

OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic  
Meeting of the OSPAR Commission  
Cascais (Portugal): 23-27 June 2014

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## Ballast Water Exchange Areas in the North Sea

Presented by Secretariat

**Regulation B-4.2 of the IMO Ballast Water Management Convention allows ports States to designate areas, in consultation with adjacent or other States, as appropriate, where ships may conduct ballast water exchange as a temporary regulation until the D-2 Standard of the Convention enters into force for all ships. A proposal for the North Sea is outlined in this document.**

Action requested

1. OSPAR is invited to note the information provided and endorse the proposed designated areas for ballast water exchange in the North Sea for intra North Sea Traffic, as outlined in Annex 1.

Background

2. In 2012 the North Sea Ballast Water exchange and exemptions group, in consultation with the North Sea Ballast Water Opportunity project and EMSA, prepared for the implementation of ballast water exchange areas in the North Sea.

3. The proposed sets out designated ballast water exchange areas in the North Sea for intra North Sea traffic. Within Norwegian territorial waters and economic zone the Norwegian national regulation applies. The designation of areas of ballast water exchange is a temporary regulation. It should enter into force when the Convention enters into force, and terminates when ships shall meet regulation D-2 of the Convention.

4. Regulation B-4.2 of the Convention allows ports States to designate areas, in consultation with adjacent or other States, as appropriate, where ships may conduct ballast water exchange. Regulation B-4.2 determines that such sea areas can be designated in sea areas where the distance from the nearest land or the depth does not meet the requirements described in paragraph 1.1 or 1.2 of the regulation. The North Sea falls under this category, as the required depth is too shallow.

5. The identification, assessment and designation of the proposed ballast water exchange areas were done taking into account the relevant guideline of the Convention: "Guidelines on Designation of Areas for Ballast Water Exchange (G14)".

6. The assessment of identified areas was done in the European Space Agency (ESA) Due Innovator II project. The goal of this project was to investigate the opportunity for remote sensing data to contribute to the risk assessment of Ballast Water exchange. Some of the basic principles used were:

- clear water indicates a low risk
- high chlorophyll concentration indicates high risk
- a close distance to the coast indicates a high risk
- low depth indicates a high risk

7. The “Designation of areas for Ballast Water Exchange in the North Sea for intra North Sea Traffic” is presented in Annex 1.

8. Norway has implemented parts of the Ballast Water Management Convention (D-1; Exchange standard) in its national regulations. The Norwegian Ballast Water Regulation entered into force on 1 July 2010. As regulation B-4.2 in the BWMC allows, Norway has designated areas for ballast water exchange within its exclusive economic zone (EEZ). Areas within Norway’s EEZ are therefore excluded from the current proposal. The Norwegian ballast water exchange areas are displayed in Annex 2.

9. EIHA 2012 considered the proposal and agreed to forward it to OSPAR 2012 for endorsement. Unfortunately at OSPAR 2012 Germany were not in a position to be able to endorse the designation of areas for Ballast Water Exchange in the North Sea for intra North Sea Traffic as they were still in the process of ratifying the Ballast Water Convention. At the last Joint OSPAR/HELCOM Task Group on Ballast Water Management Convention Exemptions, held in Copenhagen on the 12-13 May 2014, Germany informed the meeting that they had now completed the ratification process and could now endorse the proposal.

## Annex 1

As a result of deliberations, the North Sea countries have suggested to designate ballast water exchange areas in the North Sea.

### Purpose

1 This regulation designates areas in which ballast water exchange cannot take place in the North Sea for intra North Sea traffic, in accordance with the International Convention for the Control and Management of Ships Ballast Water and Sediments (the Convention). A ship on a voyage between two North Sea ports, which must at least meet the standards described in regulation D-1 of the Convention, may conduct ballast water exchange in these areas. Within Norwegian territorial waters and economic zone the Norwegian national regulation applies. This designation of areas of ballast water exchange in the North Sea is a temporary regulation. It enters into force when the Convention enters into force, and terminates when ships shall meet regulation D-2 of the Convention (ultimately 2016 for all categories of ships).

### Introduction

2 The Convention aims *“to prevent, minimize and ultimately eliminate the risks to the environment, human health, property and resources arising from the transfer of Harmful Aquatic Organisms and Pathogens through the control and management of ships’ Ballast Water and Sediments, as well as to avoid unwanted side-effects from that control and to encourage developments in related knowledge and technology.”*

3 Regulation B-3 of the Convention states for different categories of ships when Ballast Water Management must be conducted to at least meeting the standard described in regulation D-1: *“Ballast water Exchange Standard”*.

