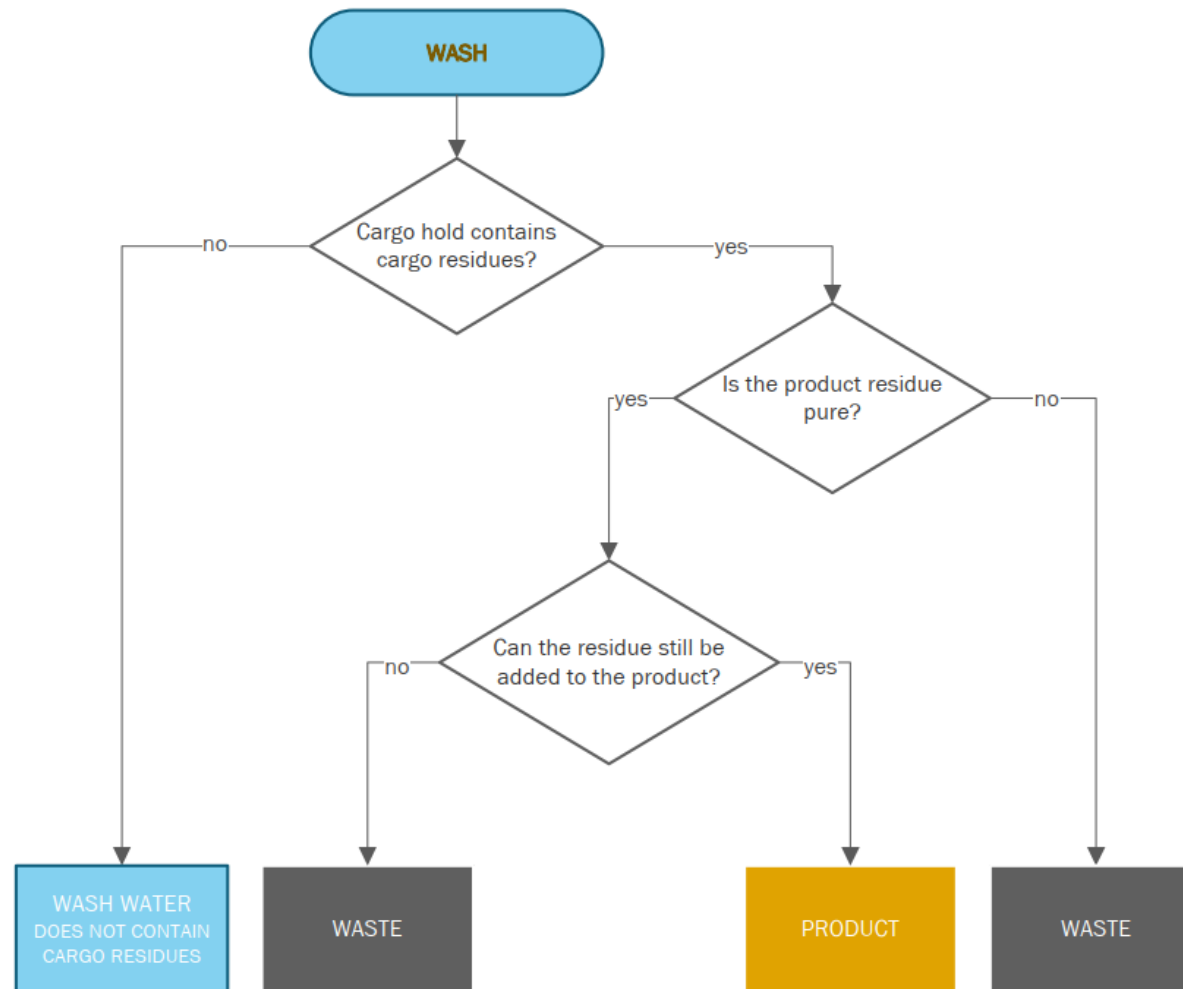
The following figure shows this decision path graphically:





A different scenario occurs when cargo holds are washed after unloading. For product residues that are mixed with washing water, equivalent criteria can also be used for classification. A distinction should be made both as to whether the product residue contained in the hold is pure or not and as to the degree of cleanliness of the hold prior to washing. Such a distinction already exists for cargo residues on deck in Art. 2 (5) of Directive (EU) 2019/883. There are also agreements on the condition in which the hold must be before new cargo is taken on in the contracts of affreightment. However, such agreements are not made with environmental considerations in mind. It would therefore be possible to define how a cargo hold is to be cleaned and when it can be considered "clean" within the meaning of the PRF-Directive. Wash water that is produced before the defined cleaning state is achieved would then be clearly classified as "containing cargo residues". Depending on whether the product residues contained can still be added to the product, e.g. in the case of mineral products by spraying, this would then be classified as a product. If it cannot be added to the unloaded product for whatever reason, then it would be classified as waste and would have to be disposed of as waste.

