

BE AWARE



Bonn Agreement
Accord de Bonn



BE-AWARE DATA REQUEST NOTE

APRIL 2012
BONN AGREEMENT

BE-AWARE

DATA COLLECTION NOTE

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1 Introduction

1.1 Background

The present Data Collection Note is part of the BE-AWARE project dealing with the risk of spill of oil and HNS in the Bonn Agreement area. BE-AWARE consists of the following work steps:

- A Project management and communication
- B Kick-off meeting
- C **Regional resource database**
- D Methodology
- E Area-wide traffic study
- F Sensitivity analysis
- G Risk assessment workshop
- H Bonn Agreement area-wide risk assessment
- I Case study
- J Project conference

1.2 Scope

The Data Collection Note defines the work to be carried out during work step C (regional resource database) and is closely linked to work step D (methodology). The data collection note describes the data requirements of the BE-AWARE project. It is aimed at the Bonn Secretariat and the project partners, who need to collect the corresponding data.

The checklist in Chapter 5 serves to keep track of the delivery status throughout the data collection process.

The following chapters do not only describe the type of data requested but also the precise data format. Due to the large variety of national databases, it is essential that the indicated formatting requirements are met. This will allow for the smooth integration of the data in the model and thus contribute to meeting the agreed time schedule.

2 Ship traffic and GIS data

2.1 AIS data

General	The AIS data are received from the data base located at the Danish Maritime Authority (DMA), which is operated in co-operation with the other countries around the Bonn Agreement area. This is the primary data source for establishing the traffic model. It records AIS messages of all AIS-equipped vessels in the Bonn Agreement area.
Data collection procedure	COWI will contact DMA directly. No action by the Secretariat or the project partners required.
Data period	Data for the entire year 2011 (1 January to 31 December) will be collected.

2.2 IHS Fairplay vessel characteristics data

General	The IHS Fairplay World Shipping Encyclopedia contains a series of details for every sea-going vessel of 100 GT and above.
Data collection procedure	COWI will purchase the latest version of the IHS Fairplay World Shipping Encyclopedia directly. No action by the project partners required.

2.3 GIS data

Required by 1 June 2012.

General	GIS (geographic information system) data are digitalised geographical data. COWI has access to GIS data on coastlines and bathymetry in the Bonn Agreement area. However, some additional GIS data need to be collected.
Data collection procedure	The Bonn Secretariat is kindly asked to collect the following GIS data from the individual member countries: <ul style="list-style-type: none">› Boundaries of the exclusive economic zones (EEZ) of the individual Bonn Agreement member states

- › Outer sea boundaries of the Bonn Agreement area
- › Boundaries of other multilateral agreement areas within the Bonn Agreement area (e.g. the DENERNETH agreement between Denmark, Germany and the Netherlands)

Data format Any common GIS file format is acceptable.

3 Transport data

3.1 Goods transport to and from ports

Required by 1 June 2012.

General	Goods transport to and from ports is registered by the ports themselves as well as information providers such as Lloyd's List Intelligence (LLI).
Data collection procedure	The Bonn Secretariat is kindly asked to collect the below-described data from the member countries, the relevant ports and/or information providers (e.g. LLI).
Data scope	<p>The following data are required:</p> <ul style="list-style-type: none">› Dangerous goods reports (oil and hazardous and noxious substances (HNS)) for relevant ports (specified below) for the entire year 2008 and the entire year 2011. Dangerous goods reports contain the details of the shipments of dangerous goods in a port. A precise definition of oil and HNS types is provided in the Be-Aware Methodology Note.› Import/export data on total oil and HNS in GT for relevant ports (specified below) for the years 2000 to 2011.› Detailed data on shipments from the most important offshore platforms per country for one complete year, preferably the entire year 2008 and the entire year 2011.› Data on total oil transport in GT from most important offshore platforms per country for the years 2000 to 2011.

Data shall be collected for all relevant ports as specified below.

