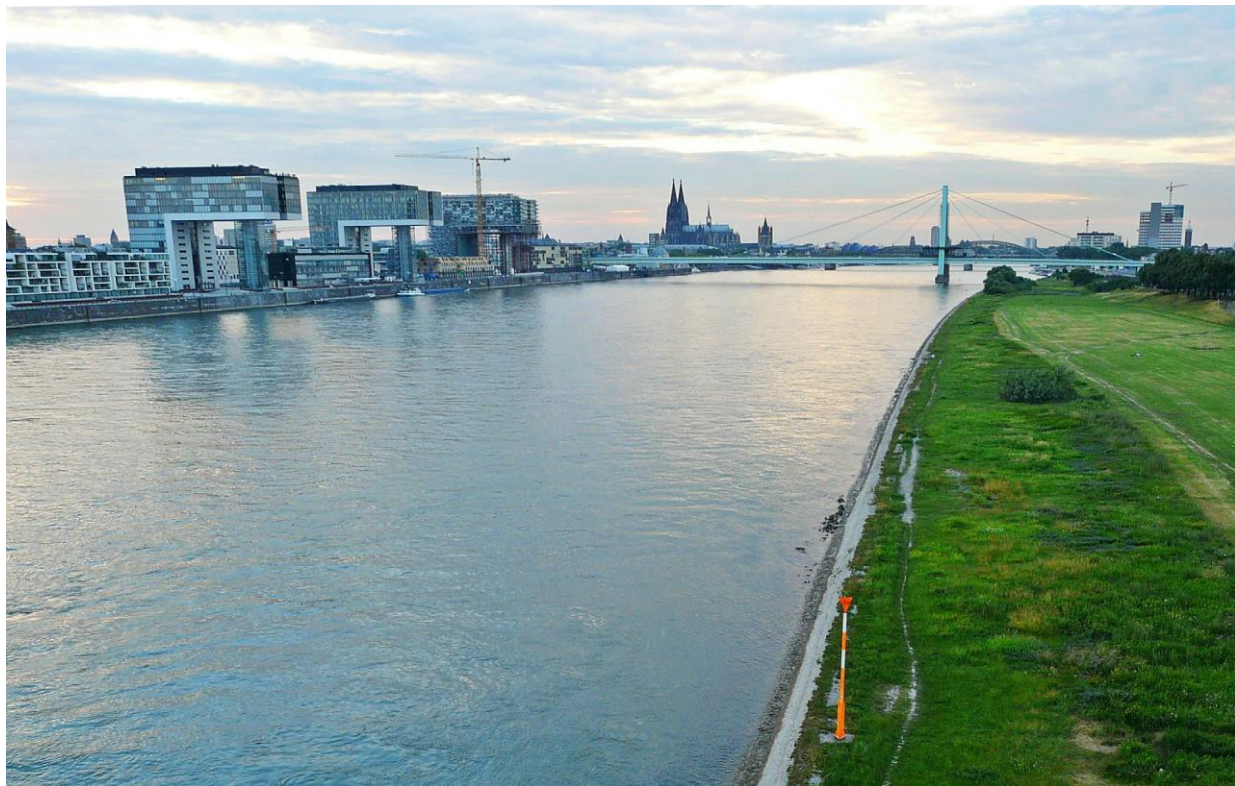




# OSPAR COMMISSION

## Riverine Inputs and Direct Discharges to Convention Waters

### OSPAR Contracting Parties' RID 2016 Data Report



### OSPAR Convention

The Convention for the Protection of the Marine Environment of the North-East Atlantic (the “OSPAR Convention”) was opened for signature at the Ministerial Meeting of the former Oslo and Paris Commissions in Paris on 22 September 1992. The Convention entered into force on 25 March 1998. It has been ratified by Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, Netherlands, Norway, Portugal, Sweden, Switzerland and the United Kingdom and approved by the European Union and Spain.

### Convention OSPAR

La Convention pour la protection du milieu marin de l'Atlantique du Nord-Est, dite Convention OSPAR, a été ouverte à la signature à la réunion ministérielle des anciennes Commissions d'Oslo et de Paris, à Paris le 22 septembre 1992. La Convention est entrée en vigueur le 25 mars 1998. La Convention a été ratifiée par l'Allemagne, la Belgique, le Danemark, la Finlande, la France, l'Irlande, l'Islande, le Luxembourg, la Norvège, les Pays-Bas, le Portugal, le Royaume-Uni de Grande Bretagne et d'Irlande du Nord, la Suède et la Suisse et approuvée par l'Union européenne et l'Espagne.