	<p>The following figure shows this decision path graphically:</p>
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Washing water that accumulates after reaching a defined state of cleanliness would then be "free of cargo residues" and could legally be discharged into the sea even in special areas. However, this requires a further consideration that assesses the environmental compatibility of both measures and considers the type of cargo residues involved. During the project, this was discussed with the experts in the **advisory group** as well as with other partners involved, and there was consensus that the onshore disposal of large quantities of wash water shouldn't be examined for its environmental compatibility without a differentiated consideration of the ingredients it contains.

In summary, it is therefore proposed to subdivide the definition of "cargo residue" as follows:

- (1) Cargo residue is pure
  - a. and can be added to the cargo (classification as product)
  - b. and can no longer be added to the cargo (classification as waste)
- (2) Cargo residue is contaminated and can no longer be added to the cargo (classification as waste)

If the cargo hold is washed, the wash water/cargo residue mixture could be differentiated as follows:

- (1) Cargo hold was "free of cargo residues" during the wash, wash water is therefore also free of cargo residues and can be discharged to sea
- (2) Cargo hold contained cargo residue during the wash and cargo residue is pure of type
  - a. and can be added to the cargo (classification as product)
  - b. and can no longer be added to the cargo (classification as waste)
- (3) Cargo hold contained cargo residue during the wash and cargo residue is contaminated and mixed with washing water and/or cleaning chemicals (classification as waste)

As cargo residues are excluded from the cost recovery system under the PRF Directive, it should be noted that clarifications and adjustments in the area of definitions of cargo residues may also have an impact at the level of the cost recovery system. (see challenge C6)

Level of implementation	legal
Implementation of the action through	EU
Affected legislation	Adaptation of the PRF Directive (definitions and criteria for the distinction of cargo residues for the classification of product and waste).
Further remarks	-

#### Challenge 4 - No distinct waste code

Description of the challenge	<p>For identification purposes, in the EU waste is identified with a six-digit waste code number according to the European Waste Catalogue (EWC), implemented in Germany in the Abfallverzeichnisverordnung (AVV). Assignment to the waste types takes place under the chapters (two-digit chapter heading) and groups (four-digit chapter heading) specified in the EWC or the AVV. The origin of the waste is decisive for the chapter allocation.</p> <p>Waste from marine transport can be found in the EWC, e.g. under group 13 04 Bilge oils. Other wastes, e.g. from the accommodation area of a ship, are covered by category 20 for municipal waste. Waste management companies submit their annual report to the competent authority every year. In this way, statistics can be kept at the end on how many wastes was disposed of under which waste code and what quantities were generated in each case.</p> <p>Cargo residues cannot be clearly assigned to a specific waste category. Thus, there is no unique waste code for such wastes. For wastes that cannot be assigned to any other category, chapter 16 "Wastes not listed elsewhere" in the EWC applies. In some cases, group 16 03 "Waste batches and unused products" is used for cargo residues. Further subdivision is then only possible into inorganic and organic wastes. However, many wastes from other areas of origin also fall under this waste key.</p> <p>The waste key is also relevant for the disposal company. A clear assignment to a waste code would mean clarification regarding the waste and its disposal path.</p>
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<b>Proposed Action 1 (C4)</b>	<b>Introduction of a distinct waste code</b>
Objective and detailed description of the action	The introduction of a unique waste code is proposed both for the clear identification of cargo residues in the waste sector and for obtaining a data basis (see challenge C2).
Level of implementation	legal
Implementation of the action through	EU
Affected legislation	European Waste Catalogue (EWC)
Further remarks	-

<b>Proposed Action 2 (C4)</b>	<b>Requirements for data collection of quantities of cargo residues landed / disposed of</b>
Objective and detailed description of the action	In addition to a unique waste code, national data collection requirements for disposed cargo residues could be developed to enable the collection and analysis of these quantities. Both the quantities disposed of via PRFs and those accepted via cargo handlers could be recorded.  (see also proposed action for C2)
Level of implementation	legal
Implementation of the action through	BMDV
Affected legislation	National data collection requirements
Further remarks	-