4 Regulation B-4.2 of the Convention allows ports States to designate areas, in consultation with adjacent or other States, as appropriate, where ships may conduct ballast water exchange. Regulation B-4.2 determines that such sea areas can be designated in sea areas where the distance from the nearest land or the depth does not meet the parameters described in paragraph 1.1 or 1.2 of the regulation. The North Sea falls under this category, as the required depth is too shallow.

5 The identification, assessment and designation of these areas were done taking into account the relevant guideline of the Convention: *“Guidelines on Designation of Areas for Ballast Water Exchange (G14).”*

6 The assessment of identified areas was done in the European Space Agency (ESA) Due Innovator II project. The goal of this project was to investigate the opportunity for remote sensing data to contribute to the risk assessment of Ballast Water exchange. Some of the basic principles used were:

- clear water indicates a low risk
- high chlorophyll concentration indicates high risk
- a close distance to the coast indicates a high risk
- low depth indicates a high risk

After careful consideration, the group proposed that ballast water exchange should, in principle, be avoided in areas with a risk index of 0,75 and above; consequently areas with a risk index lower than 0,75 can be designated as ballast water exchange areas. However, while the group agreed that a high standard of protection was desirable, taking into consideration regulation B-4 of the BWMC, the group agreed that a delay of the voyage of a deviation from the intended voyage should be avoided. The group noted that options for exchange on the Traffic Separations Scheme Terschelling-German Bight might not be sufficient with the proposed index value of 0,75. Rather than lowering the standard of protection for the North Sea as a whole, the group agreed to adjust the boundary of the designated ballast water exchange area around the TSS, in order to afford ships bound on the TSS the opportunity for ballast water exchange.

Norway has implemented parts of the Ballast Water Management Convention (D-1; Exchange standard) in its national regulations. The Norwegian Ballast Water Regulation entered into force on 1 July 2010. As regulation B-4.2 in the BWMC allows, Norway has designated areas for ballast water exchange within its exclusive economic zone (EEZ). Areas within Norway's EEZ are therefore excluded from the current proposal. The Norwegian ballast water exchange areas are displayed in Annex 2.

7 The North Sea area means<sup>1</sup> the North Sea proper including seas therein with the boundary between:

- .1 the North Sea southwards of latitude 62<sup>0</sup> N and eastwards of longitude 4<sup>0</sup> W;
- .2 the Skagerrak and part of the Kattegat, the southern limit of which is determined east of the Skaw by latitude 57<sup>0</sup>44' N; and
- .3 the English Channel and its approaches eastwards of longitude 5<sup>0</sup> W and northwards of latitude 48<sup>0</sup>30' N.

### **Ballast Water Exchange in the North Sea**

8 A ship, on a voyage between 2 ports located in the North Sea, which under the Convention shall at least meet the standard described in regulation D-1, may conduct ballast water exchange in the designated ballast water exchange area in the North Sea. A ship conducting ballast water exchange in this area shall comply with all the regulations for ballast water exchange in the Convention, with the exception of regulation B-4.1.