Specific data requirements

The following specific data requirements shall be met:

Dangerous goods reports

The details of dangerous goods reports shall at least contain:

Field	Type	Description
Reporting Country	Text	Country of current report
Reporting Port	Text	Port of current report
Year	Integer	Year of loading/unloading in current port
Date	Date	Date of loading/unloading (DD-MM-YYYY)
Time	Time	Time of loading/unloading (HH:MM) (24h)
Ship name	Text	Ship name
IMO number	Integer	IMO number of the ship
MMSI number	Integer	MMSI number of the ship
Call sign	Text	Call sign of the ship
Ship type	Text	Choose from following options: crude tanker, product tanker, gas tanker, chemical tanker, OBO, bulk carrier, container vessel, RoRo, general cargo ship, other
Hull type	Text	<i>Single</i> or <i>Double</i> (only relevant for tankers and bulk carriers), <i>Unknown</i>
Gross tonnage	Real number	Gross tonnage
Activity	Text	<i>Load/unload</i>
Amount	Integer	Amount of oil/HNS in tonnes
UN number	Integer	Four-digit number that identifies hazardous substance
Country of departure	Text	Country of departure
Port of departure	Text	Port of departure
Country of destination	Text	Country of destination
Port of destination	Text	Port of destination

Oil and HNS types shall be specified as detailed as possible in order to allow grouping the substances in different ways.

Import/export data

Import/export data shall contain the ports the cargo has been shipped from or to.

Field	Type	Description
Reporting Country	Text	Country of current report
Reporting Port	Text	Port of current report
Year	Integer	Year of loading/unloading in current port
Activity	Text	<i>Load/unload</i>
Amount	Integer	Amount of oil/HNS in tonnes
UN number	Integer	Four-digit number that identifies hazardous substance
Country of destination	Text	Country of destination
Port of destination	Text	Port of destination

Detailed platform data

The detailed data on oil shipments from offshore platforms shall include country and port of destination, ship identity and ship characteristics:

Field	Type	Description
Reporting Country	Text	Country of current report
Reporting Platform	Text	Platform of current report
Latitude	Real number	Expressed in degrees and decimals (e.g. 64.23°, <u>not</u> 64°14')
Longitude	Real number	Expressed in degrees and (e.g. 14.56°, <u>not</u> 14°34')
Year	Integer	Year of loading/unloading in current port
Date	Date	Date of loading/unloading (DD-MM-YYYY)
Time	Time	Time of loading/unloading (HH:MM) (24h)
Ship name	Text	Ship name
IMO number	Integer	IMO number of the ship
MMSI number	Integer	MMSI number of the ship
Call sign	Text	Call sign of the ship
Ship type	Text	Choose from following options: crude tanker, product tanker, gas tanker, chemical tanker, OBO, bulk carrier, container vessel, RoRo, general cargo ship, other
Hull type	Text	<i>Single or Double</i> (only relevant for tankers and bulk carriers), <i>Unknown</i>

Gross tonnage	Real number	Gross tonnage
Amount	Integer	Amount of oil in tonnes
UN number	Integer	Four-digit number that identifies hazardous substance
Country of destination	Text	Country of destination
Port of destination	Text	Port of destination

Overall platform data

Data on total oil transport from offshore platforms shall contain the ports the cargo has been shipped to

Field	Type	Description
Reporting Country	Text	Country of current report
Reporting Platform	Text	Platform of current report
Year	Integer	Year of loading/unloading in current port
Amount	Integer	Amount of oil/HNS in tonnes
UN number	Integer	Four-digit number that identifies hazardous substance
Country of destination	Text	Country of destination
Port of destination	Text	Port of destination

Relevant ports

The following ports are considered as relevant:

- › *Relevant ports in the Bonn Agreement area:* A number of ports have been selected by analysing the GT of oil and chemical tankers of all ports in the region and selecting the ports that together contribute for 70 % of the oil and HNS GT respectively for the entire Bonn Agreement area:

- › Amsterdam The Netherlands
- › Antwerp Belgium
- › Brofjorden Sweden
- › Cork Ireland
- › Coryton Great Britain
- › Dunkirk France
- › Falmouth Great Britain
- › Fawley Great Britain
- › Ghent Belgium
- › Gothenburg Sweden
- › Hamburg Germany
- › Hound Point Great Britain
- › Immingham Great Britain
- › Le Havre France

- | | | |
|---|---------------|-----------------|
| › | London | Great Britain |
| › | Milford Haven | Great Britain |
| › | Mongstad | Norway |
| › | Rotterdam | The Netherlands |
| › | Sture | Norway |
| › | Tees | Great Britain |
| › | Wilhelmshaven | Germany |
| › | Zeebrugge | Belgium |
- › *Relevant ports and regions outside the Bonn Agreement area:* Data from ports and regions outside the Bonn Agreement area are relevant in cases, where oil and HNS are transported across the Bonn Agreement area without stopping at a Bonn Agreement port:
- › This is especially relevant for oil export from the Baltic Sea to other regions of the world.
 - › Transports to and from the Norwegian Sea and Barents Sea can be covered in a more general way.