### Challenge 5 - Lack of definition on cleanliness of cargo holds after unloading

Description of the challenge	<p>When solid and liquid bulk cargo is transported, cargo residues are usually left behind in the storage rooms and cargo tanks during unloading. These often have to be cleaned and washed out before other bulk cargo can be properly transported. Consequently, when a ship is unloaded in port, depending on the cargo, there is a point during the discharge process when the cargo has been swept up or otherwise removed from the hold. This raises the question of whether the hold is then clean, i.e. free of cargo residues. It should be possible to answer this question without ambiguity based on specifications. At present, there is no definition of a "clean" cargo hold after cleaning.</p> <p>If a ship leaves the port after the dry cleaning of the holds and then washes its holds, the question arises as to whether this wash water contains cargo residues. On the one hand, the legal assessment of the legitimacy of discharging the wash water into the sea or in special areas depends on this, as does the question of whether the wash water must be discharged in a PRF when entering the port.</p> <p>A pre-washing obligation in the port of discharge for liquid bulk cargoes results from MARPOL Annex II. For solid bulk cargoes, on the other hand, there is no pre-washing obligation under MARPOL Annex V. There are various cleaning standards for dry bulk cargoes, but these are set by the charterers and are thus considered private contractual standards in the maritime industry. These standards are therefore generally not legally binding regulations according to which cleaning in the port of discharge is mandatory.</p>
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<b><u>Proposed Action 1 (C5)</u></b>	<b>Definition on cleanliness of cargo holds and unloading condition and cleaning methods</b>
Objective and detailed description of the action	<p>As a measure, it is proposed to define the cleanliness of cargo holds based on the state of unloading and, if necessary, defined suitable cleaning methods. An equivalent clarification already exists for inland waterway transport in the Convention on the Collection, Acceptance and Discharge of Waste in Rhine and Inland Navigation (CDNI).</p> <p>This should also be done considering a clarification on the classification of product residues as product or waste. In order to define the cleanliness of holds after unloading, suitable cleaning methods could be named depending on the cargo transported, after which the hold is to be considered clean. This should not necessarily be a classic wash, as this may involve the use and contamination of a lot of water, which would then have to be disposed of again. In addition, possible extended port berthing times by cleaning would need to be taken into consideration. Also, there are now various cleaning methods on the market, for example using robots, which can clean the walls of the holds with minimal use of water.</p>
Level of implementation	Technical, legal
Implementation of the action through	EU
Affected legislation	PRF-Directive
Further remarks	-

## Challenge 6 - Exemption of cargo residues from the cost recovery system

Description of the challenge	<p>Cargo residues are included in the waste definition of the PRF Directive, but according to recital 34 of the PRF Directive, they "remain the property of the cargo owner after the cargo has been unloaded at the terminal" and "may have an economic value". The recital continues: "For this reason, cargo residues should not be included in the cost recovery system and the application of an indirect charge." The use of the PRF is then charged directly to the shipping company in each case. In the system of the PRF Directive, the cost recovery system serves to create incentives for the delivery of ship-generated waste to PRF. This incentive does not exist for cargo residues due to the exemption from the cost recovery system. Rather, the additional costs of disposal via the PRF, the complicated planning conditions and the poor availability of the PRF for cargo residues deter potential users of the PRF from using it for their cargo residues.</p> <p>When considering costs, a distinction must be made between dry cargo residues and wash water with cargo residues.</p> <p>Dry cargo residues, which usually occur in smaller quantities (usually a few cubic metres) and solid containers (drums, big bags), only pose a problem for disposal if the composition of the waste is unknown. In that case, cost-intensive and time-consuming analyses are required for disposal. This is more of a problem for non-port cargo, i.e. cargo that is not regularly handled in the port, or for mixed waste. However, when wash water containing cargo residues is announced for delivery to the PRF, this is usually a far greater challenge. Wash water can quickly amount to several hundred cubic meters, which can often only be removed by the disposal companies with tank trucks. Suitable disposal facilities are not available in many ports close to the port. This often results in high disposal costs for the shipping company.</p> <p>However, the high costs for the shipping companies also result precisely from the exception to the cost recovery system, as each disposal via the PRF is an individual case. The costs of disposal are currently borne in full by the shipping company. In addition, most ports make use of the cargo handling companies for the acceptance of typical</p>
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	port cargo residues and name them in the PWMP as responsible for the acceptance. The actual PRF of the port is therefore only requested in those cases when the ships announce non-port material or wash water that the cargo handling companies do not accept. The disposals therefore notified via the PRF are mostly "problem cases". Some cargo handling companies interviewed reported no problems regarding the disposal of dry cargo residues that are typically handled. The disposal paths there are apparently unproblematic due to regular use and small quantities.
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<b><u>Proposed Action 1 (C6)</u></b>	<b>Increasing the attractiveness of onshore disposal by inclusion in the cost recovery system</b>
Objective and detailed description of the action	<p>Inclusion in the cost recovery system would increase the attractiveness of onshore disposal for shipping companies. Disposal facilities could be provided and the costs would be put into perspective for the individual user through the levy.</p> <p>This proposed action should be subjected to a further feasibility study differentiating between typical port and non-port cargo residues.</p>
Level of implementation	legal
Implementation of the action through	EU
Affected legislation	PRF-Directive
Further remarks	This measure should be implemented in conjunction with other proposed measures. At present, due to the lack of information on the quantities of cargo residues (see challenge C1, for example), it is not known what quantities must be expected. In addition, there is no demarcation between product and waste (see challenge C3), i.e. the point at which a PRF would be responsible for quantities classified as waste.