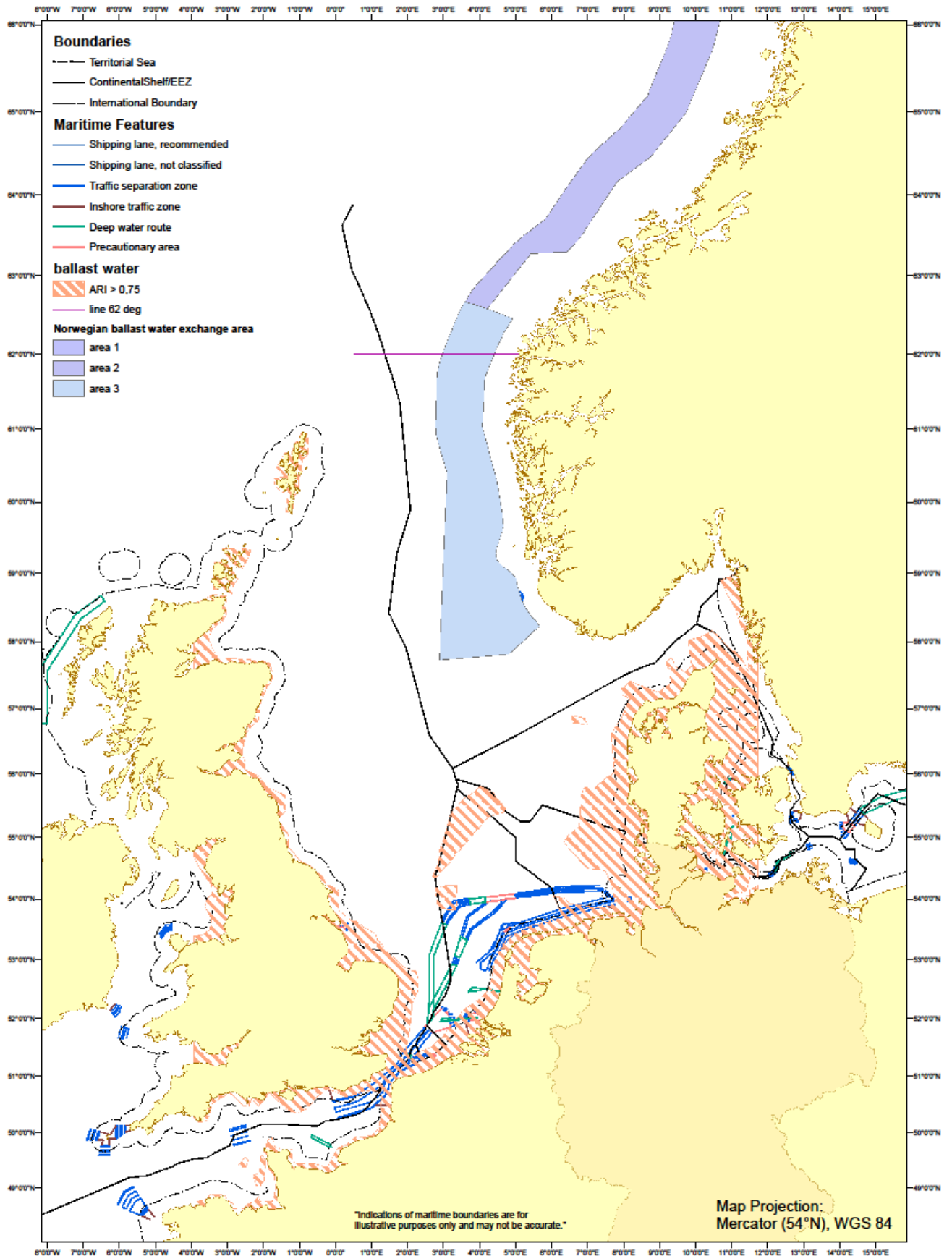
9 The designated ballast water exchange area in the North Sea is the area with a risk index ARI of less than 0,75, the area which is not red, corrected for the "Kompromisslinie" for the Traffic Separations Scheme Terschelling-German Bight, and corrected for the Norwegian EEZ