3.2 Goods transport development and prognosis

Required by 1 June 2012.

General

In addition to the present situation, the BE-AWARE project regards equally the expected traffic and transport situation in 2020. This accounts not only the transport of oil and HNS, but all seagoing transport above 300 GT. To this purpose, data about the expected future goods transport measured in tonnes per cargo type and route need to be collected. This can be done in two ways:

- › By providing data of the historical development during the last few years (can be used for making a prognosis)
- › By providing readily available prognoses that have previously been prepared

Data collection procedure

The Bonn Secretariat is kindly asked to collect the following data from the member countries:

- › Historical data on goods transport from the last 5 to 10 years from each Bonn Agreement member country
- › Readily available prognoses on goods transport and/or ship traffic from each member country
- › Most important future developments related to port extensions, developments of new ports etc. from each member country

These data and prognoses can relate to the entire country, to one or several ports, sea areas, straits or other regional units. *There shall be special emphasis on the relevant Bonn Agreement ports mentioned in Section 3.1.* The goods flows should

be indicated as tonnes per goods type, year and direction (i.e. destination/origin or ingoing/outgoing or eastbound/westbound, northbound/southbound etc.).

3.3 Passenger transport development and prognosis

Required by 1 June 2012.

General

As with goods transport (see above), both data on the past development and readily available prognoses will be used.

Data collection procedure

The Bonn Secretariat is kindly asked to collect the following data from the member countries for each internal passenger route (passenger ferries, RoPax ferries) in the respective country and for each international route starting/ending in the respective countries:

- › Number of passengers for each year during 2000-2011 (if this is not possible: Please indicate numbers for the available years)
- › Number of ferry trips for each year during 2000-2011 (if this is not possible: Please indicate numbers for the available years)
- › Any available prognoses on the future development of passenger numbers and ferry trips per route and year

4 Accident- and spill-related data

4.1 Data on accidents and spills at sea

Required by 1 June 2012.

General	Historical accident data are important for calibrating and validating the results of the accident model.
Data collection procedure	The Bonn Secretariat is kindly asked to collect the below-described data from the member countries.
Data period	Data over as many past years as possible shall be collected. If possible, at least 10 years shall be covered.
Data format	Accident data should be provided in a table of the following format:

Field	Type	Description
Country	Text	Country, in whose EEZ the accident occurred
Year	Integer	Year of occurrence
Date	Date	Date of occurrence (DD-MM-YYYY)
Time	Time	Time of occurrence (HH:MM) (24h)
Latitude	Real number	Expressed in degrees and decimals (e.g. 64.23°, <u>not</u> 64°14')
Longitude	Real number	Expressed in degrees and decimals (e.g. 14.56°, <u>not</u> 14°34')
		<u>If coordinates are unknown:</u> Convert geographical information roughly to the most likely coordinates (e.g. "20 miles east of Gotland" → 57.23° N, 19.52° E; "Gulf of Finland" → 59.90° N, 25.48° E, i.e. roughly the centre of the Gulf of Finland)
Alternative geographical information	Text	If there are no coordinates, please enter any available geographical information here (e.g. "20 miles east of Gotland" or "Gulf of Finland")