### Challenge 7 - NSW reporting data on disposal of cargo residues inconclusive

Description of the challenge	<p>Pre-notification for waste delivery to a PRF must be made via the NSW at least 24 hours before port call according to Art. 6 of the PRF Directive.</p> <p>In the case of cargo residues, however, it is not yet clear at this point how much cargo residue will be generated after unloading in the port. Such a pre-notification is practically only possible for cargo residues or wash water which is already on board at the time of notification resulting from an earlier discharge. This means that these wastes are mostly non-port materials.</p> <p>When a notification is made to the NSW, the "type" and "description" of the "cargo-related waste" to be disposed of must be entered. This description is then left to the declarant. In the case of wash water, however, it is not specifically demanded how much cargo residue is contained in the wash water or which cleaning chemicals are contained, if any.</p> <p>The reporting data in the NSW only apply to the PRF, but not to discharges via the cargo handling companies. This disposal therefore bypasses the reporting system, as it does not allow any information on this. Therefore, no conclusions can be drawn as to how often or how much cargo residues are handed over via the cargo handling companies.</p> <p>Hardly any cargo residues are announced via the NSW for disposal in a PRF. However, residues do of course accrue during unloading. The fact that hardly any cargo residues are registered via the NSW could give the impression that there are no cargo residues. This is however not correct. It is therefore also difficult for port operators to draw conclusions about demand in the following year from the previous year's declarations. Therefore, they often have to resort to rough estimates for their planning.</p>
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<b><u>Proposed Action 1 (C7)</u></b>	<b>Adaptation NSW - reporting data</b>
Objective and detailed description of the action	<p>As described in the challenge, the reporting time and data for cargo residues are not feasible, as it is not yet known at the time of notification whether and how many cargo residues will be generated during unloading. Since, in addition, disposal mostly takes place via the cargo handling companies, practically no reports are submitted in the NSW on the disposal of cargo residues.</p> <p>As a measure, it is therefore proposed to additionally query whether the waste is already on board or whether it only arises during the port call.</p> <p>In addition, it is suggested that the declaration data on cargo residues be made more specific. It would make sense to not only require a "description" of the waste to be discharged in the notification, but to specifically distinguish between dry waste and wash water. For this purpose, it could be asked directly how large the proportion of cargo residue in the wash water is.</p>
Level of implementation	legal
Implementation of the action through	EU
Affected legislation	PRF-Directive Annex 2
Further remarks	-

<b><u>Proposed Action 2 (C7)</u></b>	<b>Adaptation NSW - Declare disposals via the handling companies via NSW</b>
Objective and detailed description of the action	<p>As described in the challenge, when cargo residues are handed over via the cargo handling companies, there is no notification via the NSW and later no documentation of the quantities disposed of. In practice, however, these disposals do take place and the handling companies are named in most of the PWMP as the responsible parties for the acceptance of cargo residues.</p> <p>In order to make these disposals "visible", however, a possible solution would be to also declare these disposals via the NSW and to also document the quantity of the disposal carried out in the NSW.</p> <p>The advantages of this approach would be that an existing system would be used and the quantities of cargo residues disposed of would be recorded and could be evaluated.</p>
Level of implementation	organizational, legal
Implementation of the action through	EU
Affected legislation	PRF-Directive
Further remarks	<p>It would have to be evaluated in detail to what extent the reporting fields of the NSW are specified or restricted by the EU Reporting Formalities Directive 2010/65/EU for the entry into and departure of ships from a port in Germany as well as for the transit of a ship through the Kiel Canal (NOK).</p> <p>Since the data of the NSW are later fed into SafeSeaNet, it would also have to be checked here whether a national adaptation of the NSW is possible.</p>

<b><u>Proposed Action 3 (C7)</u></b>	<b>Adaptation NSW – documentation of disposal quantities of the cargo handling companies</b>
Objective and detailed description of the action	<p>As described in the challenge, the amounts of cargo residues disposed of via the cargo handling companies are not registered in the NSW system since no pre-announcement of the disposal is done via NSW.</p> <p>It is therefore proposed to think about a possible notification of these amounts into the NSW or another way to collect this information and create a possibility to assess on the amounts disposed of this way.</p>
Level of implementation	legal
Implementation of the action through	EU
Affected legislation	PRF-Directive Annex 2
Further remarks	-