### Acknowledgements

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**NIBIO**

NORWEGIAN INSTITUTE OF  
BIOECONOMY RESEARCH

**Contents**

**Glossary..... 3**

**Introduction..... 5**

**Submission of RID data for 2016 ..... 7**

**Status of historical data submission ..... 8**

**Concluding remarks.....10**

**Annex I Annual Overview Tables for the reporting year 2016 (AA Tables) .....11**

**Annex IV Statistical information on river catchment areas .....18**

**Addendum:**

National 2016 RID data reports (excel and word files) <https://odims.ospar.org/>

## Glossary

<b>Catchment area</b>	The area of land delimited by watersheds draining into a body of water (river, basin, reservoir, sea).
<b>Cd</b>	Cadmium
<b>Cu</b>	Copper
<b>Direct discharges</b>	Point sources discharging directly to coastal or transitional waters.
<b>Heavy metals</b>	Five heavy metals are mandatory in the RID Programme: cadmium, copper, lead, mercury and zinc.
<b>Hg</b>	Mercury
<b>LOD</b>	Limit of Detection. The minimum concentration of a compound that can be detected.
<b>LOQ</b>	Limit of quantification. The minimum concentration of a compound that can be quantified confidently. LOQ is determined by assessing the variability (standard deviation) of replicate measurements of analytes at a concentration near the detection limit.
<b>Main river</b>	This term is on its way out of the RID Programme, as main and tributary rivers are now exchanged with the term “monitored rivers”. A main river was defined as a river that was monitored at least once a month (12 datasets) every year. Main rivers should be major load bearing rivers.
<b>Monitored area</b>	The catchment upstream of the RID river monitoring station.
<b>Monitored river</b>	All rivers that have RID water quality monitoring stations, irrespective of sampling frequency.
<b>Monitoring station</b>	The site at which water samples are collected for chemical analyses within the RID Programme.
<b>Pb</b>	Lead
<b>Riverine inputs</b>	A mass of a determinand carried to the maritime area by a watercourse (natural or man-made) per unit of time.
<b>SPM</b>	Suspended Particulate Matter
<b>Total inputs</b>	The sum of inputs as measured in the monitored rivers, and estimated from unmonitored areas and direct discharges.
<b>Total-N</b>	Total Nitrogen
<b>Total-P</b>	Total Phosphorus
<b>Tributary river</b>	This term is on its way out of the RID Programme, as main and tributary rivers are now being exchanged with the term “monitored rivers”. A tributary river

would have a separate catchment from a main river and an outlet directly to the maritime area or to a main river downstream of a river monitoring point. A tributary river should be a minor load bearing river and can be sampled at a frequency determined by each Contracting Party.

**Unmonitored area** Any land area not covered by a riverine monitoring station. This can include the part of the catchment located downstream of the riverine monitoring station and all unmonitored catchments. Unmonitored areas can have both diffuse and point sources of pollution. If point sources are discharging directly to coastal or transitional waters, they are named "direct discharges" and should be reported as such.

**Zn** Zinc

## Introduction

The Comprehensive Study on Riverine Inputs and Direct Discharges (RID; agreement 1998-5, update 2014-04)<sup>1</sup> is part of the wider Joint Assessment and Monitoring Programme of OSPAR. The purpose of the RID Study is to assess, as accurately as possible, all riverine inputs and direct discharges of selected pollutants to Convention waters on an annual basis. The OSPAR Convention area is divided into five main regions (Figure 1; Table 1).

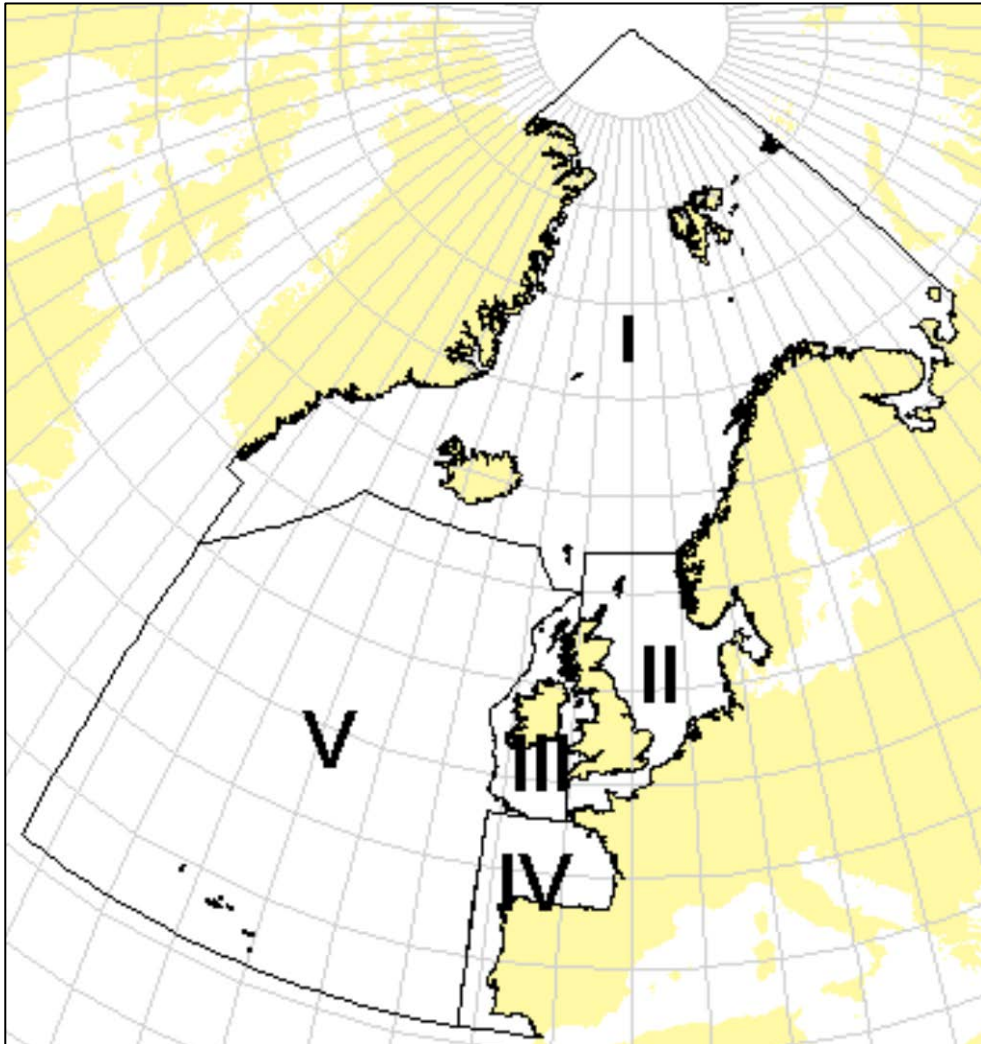


Figure 1. OSPAR Maritime Area and Regions. I: Arctic Waters, II: Greater North Sea, III: Celtic Seas, IV: Bay of Biscay and V: Wider Atlantic.