Ship name	Text	Ship name (or name of the fixed object)
IMO number	Integer	IMO number of the ship (only for ships)
Call sign	Text	Call sign of the ship (this is especially important for ships, whose IMO number is not known) (only for ships)
Ship category	Text	Choose from following options: <i>Cargo, Tanker, Passenger, Other, Unknown</i> (only for ships)
Hull type	Text	<i>Single</i> or <i>Double</i> (only relevant for tankers and bulk carriers), <i>Unknown</i> (only for ships)
Gross tonnage	Real number	Gross tonnage (only for ships)
Accident type	Text	Choose the first applicable option from the following in hierarchical order: <i>Collision with vessel, Collision with object, Grounding, Fire, Sunk other cause, Hull damage other cause, Pollution other cause</i> (E.g. a ship that leaks oil and sinks due to a collision with another ship is counted as "Collision with vessel", <u>not</u> as "Sunk other cause" or "Pollution other cause")
Piloted	Text	Choose from following options: <i>Yes, No, Unknown</i> (only for ships)
Pollution	Text	Choose from following options: <i>Yes, No, Unknown</i>
Pollution size	Real number	Pollution size in tonnes
Pollution type	Text	Choose from following options: <i>Volatile oil (diesel, petrol etc.), Non-volatile oil, Animal/vegetable oil, Other hazardous substance (except gas), Non-hazardous substance (incl. gas), N/A (no leakage), Unknown</i>
Pollution type comments	Text	Any further comments regarding the pollution type

It is important that accidents without known coordinates are equally included!! In this case, you can enter geographical information as free text or drop the geographical description altogether (see details on the data format below).

Data scope

The following accidents *shall be included*:

- > Ship accidents
- > Platform accidents
- > Wind farm accidents
- > Subsea oil pipeline accidents

Also spontaneous spills and spills for which no cause could be identified shall be included.

The following accidents *shall be omitted*:

- › Accidents outside the national EEZ of the respective country
- › Accidents inside ports, harbours, lagoons, rivers and other inner waterways
- › Accidents with ships smaller than 300 GT (if a ship below 300 GT collides with a ship above 300 GT, indicate only the one that is above 300 GT).
Exception: Tanker accidents should also be included, also if the tanker is smaller than 300 GT.
- › Near misses
- › Accidents that are unlikely to result in spill events:
 - › Machine damage (unless it leads to follow-up events, it is registered as grounding, collision etc.)
 - › Passenger accidents

4.2 Pilotage

Required by 1 June 2012.

General

Pilotage, i.e. the usage of a maritime pilot, is one of the most important risk-reducing measures in navigation. When estimating the number of grounding and collision accidents per year, it is therefore of central importance to have a realistic idea of the fraction of piloted ships.

The piloted fraction is estimated by comparing the number of piloted sea miles to the total number of sailed sea miles in an area. While the total number of sailed sea miles per area, ship size and ship type is known from the AIS traffic statistics described in Section 2.1, the number of piloted sea miles needs to be collected separately. The present section describes which requirements should be met during this process.

Data collection procedure

The Bonn Secretariat is kindly asked to collect the below-described data from the member countries.

The required data details are specified below (see *Data period* and *Data format*). It should be stressed that it is very relevant to know

- › where the pilotage job has taken place. Therefore, we need either the coordinates of the start and beginning of the pilot job or the name/code/ID of the pilotage route

- › how many nautical miles the pilotage job included
- › the size (DWT and/or GT) and type of the piloted vessel or – alternatively – the vessel name and IMO number

Note that the next section (4.3, *RRM parameters*) equally includes a number of questions regarding pilotage.

Data period

The BE-AWARE project uses AIS data from the entire year 2011 (1 January to 31 December). The same period should be used for pilotage data.

If pilotage data are not available for the mentioned period, the latest available data can be used instead. If possible, they should cover a period of one entire year.

Data format

The collected data shall have the following format:

Field	Type	Description
Date	Date	Date of pilot job (DD-MM-YYYY)
Beginning of pilot job: Place	Text	Name of the location, where the pilot job began
Beginning of the pilot job: Lon/Lat	Real number	Expressed in degrees and decimals (e.g. 14.56°, <u>not</u> 14°34'). A rough indication is sufficient. <i>Can be omitted, if a pilotage route ID is indicated in stead.</i>
End of pilot job: Place	Text	Name of the location, where the pilot job ended
End of the pilot job: Lon/Lat	Real number	Expressed in degrees and decimals (e.g. 14.56°, <u>not</u> 14°34'). A rough indication is sufficient. <i>Can be omitted, if a pilotage route ID is indicated in stead.</i>
Pilotage route ID	Text/Number	If you use codes/abbreviations for designating the most common pilotage routes in your country, please indicate here
Piloted distance	Real number	The distance sailed with a pilot on board, expressed in nautical miles
Ship name	Text	Ship name (<i>can be omitted, if DWT/GT and ship type are known</i>)
IMO number	Integer	IMO number of the ship (<i>can be omitted, if DWT/GT and ship type are known</i>)
Deadweight tonnage	Real number	Deadweight tonnage (metric tons)
Gross tonnage	Real number	Gross tonnage
Ship type	Text	Please indicate the ship type in English (you can also provide a separate list, which translates all ship type designations into English)
Loaded?	Yes/No	Indicate <i>Yes</i> if the ship is loaded and <i>No</i> if the

ship is in ballast

4.3 RRM parameters

Required by 1 June 2012.