## Challenge 8 - Insufficient options for entries in Garbage Record Book (GRB), Part 2

Description of the challenge	<p>MEPC.277(70) requires a garbage record book (GRB) to be kept on board, documenting the discharges of cargo residues into the sea and the shore-based disposals to a PRF. The following figure shows the information contained in the GRB. It is basically divided into the categories "J" for non-HME cargo residues and "K" for HME cargo residues. For this purpose, the position of the ship at the beginning and end of the discharge and the quantity of cargo residues discharged by category must be entered for discharges into the sea. For disposals ashore, the quantity and, as a position, the corresponding port must also be entered. It is not clear from the wording of MEPC.277(70) whether shore disposals only have to be recorded if they are made to a PRF or whether disposals to a cargo handling company also have to be recorded. Correctly, however, cargo handling companies should be functionally classified as PRFs.</p> <p>During a random check of the waste diaries as part of the questionnaire campaign, it was observed that the entries made are not always clear, as was confirmed by the enforcement authorities in the advisory group.</p> <p>The following figure shows a random sample of a GRB.</p>
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J - Cargo residues (non-HME)				K - Cargo residues (HME)		
Discharges under regulations 4 (Discharge of garbage outside special areas) and 6 (Discharge of garbage within special areas)						
Date/Time	Position of the ship (latitude / longitude) or port if discharged ashore	Category	Estimated amount discharged		Start and stop positions of the ship for discharges into the sea	Certification/ Signature
			Into sea (m <sup>3</sup> )	To recep- tion faci- ties or to another ship (m <sup>3</sup> )		
					START: 1300H- $\phi = 47^{\circ} 15.4'N$ $\lambda = 007^{\circ} 26.5'W$	
		" "	0.40 m <sup>3</sup> WHEAT		STOP: 1500H- $\phi = 46^{\circ} 55.4'N$ $\lambda = 007^{\circ} 44.4'W$	
					START: 0900H- $\phi = 25^{\circ} 33.9'N$ $\lambda = 020^{\circ} 56.5'W$	
			30.0 m <sup>3</sup> WASH WATER		STOP: 1400H- $\phi = 24^{\circ} 35.1'N$ $\lambda = 021^{\circ} 22.9'W$	

It shows that the entry for the discharge of wash water (line 4) was made without an indication of the waste categories J or K. It is therefore unclear which category of cargo residues was discharged or whether only wash water without cargo residues was discharged to sea. As reported in the advisory group, the quantities of only wash water are often entered in the GRB when cargo spaces are washed for the second time. However, the entries in the GRB are intended for the discharge and disposal of cargo residues of waste categories J and K, not for pure wash water.

In the given entry, it is unclear whether the entry is incorrect, the contained cargo residue was just not entered or if pure wash water was discharged, which normally wouldn't have to be entered in the GRB. It could not be clarified on board why a quantity of wash water was entered here without specifying the cargo residue.

However, it shows that it is not sufficiently clear from the current version of the GRB what information is to be entered.

<b><u>Proposed Action 1 (C8)</u></b>	<b>Provide guidance on entries in the GRB, Part 2 and insert an additional column for wash water</b>
Objective and detailed description of the action	As the description of the challenge shows, it is not exactly clear for the ship's crew what entries have to be made. A clarification, e.g. in the form of a "unified interpretation" with instructions for making entries, would be advisable. This would also support the water police for their inspections of ships, in which the ship equipment, approvals and documentation required by MARPOL are checked on board.
Level of implementation	legal
Implementation of the action through	IMO
Affected legislation	MARPOL, Annex V
Further remarks	-

## Challenge 9 - National implementation partly differs in German federal states

Description of the challenge	<p>The implementation of the PRF Directive in Germany is a responsibility of the Federal States (Länder). With exception of North Rhine-Westphalia, all relevant federal states have implemented the current PRF Directive. The regulations made in the state laws are mostly quite uniform, but there are considerable differences in the regulatory system, e.g. with regard to the obligation to discharge ship-generated waste and cargo residues. In detail, the state laws continue to differ in the definition of criteria for the adequacy of PRF. In particular, it is sometimes explicitly stipulated that PRF are not obliged to accept all types of ship-generated waste.</p> <p>In contrast to the PRF Directive, individual state laws continue to differentiate between cargo residues and other ship-generated waste when it comes to the obligation to unload. Individual state laws provide in additional regulations for cargo residues that these are to be accepted by the operators of the cargo handling facilities. In Hamburg, on the other hand, there is a two-step system. It first provides for unloading in cargo handling facilities, but also explicitly allows for disposal in PRFs in a second step. In almost all state laws, the terms ship-generated waste/cargo residues and PRF/cargo handling facility are used inconsistently, so that the areas of application of some regulations are not always immediately clear from the wording and systematics.</p> <p>In accordance with the PRF Directive, all state laws introduce a fixed fee or indirect charge for the disposal of ship-generated waste, which must be borne by all ships calling at a port. All state laws provide that cargo residues are not covered by the indirect charge.</p>
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<b><u>Proposed Action 1 (C9)</u></b>	<b>Unification of the implementation laws for the PRF Directive at the state level</b>
Objective and detailed description of the action	Global shipping - especially for solid bulk cargoes - is dependent on uniform and transparent regulations. This also applies to the conditions for the discharge and disposal of cargo residues. In Germany, the transfer of the competence to implement the PRF Directive to the federal states has led to a situation where the necessary uniformity in implementation is not guaranteed in all cases. In the context of future amendments to the respective transposition laws, the federal states should therefore work towards ensuring that the regulations for transposing the PRF Directive are uniform throughout Germany, insofar as there is no particular legal reason for regional differences.
Level of implementation	legal
Implementation of the action through	Federal States (Länder)
Affected legislation	Adapting the state laws that implement the PRF-Directive
Further remarks	-