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<sup>1</sup> At its Tenth Meeting (Lisbon, 1988) the Paris Commission<sup>1</sup> (PARCOM) adopted the Principles of the Comprehensive Study on Riverine Inputs (PARCOM 10/10/1, § 4.25 (e)). The RID Principles were reviewed in 1998, 2005, and 2014 (agreement 2014-04).

Table 1. Assignment of countries and sea areas to OSPAR Regions.

Country / Sea Area	OSPAR Region	Country / Sea Area	OSPAR Region
Belgium		Norway	
- North Sea (BE)	II	- Norwegian Sea (NO)	I
Denmark		- Barents Sea (NO)	I
- Skagerrak (DK)	II	- Skagerrak (NO)	II
- Kattegat (DK)	II	- North Sea (NO)	II
- North Sea (DK)	II	Portugal	
France		- Bay of Biscay and Iberian Coast (PO)	IV
- Channel	II	Spain	
- Atlantic	IV	- Atlantic (ESP)	IV
Germany		Sweden	
- North Sea (GER)	II	- Kattegat (SWE)	II
Iceland		- Skagerrak (SWE)	II
- Atlantic	I	UK	
Ireland		- North Sea (North)	II
- Irish Sea	III	- North Sea (South)	II
- Celtic Sea	III	- Channel	II
- Atlantic	III	- Irish Sea	III
Netherlands		- Celtic Sea	III
- North Sea (NL)	II	- Atlantic	III

## Submission of RID data for 2016

Table 2 provides an overview of the status of 2016 RID data submitted by Contracting Parties by 13 February 2018. All Contracting Parties except Denmark had a deadline of 1 November 2017 for submitting data and text reports. Denmark had a deadline of 1 December 2017.

Table 2. Overview of submitted 2016 RID information by Contracting Parties (green colour: submitted)

Contracting Party	RID 2016 written report submitted	RID 2016 Data submitted	1990-2016 Charts submitted	RID 2016 Data validated
Belgium	X	X	X	X
Denmark#				
France	X	X	X	X
Germany	X	X	*	X
Iceland	X	X	X	X
Ireland	*	X	*	X
Netherlands	X	X	*	X
Norway	X	X	X	X
Portugal				
Spain	X	X	X	Data sent for validation
Sweden	X	X	X**	X
United Kingdom ##				

# CP has notified that data will be sent after some data quality issues will be clarified nationally.

## CP has notified that data will be sent in February 2018.

\* Pending, due to the need to correct historical data.

\*\* Charts submitted, but historical data needs to be corrected and re-submitted.

Table 3. Overview of information for 2016 on inputs to the OSPAR Maritime Area reported by Contracting Parties (Green = data submitted; White = no data submitted; Grey = no data will be submitted by this Contracting Party from this source).

Contracting Party	Sewage effluents	Industrial effluents	Aquaculture discharges	Other direct discharges	Monitored rivers	Unmonitored rivers
Belgium						
Denmark						
France						
Germany						
Iceland						
Ireland						
Netherlands						
Norway						
Portugal						
Spain						
Sweden						
United Kingdom						

Overview tables 1-4 (AA-tables) for 2016 are given in Annex I.



## Status of historical data submission

In 2017, the RID Data Centre prepared excel files with data series from 1990-2015 of both riverine inputs and direct discharges. CPs were asked to update these excel files with data from 2016. The result of this exercise has been that several CPs have found missing or erroneous data in their historical databases, and many are now in the process of correcting these. An overview of the status of the historical data in the database has been provided in Table 4.

*Table 4. Overview of status of the historical data in the RID database (1990-2015).*

<b>Contracting Party</b>	<b>Status for data 1990-2015</b>	<b>Validation pending (1990-2015)</b>	<b>Other remaining tasks</b>
Belgium	All data up to and including 2015 validated and confirmed.		Belgium and the Netherlands are in discussions on how to deal with the transboundary Channel Gent-Terneuzen to Wester Scheldt.
Denmark	Data 1990-2015 re-submitted, imported and sent Denmark for validation.	Data 1990-2015 have not been validated	
France	All data up to and including 2015 validated and confirmed.		Clarifications are needed on data from 2005-2011, and for all discharge data.
Germany	All data up to and including 2015 were validated and confirmed in 2016, but new errors were discovered.		NIBIO and Germany are working to fix some discovered errors in Riverine Loads (Tables 6a,c).
Iceland	Data from 1990-2015 received, but not all of them in RID format.		Historical data needs to be transferred to the correct format; NIBIO and Iceland are in contact.
Ireland	Data from 1990-2015 are in the database but with some errors.		Ireland will re-report parts of their historical data, including runoff data.
Netherlands	All data up to and including 2015 are in the database, but with some errors.		Netherlands will resubmit some historical data.  Belgium and the Netherlands are in

<b>Contracting Party</b>	<b>Status for data 1990-2015</b>	<b>Validation pending (1990-2015)</b>	<b>Other remaining tasks</b>
			discussions on how to deal with the transboundary Channel Gent-Terneuzen to Wester Scheldt.
Norway	All data up to and including 2015 validated and confirmed.		
Spain	All data up to and including 2015 are in the database but not validated.	Data validation pending for 1990-2014.	
Sweden	All data up to and including 2015 validated and confirmed.		Sweden will resubmit some historical data (especially runoff data).
UK	Data up to and including 2015 are in the database.	UK is to validate the 2008-2011 and the 2015 data.	