10 Within the Norwegian EEZ ballast water exchange areas are displayed in Annex 2.

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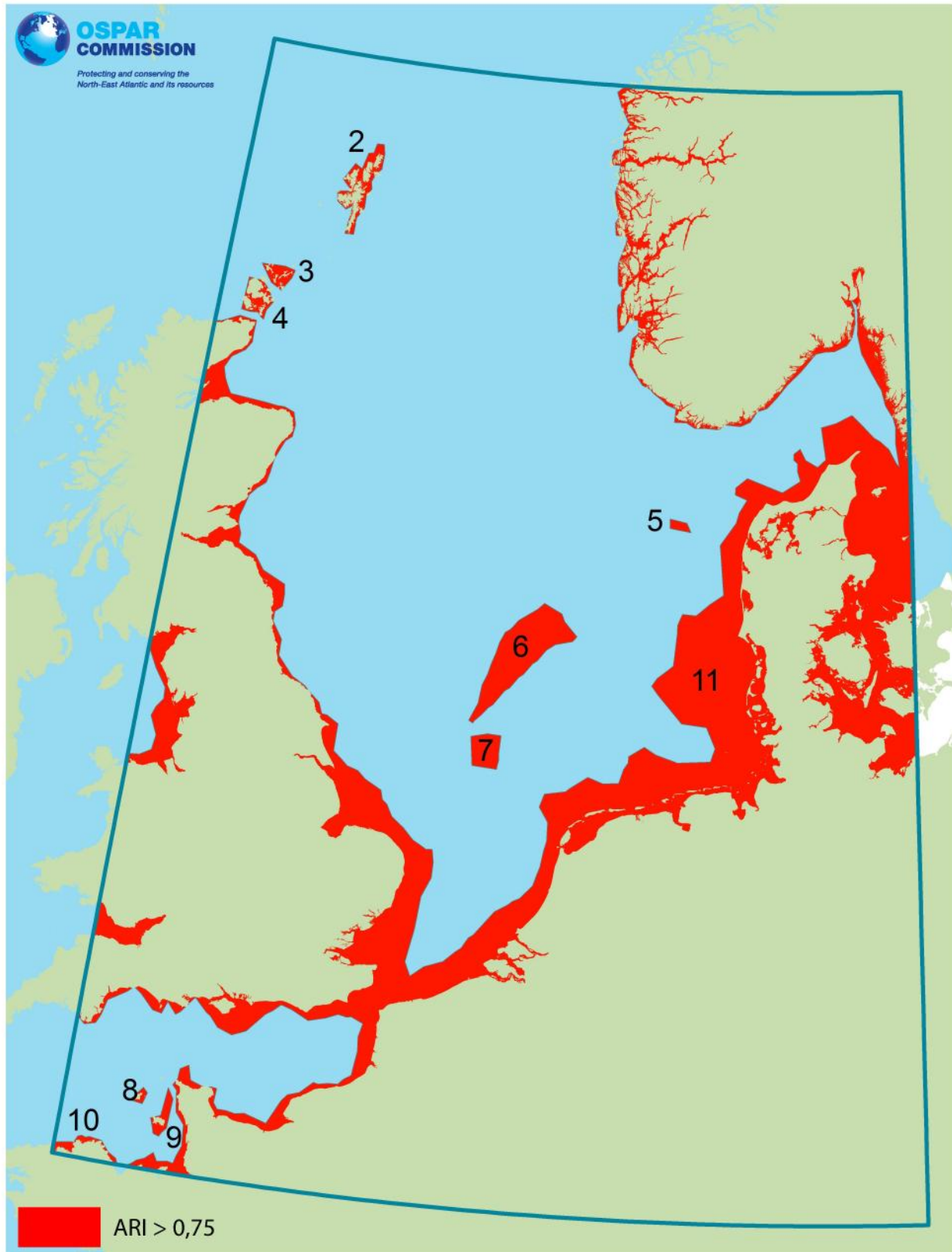
<sup>1</sup> The definition of the North Sea is consistent with MARPOL 73/78, Annex V, Regulation 5 (1) (f), but above that includes a part of the Kattegat so that traffic to and from Gothenburg is included.

# North Sea: ballast water



## Annex 1 - Coordinates of the designated ballast water exchange area in the North Sea

The area with a risk index ARI of less than 0,75, corrected for the "Kompromisslinie" for the Traffic Separations Scheme Terschelling-German