<b><u>Proposed Action 2 (C9)</u></b>	<b>National guidance on port waste management plans (PWMP) according to the PRF Directive (see proposed action no. 3 for C1)</b>
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## Challenge 10 - Non-availability of PRF (volumes, disposal times, waste originating from other ports, costs)

Description of the challenge	<p>Regulation 8 of MARPOL Annex V does not explicitly define when a PRF is to be considered adequate. It only states that reception facilities can receive the waste "in accordance with the requirements of the ships using them" and "without undue delay". The IMO defines adequate PRFs in the relevant guidelines (MEPC.83(44) - IMO Guidelines to Ensure Adequate Port Reception Facilities) as those:</p> <ul style="list-style-type: none"><li>- Which are actually used in practice by the maritime industry,</li><li>- which meet the needs of the ships concerned,</li><li>- which do not create negative incentives,</li><li>- which contribute to an improvement in marine environmental protection, and</li><li>- which guarantee environmentally friendly disposal of ship-generated waste.</li></ul> <p>Interviews with shipping company representatives have shown that a major problem is the practical unavailability of PRFs for cargo residues. Although almost all ports state that they have adequate PRFs for cargo residues, this is not confirmed in practice with regard to cargo residues.</p> <p>Reasons given for this were:</p> <ul style="list-style-type: none"><li>- Information on disposal capacities, costs and type of waste accepted can often only be obtained on request, data in GISIS is often not practical.</li><li>- Service times of the disposal companies are partly limited to weekday service.</li><li>- In the case of non-port materials, the possibility of disposal is not generally given.</li><li>- The actual disposal option is often decided on a case-by-case basis and is therefore not given as a general rule.</li></ul>
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<b><u>Proposed Action 1 (C10)</u></b>	<b>Exchange between relevant stakeholders to coordinate joint disposal solutions</b>
Objective and detailed description of the action	<p>As a measure for more practicable disposal solutions, it is proposed that the relevant stakeholder discuss problems and work out solutions in a comprehensive exchange. This exchange was also desired by all participants in the advisory group and considered to be useful.</p> <p>It would also be conceivable for ports to join forces regarding disposal offers or a joint disposal company database in order to generate solutions for a better offer of PRF for cargo residues for all parties.</p>
Level of implementation	organizational
Implementation of the action through	BMDV/Federal states (z.B. MARPOL AG)
Affected legislation	-
Further remarks	-

<b><u>Proposed Action 2 (C10)</u></b>	<b>Definition of cleanliness of cargo holds and unloading condition</b>
Objective and detailed description of the action	<p>A definition of how a cargo hold is to be cleaned after discharge and at what point cargo holds are considered clean. It would thus be clearly regulated that all cargo residues would remain in the port of discharge and a clean ship would leave the port. A wash after reaching this state of unloading would then not result in wash water having to be discharged ashore. The wash water without cargo residues would then not have to be discharged in a PRF. In addition to the definition of cleanliness of cargo holds, mandatory cleaning standards could be defined to ensure appropriate cleaning of cargo holds.</p> <p>The proposals mentioned would reduce the problem of non-availability of PRFs due to substances foreign to the port.</p> <p>(See also challenge C5)</p>
Level of implementation	legal
Implementation of the action through	EU
Affected legislation	PRF-Directive
Further remarks	<ul style="list-style-type: none"> <li>- The reaching of the then defined state of cleanliness of the cargo holds is to be verified by appropriate controls. Experience with MARPOL Annex II has shown that otherwise even legal discharges can lead to environmental pollution.</li> </ul>