In summary, not all CPs have delivered their 2016 data, and many CPs have discovered errors in their historical data. Possible sources of newly discovered data errors in the RID database are given in Table 5.

Table 5. Possible sources of data errors in the RID database.

<b>Problem</b>	<b>Possible reason</b>	<b>Solution</b>
<b>Missing data</b>	Data do not exist.	If possible, fill in the data gaps using interpolation or model estimation techniques.
	Data are reported, but are not summed up properly in the summary fields in the database.	NIBIO will work with each CP to figure out how these sums should be calculated and put into the database.
<b>Data errors</b>	A value of zero (0) is given, instead of missing data.	Contact NIBIO to correct these types of errors in the database. Meanwhile, NIBIO will try and remove the obvious errors of this kind.
	Unit errors.	Re-report the relevant table(s) with correct data
	Non-consecutive data series due to changes in measurement methods or detection limits.	<ul style="list-style-type: none"> <li>• Report the changes to NIBIO</li> <li>• Make efforts to find some calculation (conversion) methods to get consecutive time series, and re-report if possible.</li> </ul>
	Non-consecutive data series due to other reasons.	If possible, fill in the data gaps using interpolation or model estimation techniques; and re-report the data.

### Concluding remarks

The historical data for most of the CPs need corrections. This work is underway, and will hopefully give a better basis for more meaningful discussions on trends in nutrient and metal inputs in the future.

**Annex I      Annual Overview Tables for the reporting year 2016 (AA Tables)**

- AA Table 1a    Information Received on Inputs to the Maritime Area of the OSPAR Convention in 2016
- AA Table 1b    Determinands Reported by Contracting Parties in 2016
- AA Table 2     Direct Discharges to the Maritime Area of the OSPAR Convention in 2016 by Country
- AA Table 3     Riverine Inputs to the Maritime Area of the OSPAR Convention in 2016 by Country
- AA Table 4a    Sum of Direct (Table 2) and Riverine (Table 3) Inputs to the Maritime Area of the OSPAR Convention in 2016 by Country
- AA Table 4b    Sum of Direct and Riverine Inputs to the Maritime Area of the OSPAR Convention in 2016 by Sea Area

**AA Table 1a. 2016**
**Information Received on Inputs to the Maritime Area of the OSPAR Convention in 2016**

Country	Direct Discharges				Coastal Areas	Riverine Inputs	
	Sewage Effluents	Industrial Effluents	Aquaculture Discharges	Other Discharges		Monitored Rivers	Unmonitored Areas
Belgium							
- North Sea (BE)	NA	NA	NA	NA		+	NA
Denmark							
- Skagerrak (DK)	NI	NI	NI	NI		NI	NI
- Kattegat (DK)	NI	NI	NI	NI		NI	NI
- North Sea (DK)	NI	NI	NI	NI		NI	NI
France							
- Channel	NI	NI	NI	NI		+	+
- Atlantic	NI	NI	NI	NI		+	+
Germany							
- North Sea (GER)	+	+	+	+		+	+
Iceland							
- Atlantic	NI	NI	NI	NI		+	NI
Ireland							
- Irish Sea	+	+	+	NI		+	+
- Celtic Sea	+	+	+	NI		+	+
- Atlantic	+	+	+	NI		+	+
Netherlands							
- North Sea (NL)	NI	NI	NI	NI		+	NI
Norway							
- Norwegian Sea (NO)	+	+	+	NI		+	+
- Barents Sea (NO)	+	+	+	NI		+	+
- Skagerrak (NO)	+	+	+	NI		+	+
- North Sea (NO)	+	+	+	NI		+	+
Portugal							
- Bay of Biscay and Iberian Coast (PC)	NI	NI	NI	NI		NI	NI
Spain							
- Atlantic (ESP)	+	+	+	NI		+	NI
Sweden							
- Kattegat (SWE)	+	+	NI	NI		+	+
- Skagerrak (SWE)	+	+	NI	NI		+	+
UK							
- North Sea (North)	NI	NI	NI	NI		NI	NI
- North Sea (South)	NI	NI	NI	NI		NI	NI
- Channel	NI	NI	NI	NI		NI	NI
- Irish Sea	NI	NI	NI	NI		NI	NI
- Celtic Sea	NI	NI	NI	NI		NI	NI
- Atlantic	NI	NI	NI	NI		NI	NI