General

The accident and spill model takes more than a dozen different risk-reducing measures (RRMs) into account. They include e.g. ECDIS usage, VTS centres and many more. Each RRM is characterised by two basic numbers:

- › The probability that a RRM is in force ($P = 1$, if it is certain that the RRM applies to all ships; $0 < P < 1$ if the RRM does not apply to all ships or if it is uncertain, whether the RRM will be implemented at a given point in time in the future)
- › The risk-reduction factor associated with a RRM ($k = 0.7$ means that the risk is reduced to 70 % of its original value, i.e. a reduction by 30 %)

For a number of RRM, both parameters have already been estimated in connection with the BRISK project. However, some of the RRM have regionally varying parameters. Therefore, input from the participating countries is required.

The project partners are asked to help the Secretariat with quantifying the *first* parameter of the two, i.e. the probability that the respective RRM are in force. As far as the *second* parameter, i.e. the risk-reduction factor, is concerned, we will address the specific project partners separately via the Secretariat, if it should become necessary.

Data collection procedure

The relevant questions regarding the different RRM are collected in a questionnaire which will be distributed together with this note (*BE-AWARE RRM questionnaire.docx*). Please fill out the questionnaire and return.

4.4 STS operations, loading buoys and bunkering at sea

Required by 1 June 2012.

General

As described in the Method Note, several scenarios can ensue in spill of oil or HNS during ship-to-ship transfer (STS) and oil loading buoy operations. Likewise, bunkering at sea can lead to oil spills.

Data collection procedure

Please indicate the following information:

- › All locations, where STS transfers, oil loading buoy operations and bunkering at sea are performed in your country's EEZ (name of the area, latitude, longitude).

- › The number of STS/bunkering/loading buoy operations per year performed at each location. If available, also include the ship type (oil tanker, gas tanker, chemical tanker, OBO, bulk carrier, container vessel, RoRo, general cargo ship, passenger/ferry, supply vessel, other) and ship size (in DWT or GT) of both ships for each operation.
- › *For STS and loading buoy locations only:* The average size of the mother ships (i.e. the larger ships of the two ships involved)

4.5 Fixed objects

Required by 1 June 2012.

General

In the present context, “fixed objects” include all potential obstacles in the sea that are

- › permanently linked to the sea bed (by a foundation or permanent anchorage)
- › large enough to cause severe damage (potentially ensuing in leakage) to ships larger than 300 GT in case of a collision
- › man-made (i.e. grounds are excluded)
- › not part of the coastline (i.e. jetties are excluded)

This definition applies essentially to bridge piers, offshore platforms, offshore wind parks and very large navigational buoys. Any other object meeting the above definition is equally included.

Data collection procedure

The collected data shall have the following format:

Field	Type	Description
Object type	Text	Oil platform, buoy, wind mill, bridge pier etc.
Object name	Text	The name or ID of the object (e.g. buoy no. 314)
Latitude	Real number	Expressed in degrees and decimals (e.g. 64.23°, <u>not</u> 64°14')
Longitude	Real number	Expressed in degrees and decimals (e.g. 14.56°, <u>not</u> 14°34')
Max. dimension	Real number	The maximum dimension of the object when seen from above (i.e. length or diameter), expressed in metres
90° to max. dimension	Real number	The dimension that can be measured perpendicular to the max. dimension, when seen from above (for a rectangular object, this is simply the width of the object!!), expressed in metres
Attendant vessel	Integer	How many times per year is the object approached by vessels for supply, inspection

visits per year		etc.?
Attendant vessel size	Real number	Attendant vessel size in DWT
Construction details	Text	Construction material, construction principle etc.

Please note, that each bridge pier and each wind mill is an object of its own, unless the distance between two piers or two wind mills is very small (smaller than 50 m).