### Challenge 11 - No official confirmation in case of unavailability of PRF

Description of the challenge	<p>According to the PRF Directive, cargo residues must be handed over to a PRF or a handling company in its capacity as PRF at the port of origin. An exception to this may be granted if "there is sufficient specific storage capacity for all the waste generated so far and still to be generated during the ship's intended voyage to the next port of call".</p> <p>In order to carry out a justified disposal in the following port or to justify the presence of undisposed cargo residues on board during official inspections, it is not legally required, but in practice, it is often necessary to prove that there was no suitable PRF in the port of origin.</p> <p>Shipping companies complain that such a confirmation is not issued. Port operators have stated, both in discussions and in exchanges in the advisory group, that it can happen for various reasons that there is no suitable facility for accepting cargo residues. Nevertheless, there has been no solution so far to attest this accordingly to the ship operators. In fact, the PRF Directive does not contain any provisions on the situation where there are no suitable PRFs. Rather, Member States are obliged to maintain appropriate PRFs "which meet the needs of ships normally calling at the port". A certificate of unavailability could therefore be issued for non-port cargo residues without the port being in conflict with the PRF Directive.</p>
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<b><u>Proposed Action 1 (C11)</u></b>	<b>Official confirmation as evidence in case of unavailability of PRFs</b>
Objective and detailed description of the action	<p>It is proposed as action that the ship operator will be issued with an confirmation in case of unavailability of the PRF for cargo residues normally not handled in the port. The confirmation should be issued in a standardized format and in English.</p> <p>It should be examined which consequences this would have for the respective port operators, as this proposed measure is not about denouncing the ports for non-availability, but to enable the shipowners to dispose of the PRF without difficulties in the following port and to provide legally secure documentation in the event of inspections.</p> <p>A legally secure solution would be to include in the PRF Directive the possibility of an exceptional authorization to continue the voyage in the case of insufficient PRFs for cargo residues normally not handled in the port. However, this must not lead to the creation of an incentive for Member States not to provide suitable PRFs, contrary to the clear obligation in the PRF Directive, because in this way costs and effort can be outsourced to other ports. The definition of non-port substances should therefore not be too broad.</p> <p>Also for this challenge, we propose as a complementary action a more intensive exchange between the relevant stakeholders in order to clarify why PRFs are not available and what such a confirmation could look like before a corresponding submission is made to the EU.</p>
Level of implementation	legal
Implementation of the action through	EU
Affected legislation	PRF-Directive
Further remarks	<ul style="list-style-type: none"> <li>- Here, the PRF Directive should regulate the case of unavailability more specifically for the parties involved. In addition, there should be the possibility of a uniform certification of exceptional unavailability for the ship operators.</li> </ul>

## Challenge 12 – No local disposal option (for wash water)

Description of the challenge	<p>One reason for the high costs of disposing of wash water cited in discussions with port operators and in the advisory group is that there are often no local disposal options for wash water in particular. Therefore, long transport distances must be covered by road tankers to special disposal facilities. A PRF for cargo residues in the wash water can be offered by the local disposal company, but this is then correspondingly expensive, as the final disposal takes place in distant disposal facilities with corresponding transport routes.</p> <p>The following statement was received from the field: "The discharge of wash water as waste from the cargo area into the sewage system, as should actually take place according to the CDNI Convention, is predominantly not approved by the responsible sewage authorities in Germany with reference to the Federal Immission Control Act and the respective regional sewage ordinance. In addition, waste management companies often refuse to take over the wash water, stating that they do not know the respective chemical composition. The individual cargo handling company is currently unable to allocate a collection point, as there is currently no overview of which collection points actually accept which specific residues. This mixed situation still represents a more than unsatisfactory situation. In this respect, we very much welcome the proposed measures mentioned under point 12."</p>
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<b><u>Proposed Action 1 (C12)</u></b>	<b>Assessment of the environmental acceptability of the disposal option</b>
Objective and detailed description of the action	<p>As a measure, it is therefore proposed to also examine the environmental impact of the disposal options. Land-based disposal does achieve the goal of reducing seaside discharges. In addition, the port operator has fulfilled its obligation to provide a PRF. However, if this is more harmful to the environment as a result of long transport routes by road than a potential discharge, this approach should be reconsidered.</p> <p>If an exemption for wash water with insignificant amounts of cargo residues is considered more environmentally sound than mandatory disposal ashore, a corresponding exemption from the discharge obligation could be included in the PRF Directive. If not already possible, the possibility of discharging the wash water ( if appropriate also in special areas) should be included in MARPOL Annex V.</p>
Level of implementation	legal
Implementation of the action through	EU / IMO
Affected legislation	PRF-Directive / MARPOL, Annex V
Further remarks	-