	<b>Latitude</b>	<b>Longitude</b>						
			4	58,76806	3,01639	7	54,18167	-2,77194
2	60,66417	0,76472	4	58,75639	3,19222	7	54,23000	-3,09806
2	60,59611	0,88750	4	58,76889	3,39889	7	54,22167	-3,37111
2	60,50194	0,96083	5	56,86306	-6,91472	7	53,99556	-3,35778
2	60,41833	0,92139	5	56,75528	-7,00778	8	49,51722	2,41917
2	60,33472	1,02611	5	56,79278	-6,55889	8	49,38167	2,47861
2	60,18333	1,01833	5	56,90444	-6,55000	8	49,40139	2,71083
2	60,05667	1,16611	6	54,36444	-2,80111	8	49,57111	2,50750
2	59,85667	1,17250	6	54,34056	-2,78194	9	49,08556	2,05278
2	59,85389	1,37611	6	54,36528	-2,69556	9	49,03694	2,09056
2	60,01583	1,33972	6	54,57528	-2,84917	9	49,05556	2,20111
2	60,19361	1,29528	6	54,79556	-2,88750	9	49,14750	2,23861
2	60,13611	1,44944	6	54,92028	-2,97833	9	49,23278	2,29000
2	60,21722	1,67167	6	55,05667	-3,03583	9	49,28167	2,11472
2	60,32944	1,71333	6	55,17889	-3,10778	9	49,61611	2,05806
2	60,35278	1,46250	6	55,31556	-3,16528	9	49,49667	1,94222
2	60,37889	1,42500	6	55,43694	-3,26250	9	49,14194	1,98000
2	60,48111	1,63500	6	55,48083	-3,36639	10	48,89139	3,31667
2	60,68500	1,40250	6	55,59000	-3,51611	10	48,87222	3,08806
2	60,63528	1,23250	6	55,73944	-3,88389	10	48,75250	2,93528
2	60,82611	1,13583	6	55,81722	-4,01639	10	48,69722	2,78722
2	60,84194	1,01306	6	55,70917	-4,39500	10	48,62583	2,73778
2	60,95167	0,96583	6	55,62028	-4,46611	10	48,62583	3,91917
2	60,95667	0,80389	6	55,45306	-4,74167	10	48,77444	3,91944
2	60,84444	0,75167	6	55,39444	-4,66000	10	48,76056	3,88611
3	59,22750	2,40667	6	55,34417	-4,31389	10	48,79583	3,57417
3	59,06861	2,59222	6	55,27000	-4,13778	10	48,87500	3,51944
3	59,13861	2,84556	6	55,13583	-3,97028	10	48,89083	3,44861
3	59,34333	3,13639	6	55,09750	-3,87917	10	48,87611	3,38389
3	59,35667	2,60000	6	54,96333	-3,71139	11	65,12417	-11,72556
3	59,32694	2,35639	6	54,92500	-3,62056	11	54,37611	-11,72917
4	59,15472	3,36278	6	54,79083	-3,45278	11	54,40278	-11,52750
4	59,14556	3,16833	6	54,75250	-3,36167	11	54,27333	-11,47278
4	59,15194	3,06250	6	54,57528	-3,15083	11	54,14750	-11,39889
4	59,06333	2,88861	6	54,53694	-3,06000	11	54,09500	-11,21472
4	58,91694	2,72056	6	54,44583	-2,93528	11	54,10694	-11,11694
4	58,80444	2,84611	7	53,93028	-3,36750	11	54,03722	-11,09750
4	58,69556	2,86667	7	53,82306	-3,34250	11	54,02750	-11,24944
4	58,71583	2,93250	7	53,84333	-2,85028	11	53,97278	-11,38028

11	54,04861	-11,39972	11	50,00944	-1,07639	11	53,88722	3,62528
11	54,06639	-11,49667	11	50,06333	-1,20472	11	54,00417	3,55667
11	54,14667	-11,50556	11	50,36083	-1,26889	11	54,10139	3,43500
11	54,22944	-11,72917	11	50,52556	-1,24833	11	54,23972	3,45222
11	48,62583	-11,73139	11	50,68333	-1,30917	11	54,44583	3,70972
11	48,62583	2,59778	11	50,74833	-1,08167	11	54,68139	3,92917
11	48,66806	2,49778	11	50,73722	-0,99250	11	58,57444	3,93583
11	48,71583	2,41611	11	50,75778	-0,82833	11	58,58694	3,79278
11	48,75417	2,28222	11	50,69444	-0,60694	11	58,69167	3,41111
11	48,83833	2,13861	11	50,64000	-0,29417	11	58,66806	3,01528
11	48,73889	2,05917	11	50,74250	0,04000	11	58,52306	3,02083
11	48,76194	1,87472	11	50,78083	0,23806	11	58,41139	3,01639
11	48,74861	1,76694	11	50,69444	0,38472	11	58,30944	3,12667
11	48,84528	1,72639	11	50,64500	0,50250	11	58,20056	3,40639
11	48,96500	1,65583	11	50,41833	0,81278	11	58,06139	3,52417
11	49,21389	1,68667	11	50,34611	1,06472	11	57,94167	3,44778
11	49,34806	1,85417	11	50,41028	1,34611	11	57,87472	3,38556
11	49,60500	1,90806	11	50,52694	1,50583	11	57,77000	3,27278
11	49,66139	1,98889	11	50,56528	1,59694	11	57,74333	2,46833
11	49,73972	1,91889	11	50,71667	1,83500	11	57,72694	2,21972
11	49,86194	1,90250	11	50,52194	2,06639	11	57,72694	2,04722
11	49,91833	1,75583	11	50,48361	2,14806	11	57,68417	1,82722
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11	49,69083	1,42889	11	50,46722	2,40944	11	57,39861	1,76889
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11	49,53111	1,20944	11	50,71778	2,98861	11	56,94861	2,11111
11	49,45944	1,13250	11	50,65139	3,10139	11	56,81472	2,15806
11	49,45722	0,96944	11	50,57500	3,28306	11	56,73444	2,32833
11	49,43583	0,79694	11	50,51194	3,43278	11	56,64167	2,46333
11	49,45556	0,63667	11	50,32361	3,50278	11	56,47417	2,54250
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11	49,66444	0,00167	11	50,18194	3,77389	11	56,30250	2,58556
11	49,74417	-0,09806	11	50,26806	3,92056	11	56,17389	2,49917
11	49,78889	-0,30500	11	50,26833	3,92194	11	56,06750	2,50333
11	49,92639	-0,53861	11	53,39583	3,92722	11	55,95833	2,11111
11	49,91528	-0,62611	11	53,41111	3,70500	11	55,79667	1,90056
11	49,93694	-0,79861	11	53,49361	3,49028	11	55,67278	1,41250
11	49,94444	-0,98472	11	53,66972	3,45111	11	55,56500	1,37667