5 Checklist

The below checklist summarises the data collection requests from the previous chapters. Please note the symbols used in the checklist:

- > o ... required
- > (o) ... possibly required at a later stage (no action required at the moment)
- > - ... not required
- > x ... obtained

Table 5-1 Data collection checklist

Data type	Project Partner										Detailed description
	BE	DE	DK	FR	IE	NL	NO	SE	UK	Secretariat	
Traffic and GIS											
- GIS data											2.1
Goods transport											
- Port statistics											3.1
- Goods transport development data and prognoses											3.2
- Passenger transport development data and prognoses											3.3
Accidents											
- Accidents and spills at sea											4.1
- Pilotage data											4.2
- Risk reducing measures (RRMs)											4.3
- STS operations & bunkering at sea											4.4
- Fixed objects											4.5

Correspondence log

Country	Log of important correspondence
Example country A	30-04-2012: Requirement of data from Mr XYZ 15-04-2012: Mail requirement of data Mr XYZ
Example country B	...

MEMO

TO

COPY

902488012

BE-AWARE Secretariat and project partners

Maartje Folbert (MARIN)

Title

BE-AWARE: QUESTIONNAIRE ON RISK-REDUCING MEASURES (RRMS)

6 Global RRMs

Question	Answer
Bridge alarm	
- How many percent of all ships greater than 300 GT in the Bonn Agreement area do you believe are equipped with a bridge alarm system <i>today</i> (i.e. a system based on motion sensors that initiates an alarm, if no human movements are measureable on the bridge)? Please indicate in percent.	
- How many percent of all ships greater than 300 GT in the Bonn Agreement area do you expect to be equipped with a bridge alarm system <i>by 2020</i> ?	
ECDIS (electronic sea charts)	
- How many ships greater than 300 GT sailing in the Bonn Agreement area do you believe to be equipped with ECDIS today? Please indicate in percent.	
- How many ships greater than 300 GT sailing in the Bonn Agreement area do you believe to be equipped with ECDIS by 2020? Please indicate in percent.	

FROM Albrecht Lentz (COWI)

7 Local RRM

Question	Answer
VTS centres	
- Does your country operate any VTS centres <i>at present</i> ? If yes, please specify where they are located and which area is covered.	
- Does your country plan to implement additional VTS centres <i>in the future</i> ? If yes, please specify a) where they will be situated and which area will be covered b) the probability that they will in operation in 2020	a) b)
Escort towing (i.e. preventive tug assistance for the passage of selected narrow channels)	
- Are there any areas, where escort towing is common, recommended or even obligatory in your country's EEZ? If yes, please specify.	
- In those areas, where escort towing is common/recommended/obligatory: Is this relevant for all ship types and sizes? Only for loaded ships? Only in one transit direction?	
- In those areas, where escort towing is common/recommended/obligatory: How many percent of the ships use escort towing (depending on ship size, type, load state and transit direction)?	
- Will escort towing be common/recommended/obligatory by 2020 in areas where it is not the case now? If yes, please specify where	
- In those areas, where escort towing is expected to be common/recommended/ obligatory by 2020: How many percent of the ships do you expect to be using escort towing (depending on ship size, type, load state and transit direction)?	
Traffic separation schemes (TSS)	
Emergency towing	
- Do you operate any emergency towing vessels (ETVs) in your EEZ? If yes please specify their base ports, cruising speed and operational limitations (weather, max. size of ship to be towed etc.)	
- Do you expect additional ETVs to be operative by 2020 in your ETZ? If yes, please specify heir base ports, cruising speed and operational limitations (weather, max. size of ship to be towed etc.)	

Question	Answer
<p>- Does your country plan to implement additional TSS <i>in the future</i>? If yes, please specify</p> <p>a) where they will be situated and which area will be covered</p> <p>b) the probability that they will in operation in 2020</p>	
<p>Pilotage</p>	
<p>- Are there any areas in your country's EEZ, where pilotage is <i>mandatory today</i>? Please indicate where and for which ships.</p>	
<p>- Are there any areas in your country's EEZ, where pilotage is <i>recommended today</i> (e.g. by IMO)? Please indicate where and for which ships.</p>	
<p>- Do you expect that there will be additional areas where pilotage will be <i>mandatory or recommended by 2020</i>? If yes, please indicate where and for which ships. Please also indicate the probability that the indicated changes will be in force by 2020 (in percent).</p>	