### Challenge 13 – Limited possibilities for control by authorities

Description of the challenge	<p>Both in the advisory group and in further discussions, several facts were stated by the authorities responsible for inspection (water police, port authorities) that impede their inspections regarding the proper disposal of waste and the corresponding documentation. These stated facts have already been considered in the development of possible proposals for actions for other challenges within this report, so that the following actions should be referred to again here in summary.</p> <p>Examples of the challenges are:</p> <ul style="list-style-type: none"><li>- Insufficient or no reliable data in GISIS to assess whether predecessor port had adequate PRF - accordingly, this made it difficult to assess whether the predecessor port had an adequate PRF.</li><li>- Lack of recommended action when releasing port waste management plans - made it more difficult to control when releasing HABPs.</li><li>- Ambiguous classification of product residues as product or waste - corresponding discussions with ship crews regarding classification of cargo residues on board</li><li>- Documentation of disposal quantities - here control would be easier if the quantities were also recorded via the handling companies in one of the existing systems</li><li>- Unclear GRB, Part 2 entries - see example from challenge 8</li><li>- No official certification in case of unavailability of PRF - correspondingly unclear situation when masters state that no adequate PRF existed in the previous port.</li></ul>
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<b><u>Proposed Action 1 (C13)</u></b>	<b>National coordination of the data entered in the GISIS database</b> (see proposed action no. 1 for C1)
<b><u>Proposed Action 2 (C13)</u></b>	<b>Adaptation of GISIS regarding cargo residues</b> (see proposed action no. 2 for C1)
Objective and detailed description of the action	During inspections, it is also of interest to the water police and the port authorities to know the equipment of (previous or following) ports with regard to existing PRFs. They also use the GISIS database for this purpose. For example, they use it to check whether cargo residues could have been delivered to the previous port. As already stated in challenge C1, the amount of data in the GISIS database is not sufficiently good, so that this information is not reliable and sufficient for control purposes.
Level of implementation	organizational
Implementation of the action through	BMDV, Federal States
Affected legislation	Only enforcement, coordination, no adaptation of laws necessary
Further remarks	-

<b><u>Proposed Action 3 (C13)</u></b>	<b>National guidance on port waste management plans (PWMP) according to the PRF Directive (see proposed action no. 3 for C1)</b>
Objective and detailed description of the action	This measure addresses the review and approval of PWMPs by the competent authority. Here, a national recommendation for action could set out how the requirements of the PRF Directive are to be implemented exactly and how the plans are to be reviewed. This recommendation for action could support the competent authorities as a checklist when approving the plans and contribute to the standardization of the plans accordingly.  (see also challenge C1)
Level of implementation	legal
Implementation of the action through	BMDV
Affected legislation	New national recommendation for action
Further remarks	-

<b><u>Proposed Action 4 (C13)</u></b>	<b>Clear classification of product residues as product or waste</b> (see proposed action no. 1 for 3)
Objective and detailed description of the action	<p>Authorities have reported inspections in the port during which some barrels or big bags with alleged cargo residues were found on board. The ship's crew explained that these were "product residues" which were the property of the cargo consignor and would be returned to him. According to the port authority, it had no possibility to order the disposal of the cargo residues, as this reasoning was legally permissible.</p> <p>If there was a clear distinction between cargo residues as product or waste (see challenge 3), this case could have been clearly resolved. According to the proposed action for challenge C3, it would no longer be possible to add this cargo residue in the barrels to the unloaded product in this case. Consequently, the cargo residues would have had to be classified as waste and disposed of accordingly ashore in order to prevent discharge into the sea.</p>
Level of implementation	legal
Implementation of the action through	EU
Affected legislation	Adaptation of the PRF-Directive (definitions and criteria for the distinction of cargo residues for the classification as product or waste)
Further remarks	-

<b><u>Proposed Action 5 (C13)</u></b>	<b>Adaptation NSW - documentation of disposal quantities of the cargo handling companies</b> (see proposed action no. 3 for C7)
Objective and detailed description of the action	It would be a great improvement for the control authorities if disposal quantities were documented more clearly. This has not been the case so far in the case of disposal via cargo handling companies (see challenge C2).
Level of implementation	Organizational, legal
Implementation of the action through	EU
Affected legislation	PRF-Directive
Further remarks	-



<b><u>Proposed Action 6 (C13)</u></b>	<b>Specify and clarify entries in the GRB, Part 2</b> (see proposed action no. 1 for C8)
Objective and detailed description of the action	The example of the unclearly filled out GRB under challenge C8 was found during a spot check by the water police. The case shows that a measure is needed to ensure that the GRB is uniformly and clearly filled in for all, so that there is clarity for both ship crews and control authorities.
Level of implementation	legal
Implementation of the action through	IMO
Affected legislation	MARPOL, Annex V - Adaptation of the GRB If applicable, "unified interpretation" or instructions for completion of the GRB
Further remarks	-

<b><u>Proposed Action 7 (C13)</u></b>	<b>Official confirmation as evidence in case of unavailability of PRFs</b> (see proposed action no. 1 for C11)
Objective and detailed description of the action	<p>As explained in challenge C11, no confirmation or statement is issued to ship operators in the event of PRF unavailability. This leads to unclear situations in the following port and during inspections. The master of the vessel cannot provide clear proof. The control authorities, in turn, cannot demand such proof, but are dependent on statements and explanations from the ship crews. This is an unsatisfactory situation for both sides. The existence and issuing of such a document would therefore be a measure that could be clearly controlled by the authorities.</p> <p>As action, it is therefore proposed to hand out a uniform statement or confirmation in English language by the port to the vessels master in case of unavailability of the PRF for documentation.</p>
Level of implementation	legal
Implementation of the action through	EU
Affected legislation	PRF-Directive
Further remarks	-