11	55,41444	1,38250	11	51,86028	-3,19250	11	56,02833	-7,75028
11	55,33889	1,52028	11	52,15361	-3,55306	11	56,61611	-7,64306
11	55,22583	1,52556	11	52,24833	-3,79611	11	56,88278	-7,96806
11	55,02444	1,29139	11	52,29306	-3,88083	11	57,00444	-8,02556
11	54,96583	1,29361	11	52,33472	-4,01167	11	57,15639	-8,18972
11	54,92250	1,29194	11	52,49444	-4,24417	11	57,21778	-7,93250
11	54,83667	1,29528	11	52,63806	-4,31194	11	57,29833	-7,93583
11	54,62250	0,96389	11	52,72278	-4,35667	11	57,41333	-8,17972
11	54,53528	0,68833	11	52,89694	-4,39806	11	57,25278	-8,94722
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11	53,62833	-0,61278	11	53,76278	-5,78444	11	57,64583	-9,88556
11	53,54194	-0,77611	11	53,93167	-5,86417	11	57,85389	-9,83111
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11	52,66056	-2,29139	11	54,82222	-6,48639	11	57,82222	-11,42361
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11	51,69306	-2,98806	11	55,87028	-7,37500	11	59,23444	-10,60889
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11	59,36389	-10,61083	11	59,40917	-5,17944	11	53,92139	-7,77556
11	59,46278	-10,58861	11	59,53611	-5,15111	11	53,86056	-7,34167
11	59,53556	-10,45528	11	59,60111	-5,19667	11	53,93167	-6,50611
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11	59,08250	-10,48556	11	59,80056	-5,04444	11	53,74583	-6,28583
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11	58,92028	-10,07778	11	60,10361	-5,18472	11	53,58750	-5,67889
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11	58,02194	-8,00111	11	61,02306	-4,93111	11	53,03333	-4,44611
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11	57,97528	-7,53222	11	61,12917	-4,70361			
11	57,98833	-7,20167	11	61,19306	-4,75222			
11	57,98222	-7,05083	11	61,22917	-4,95222			
11	57,98528	-6,97667	11	61,40528	-4,94472			
11	58,04111	-6,80806	11	61,52500	-5,07194			
11	58,04167	-6,53194	11	61,53556	-5,02667			
11	58,20000	-6,55750	11	61,62500	-4,94306			
11	58,24194	-6,33861	11	61,67250	-4,87250			
11	58,28667	-6,25389	11	61,87972	-4,70972			
11	58,37139	-6,03667	11	61,93472	-4,83222			
11	58,41611	-5,95222	11	61,96333	-5,05278			
11	58,45750	-5,77806	11	55,78333	-10,26111			
11	58,69056	-5,45556	11	55,70611	-10,17861			
11	58,99472	-5,48583	11	55,63417	-10,50028			
11	59,06111	-5,61500	11	55,71917	-10,47472			
11	59,21444	-5,58750	11	54,61556	-10,35056			
11	59,21583	-5,39639	11	54,55611	-10,54333			
11	59,08417	-5,22972	11	54,81694	-10,57861			
11	59,06278	-5,15083	11	54,78583	-10,42556			
11	59,32639	-5,08972	11	54,42194	-7,52222			
11	59,38250	-5,10917	11	54,22250	-7,67528			

## Annex 2

### The North Sea and Norwegian ballast water exchange areas