+ = Information available

NI = No information

NA = Not applicable

**AA Table 1b. 2016**
**Determinands reported by Contracting Parties in 2016**

Country	Determinands														others
	Cd	Hg	Cu	Pb	Zn	g-HCH	PCBs	NH4-N	NO3-N	PO4-P	N-Total	P-Total	SPM		
<b>Belgium</b>															
- direct inputs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
- riverine inputs	+	+	+	+	+	NA	NA	+	+	+	+	+	+	+	
<b>Denmark</b>															
- direct inputs	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
- riverine inputs	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
<b>France</b>															
- direct inputs	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
- riverine inputs	R+(4)	R+(4)	R+(3)	R+(4)	R+(4)	R+(4)	NI	R+(3)	R+(3)	R+(3)	R+(4)	R+(3)	R+(3)		
<b>Germany</b>															
- direct inputs	R+	R+	R+	R+	R+	R+	R+	R+	R+	+	+	R+	+		
- riverine inputs	R+(4)	R+(3)	+(3)	R+(3)	+(3)	R+(4)	R+(4)	+(3)	+(3)	R+(3)	+(3)	+(3)	+(3)	R+(4)	
<b>Iceland</b>															
- direct inputs	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
- riverine inputs	+	+	+	+	+	NI	NI	NI	+	+	+	+	+	NI	
<b>Ireland</b>															
- direct inputs	+	+	+	+	+	NI	NI	NI	NI	NI	+	+	+	+	
- riverine inputs	+(4)	+(4)	+(4)	+(4)	+(3)	NI	NI	+(4)	+(3)	+(4)	+(3)	+(3)	+(3)	+(4)	
<b>Netherlands</b>															
- direct inputs	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
- riverine inputs	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Mineral Oil,PAK6
<b>Norway</b>															
- direct inputs	+	+	+	+	+	NI	NI	+	+	+	+	+	+	+	As,T total Cr,Ni,TOC
- riverine inputs	+(3)	+(4)	+(3)	+(3)	+(3)	NI	NI	+(3)	+(3)	+(4)	+(3)	+(3)	+(3)	+(3)	As,T total Cr,Ni,TOC
<b>Portugal</b>															
- direct inputs	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
- riverine inputs	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
<b>Spain</b>															
- direct inputs	R+	R+	R+	R+	R+	+	+	R+	R+	R+	R+	R+	R+	R+	
- riverine inputs	R+(4)	R+(4)	R+(4)	R+(4)	R+(4)	R+(4)	R+(4)	R+(4)	R+(3)	R+(4)	R+(4)	R+(4)	R+(4)	R+(4)	
<b>Sweden</b>															
- direct inputs	+	+	+	+	+	NI	NI	+	NI	NI	+	+	+	NI	
- riverine inputs	+(4)	+(4)	+(4)	+(4)	+(4)	NI	NI	+(4)	+(4)	+(4)	+(4)	+(4)	+(4)	NI	
<b>UK</b>															
- direct inputs	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
- riverine inputs	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	

+ : Data provided

R: Estimate given as a range

(3) 70 % of measurements above detection limit

(4) Less than 70 % of measurements above detection limit

NI: No information

NA: Not applicable

**AA Table 2. 2016**

**Direct Discharges to the Maritime Area of the OSPAR Convention in 2016 by Country**

Country	Region	Cd [t/a]	Hg [t/a]	Cu [t/a]	Pb [t/a]	Zn [t/a]	g-HCH [kg/a]	PCBs [kg/a]	NH4-N [kt/a]	NO3-N [kt/a]	PO4-P [kt/a]	N-Total [kt/a]	P-Total [kt/a]	SPM [kt/a]
Belgium	North Sea (BE) lower upper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Denmark	Kattegat (DK) lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	North Sea (DK) lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Skagerrak (DK) lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
France	Atlantic lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	Channel lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Germany	North Sea (GER) lower upper	1E-04	1E-04	1.591	0.711	8.086	0.011	0.030	1.743	1.747	0.065	3.554	0.372	1.535
		0.072	0.041	2.250	1.484	13.144	0.271	1.840	1.744	1.747	0.065	3.554	0.372	1.535
Iceland	Atlantic lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Ireland	Atlantic lower upper	6E-05	1E-05	0.002	2E-04	9E-04	NI	NI	NI	NI	NI	0.604	0.035	0.977
		6E-05	1E-05	0.002	2E-04	9E-04	NI	NI	NI	NI	NI	0.604	0.035	0.977
	Celtic Sea lower upper	0.011	0.051	1.012	0.256	4.292	NI	NI	NI	NI	NI	1.613	0.514	2.077
		0.011	0.051	1.012	0.256	4.292	NI	NI	NI	NI	NI	1.613	0.514	2.077
Irish Sea lower upper	0.013	1E-03	2.485	0.599	9.329	NI	NI	NI	NI	NI	4.486	0.681	8.648	
	0.013	1E-03	2.485	0.599	9.329	NI	NI	NI	NI	NI	4.486	0.681	8.648	
Netherlands	North Sea (NL) lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Norway	Barents Sea (N) lower upper	6E-06	2E-06	270.8	2E-04	8E-04	NI	NI	12.295	1.621	1.790	15.450	2.618	5.089
		6E-06	2E-06	270.8	2E-04	8E-04	NI	NI	12.295	1.621	1.790	15.450	2.618	5.089
	North Sea (NO) lower upper	0.058	0.004	375.9	0.641	7.902	NI	NI	18.743	2.358	2.643	23.687	3.900	8.240
		0.058	0.004	375.9	0.641	7.902	NI	NI	18.743	2.358	2.643	23.687	3.900	8.240
	Norwegian Sea lower upper	0.007	9E-04	442.9	0.132	1.723	NI	NI	21.230	2.717	3.041	26.776	4.472	3.096
		0.007	9E-04	442.9	0.132	1.723	NI	NI	21.230	2.717	3.041	26.776	4.472	3.096
Skagerrak (NO) lower upper	0.034	0.008	7.767	0.431	15.06	NI	NI	5.061	0.339	0.099	6.747	0.165	1.111	
	0.034	0.008	7.767	0.431	15.06	NI	NI	5.061	0.339	0.099	6.747	0.165	1.111	
Portugal	Bay of Biscay an lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Spain	Atlantic (ESP) lower upper	0.433	0.553	4.928	5.087	19.12	0.044	0	6.1238	1.101	0.766	11.656	1.2437	212.9
		1.944	0.728	16.02	6.707	78.52	0.387	0.893	6.7871	1.2818	1.3203	12.2271	1.2529	224.2
Sweden	Kattegat (SWE) lower upper	0.036	0.003	1.364	0.084	5.880	NI	NI	0.883	NI	NI	1.471	0.048	NI
		0.036	0.003	1.364	0.084	5.880	NI	NI	0.883	NI	NI	1.471	0.048	NI
	Skagerrak (SWE) lower upper	0.001	0.001	0.098	0.005	0.561	NI	NI	0.138	NI	NI	0.287	0.008	NI
		0.001	0.001	0.098	0.005	0.561	NI	NI	0.138	NI	NI	0.287	0.008	NI
UK	Atlantic lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	Celtic Sea lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	Channel lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	Irish Sea lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	North Sea (North) lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	North Sea (South) lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI

AA Table 3. 2016

Riverine Inputs to the Maritime Area of the OSPAR Convention in 2016 by Country

Country	Sea Area	Cd [t/a]	Hg [t/a]	Cu [t/a]	Pb [t/a]	Zn [t/a]	g-HCH [kg/a]	PCBs [kg/a]	NH4-N [kt/a]	NO3-N [kt/a]	PO4-P [kt/a]	N-Total [kt/a]	P-Total [kt/a]	SPM [kt/a]
Belgium	North Sea (BE) lower upper	0.45	0.04	13.73	2.37	56.04	NA	NA	1.00	20.73	0.91	25.51	1.91	218.7
		0.45	0.04	13.73	2.37	56.04	NA	NA	1.00	20.73	0.91	25.51	1.91	218.7
Denmark	Kattegat (DK) lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	North Sea (DK) lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Skagerrak (DK) lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
France	Atlantic lower upper	0.44	0.01	85.96	4.68	108.05	0.00	0.00	3.29	256.95	3.57	35.39	5.00	1521.1
		1.37	0.28	87.67	10.38	144.49	0.31	0.00	3.35	256.95	3.63	55.62	5.00	1529.1
	Channel lower upper	0.61	0.00	50.06	0.00	227.93	0.00	NI	2.91	168.75	2.23	20.22	4.05	993.5
		0.76	0.07	50.06	24.57	229.08	0.05	NI	2.91	168.75	2.23	25.81	4.05	993.8
Germany	North Sea (GER) lower upper	2.71	0.99	134.35	124.58	786.37	9.40	9.89	4.40	108.72	1.56	133.12	5.90	1280.0
		3.57	0.99	134.35	127.07	786.37	31.51	29.06	4.40	108.72	1.60	133.12	5.90	1496.2
Iceland	Atlantic lower upper	0.03	0.02	5.51	0.42	13.16	NI	NI	NI	0.30	0.44	1.07	0.34	NI
		0.03	0.02	5.51	0.42	13.16	NI	NI	NI	0.30	0.44	1.07	0.34	NI
Ireland	Atlantic lower upper	0.12	0.12	17.54	0.21	70.46	NI	NI	0.34	5.86	0.28	14.14	0.56	64.7
		0.42	0.42	26.73	18.56	73.30	NI	NI	0.63	6.76	0.37	14.88	0.59	116.4
	Celtic Sea lower upper	0.42	0.52	46.21	2.75	167.01	NI	NI	0.97	57.25	0.82	74.97	1.74	198.6
		0.85	1.06	56.63	32.65	167.51	NI	NI	1.17	57.31	0.87	75.12	1.75	274.7
	Irish Sea lower upper	0.40	0.00	14.58	6.13	94.75	NI	NI	0.18	14.49	0.17	18.13	0.25	35.2
		0.43	0.12	15.00	10.93	94.85	NI	NI	0.22	14.49	0.19	18.13	0.25	48.1
Netherlands	North Sea (NL) lower upper	5.09	0.89	248.98	138.98	1236.00	15.27	40.56	7.16	189.09	4.47	254.80	7.44	1892.3
		5.24	0.89	248.98	138.98	1240.00	15.48	48.50	7.17	189.26	4.47	256.63	7.46	1985.7
Norway	Barents Sea (N) lower upper	0.14	0.01	40.66	1.28	22.85	NI	NI	0.52	3.97	0.09	12.72	0.30	90.0
		0.14	0.01	40.66	1.28	22.85	NI	NI	0.52	3.97	0.09	12.72	0.30	90.0
	North Sea (NO) lower upper	0.50	0.03	22.52	8.55	121.36	NI	NI	1.15	16.22	0.17	27.21	0.52	96.6
		0.50	0.03	22.52	8.55	121.36	NI	NI	1.15	16.22	0.17	27.21	0.52	96.6
	Norwegian Sea (lower upper)	0.22	0.03	32.78	3.31	60.93	NI	NI	0.89	10.64	0.19	20.35	0.53	145.9
		0.22	0.03	32.78	3.31	60.93	NI	NI	0.89	10.64	0.19	20.35	0.53	145.9
Skagerrak (NO) lower upper	0.90	0.05	57.84	25.16	345.98	NI	NI	0.93	16.41	0.37	29.70	0.77	408.9	
	0.90	0.05	57.84	25.16	345.98	NI	NI	0.93	16.41	0.37	29.70	0.77	408.9	
Portugal	Bay of Biscay an lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Spain	Atlantic (ESP) lower upper	18.62	0.01	2233.72	39.09	4672.15	7.48	0.00	10.93	34.86	1.19	18.90	2.48	90.6
		22.91	2.63	2303.98	66.61	4818.40	117.03	507.55	11.22	35.20	1.54	21.23	3.14	97.8
Sweden	Kattegat (SWE) lower upper	0.23	0.04	23.70	6.85	66.30	NI	NI	0.65	12.24	0.10	18.94	0.43	NI
		0.23	0.04	23.70	6.85	66.30	NI	NI	0.65	12.24	0.10	18.94	0.43	NI
	Skagerrak (SWE) lower upper	0.04	0.01	2.63	0.93	9.72	NI	NI	0.07	0.84	0.02	1.69	0.08	NI
		0.04	0.01	2.63	0.93	9.72	NI	NI	0.07	0.84	0.02	1.69	0.08	NI
UK	Atlantic lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	Celtic Sea lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	Channel lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	Irish Sea lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	North Sea (North) lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	North Sea (South) lower upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI

NI: No information  
 NA: Not applicable



**AA Table 4a. 2016**

**Sum of Direct (Table 2) and Riverine (Table 3) Inputs to the Maritime area of the OSPAR Convention in 2016 by Country**

Sea Area	Region	Cd [t/a]	Hg [t/a]	Cu [t/a]	Pb [t/a]	Zn [t/a]	g-HCH [kg/a]	PCBs [kg/a]	NH4-N [kt/a]	NO3-N [kt/a]	PO4-P [kt/a]	N-Total [kt/a]	P-Total [kt/a]	SPM [kt/a]	
Belgium	North Sea (BE)	lower	0.45	0.04	13.73	2.37	56.04	NA	NA	1.00	20.73	0.91	25.51	1.91	218.68
		upper	0.45	0.04	13.73	2.37	56.04	NA	NA	1.00	20.73	0.91	25.51	1.91	218.68
Denmark	Kattegat (DK)	lower	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
	North Sea (DK)	lower	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
		upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Skagerrak (DK)	lower	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
	upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
France	Atlantic	lower	0.44	0.01	85.96	4.68	108.05	0.00	0.00	3.29	256.95	3.57	35.39	5.00	1521.08
		upper	1.37	0.28	87.67	10.38	144.49	0.31	0.00	3.35	256.95	3.63	55.62	5.00	1529.11
	Channel	lower	0.61	0.00	50.06	0.00	227.93	0.00	NI	2.91	168.75	2.23	20.22	4.05	993.52
		upper	0.76	0.07	50.06	24.57	229.08	0.05	NI	2.91	168.75	2.23	25.81	4.05	993.85
Germany	North Sea (GER)	lower	2.71	0.99	135.94	125.29	794.46	9.41	9.92	6.14	110.46	1.63	136.68	6.28	1281.54
		upper	3.64	1.03	136.60	128.55	799.51	31.78	30.90	6.14	110.46	1.66	136.68	6.28	1497.69
Iceland	Atlantic	lower	0.03	0.02	5.51	0.42	13.16	NI	NI	NI	0.30	0.44	1.07	0.34	NI
		upper	0.03	0.02	5.51	0.42	13.16	NI	NI	NI	0.30	0.44	1.07	0.34	NI
Ireland	Atlantic	lower	0.12	0.12	17.54	0.21	70.47	NI	NI	0.34	5.86	0.28	14.74	0.60	65.69
		upper	0.42	0.42	26.73	18.56	73.30	NI	NI	0.63	6.76	0.37	15.48	0.62	117.36
	Celtic Sea	lower	0.43	0.57	47.22	3.01	171.30	NI	NI	0.97	57.25	0.82	76.58	2.26	200.67
		upper	0.86	1.11	57.64	32.90	171.81	NI	NI	1.17	57.31	0.87	76.73	2.27	276.75
Irish Sea	lower	0.41	0.00	17.06	6.73	104.08	NI	NI	0.18	14.49	0.17	22.62	0.93	43.81	
	upper	0.44	0.12	17.48	11.53	104.18	NI	NI	0.22	14.49	0.19	22.62	0.93	56.78	
Netherlands	North Sea (NL)	lower	5.09	0.89	248.98	138.98	1236.00	15.27	40.56	7.16	189.09	4.47	254.80	7.44	1892.31
		upper	5.24	0.89	248.98	138.98	1240.00	15.48	48.50	7.17	189.26	4.47	256.63	7.46	1985.68
Norway	Barents Sea (NC)	lower	0.14	0.01	311.50	1.28	22.86	NI	NI	12.81	5.59	1.88	28.17	2.92	95.10
		upper	0.14	0.01	311.50	1.28	22.86	NI	NI	12.81	5.59	1.88	28.17	2.92	95.10
	North Sea (NO)	lower	0.56	0.04	398.45	9.19	129.26	NI	NI	19.89	18.58	2.81	50.90	4.42	104.88
		upper	0.56	0.04	398.45	9.19	129.26	NI	NI	19.89	18.58	2.81	50.90	4.42	104.88
	Norwegian Sea	lower	0.22	0.03	475.71	3.44	62.65	NI	NI	22.12	13.35	3.23	47.13	5.01	149.04
		upper	0.22	0.03	475.71	3.44	62.65	NI	NI	22.12	13.35	3.23	47.13	5.01	149.04
Skagerrak (NO)	lower	0.94	0.06	65.61	25.59	361.05	NI	NI	5.99	16.75	0.47	36.45	0.93	409.99	
	upper	0.94	0.06	65.61	25.59	361.05	NI	NI	5.99	16.75	0.47	36.45	0.93	409.99	
Portugal	Bay of Biscay an	lower	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
		upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
Spain	Atlantic (ESP)	lower	19.05	0.56	2238.65	44.18	4691.27	7.52	0.00	17.05	35.97	1.95	30.55	3.73	303.5
		upper	24.86	3.36	2320.00	73.32	4896.92	117.41	508.44	18.01	36.48	2.86	33.45	4.39	322.0
Sweden	Kattegat (SWE)	lower	0.26	0.05	25.06	6.93	72.18	NI	NI	1.53	12.24	0.10	20.41	0.47	NI
		upper	0.26	0.05	25.06	6.93	72.18	NI	NI	1.53	12.24	0.10	20.41	0.47	NI
	Skagerrak (SWE)	lower	0.04	0.01	2.73	0.93	10.28	NI	NI	0.21	0.84	0.02	1.98	0.09	NI
		upper	0.04	0.01	2.73	0.93	10.28	NI	NI	0.21	0.84	0.02	1.98	0.09	NI
UK	Atlantic	lower	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
		upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
	Celtic Sea	lower	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
		upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
	Channel	lower	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
		upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
	Irish Sea	lower	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
		upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
	North Sea (North)	lower	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
		upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	
North Sea (South)	lower	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI		
	upper	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI		

NI: No information  
 NA: Not applicable

## AA Table 4b. 2016

## Sum of Direct and Riverine Inputs to the Maritime area of the OSPAR Convention in 2016 by Sea Area

Sea Area		Cd [t/a]	Hg [t/a]	Cu [t/a]	Pb [t/a]	Zn [t/a]	g-HCH [kg/a]	PCBs [kg/a]	NH4-N [kt/a]	NO3-N [kt/a]	PO4-P [kt/a]	N-Total [kt/a]	P-Total [kt/a]	SPM [kt/a]
Arctic Ocean	lower	0.1	0.0	311.5	1.3	22.9	NI	NI	12.8	5.6	1.9	28.2	2.9	95.1
	upper	0.1	0.0	311.5	1.3	22.9	NI	NI	12.8	5.6	1.9	28.2	2.9	95.1
Atlantic Ocean	lower	0.1	0.1	17.5	0.2	70.5	NI	NI	0.3	5.9	0.3	14.7	0.6	65.7
	upper	0.4	0.4	26.7	18.6	73.3	NI	NI	0.6	6.8	0.4	15.5	0.6	117.4
Bay of Biscay and Iberian Coast	lower	19.5	0.6	2324.6	48.9	4799.3	7.5	0.0	20.3	292.9	5.5	65.9	8.7	1824.6
	upper	26.2	3.6	2407.7	83.7	5041.4	117.7	508.4	21.4	293.4	6.5	89.1	9.4	1851.1
Celtic Sea	lower	0.4	0.6	47.2	3.0	171.3	NI	NI	1.0	57.2	0.8	76.8	2.0	200.7
	upper	0.9	1.1	57.6	32.9	171.8	NI	NI	1.2	57.3	0.9	77.0	2.0	276.7
Channel	lower	0.6	0.0	50.1	0.0	227.9	0.0	NI	2.9	168.8	2.2	20.2	4.0	993.5
	upper	0.8	0.1	50.1	24.6	229.1	0.1	NI	2.9	168.8	2.2	25.8	4.0	993.8
Irish Sea	lower	0.4	0.0	17.1	6.7	104.1	NI	NI	0.2	14.5	0.2	22.6	0.9	43.8
	upper	0.4	0.1	17.5	11.5	104.2	NI	NI	0.2	14.5	0.2	22.6	0.9	56.8
Kattegat	lower	0.3	0.0	25.1	6.9	72.2	NI	NI	1.5	12.2	0.1	20.4	0.5	NI
	upper	0.3	0.0	25.1	6.9	72.2	NI	NI	1.5	12.2	0.1	20.4	0.5	NI
North Sea (main body)	lower	8.8	2.0	797.1	275.8	2215.8	24.7	50.5	34.2	338.9	9.8	467.9	20.0	3497.4
	upper	9.9	2.0	797.8	279.1	2224.8	47.3	79.4	34.2	339.0	9.9	469.7	20.1	3806.9
Norwegian Sea	lower	0.2	0.0	475.7	3.4	62.7	NI	NI	22.1	13.4	3.2	47.1	5.0	149.0
	upper	0.2	0.0	475.7	3.4	62.7	NI	NI	22.1	13.4	3.2	47.1	5.0	149.0
Skagerrak	lower	1.0	0.1	68.3	26.5	371.3	NI	NI	6.2	17.6	0.5	38.4	1.0	410.0
	upper	1.0	0.1	68.3	26.5	371.3	NI	NI	6.2	17.6	0.5	38.4	1.0	410.0

NI: No information

**Annex IV Statistical information on river catchment areas**
**Statistical Information on River Catchment Areas**

River	Catchment area [km <sup>2</sup> ]	Countries	Share in catchment area		Population (1990)		LTA* [1000 m <sup>3</sup> /d]	LTA-period [a]	
			[km <sup>2</sup> ]	[%]	[10E6]	[%]			
<b>Statistical Information provided by Belgium:</b>									
Coastal Area	<b>2675</b>								
Western	1689	<i>Belgium</i>	>1082	NI	~0.497	NI	2367	NI	
Middle	499	<i>France</i>	NI	NI	>0,305	NI	708		
Eastern	487	<i>Belgium</i>			0.014		501		
Eastern		<i>Belgium</i>			0.177		1158		
Scheldt basin									
Scheldt	<b>22004</b>								
		<i>Belgium (1)</i>	13324	61	-10		11139	1949-2008	
		<i>France</i>	6680	30	6.9				
		<i>Netherlands (1)</i>	2000	9	-2,7				
					0.4				
		<i>(1) Ghent-Terneuzen canal comprised</i>							
Ghent-Terneuzen canal	<b>NI</b>						<b>1 885</b>	1991-2008	
		<i>Belgium</i>	NI		NI				
		<i>Netherlands</i>	NI		NI				
<b>Statistical Information provided by Denmark:</b>									
Vid å	248.3	<i>DK</i>	248	81			300.5	78-07	
Brøns å	94.1	<i>DK</i>	94	100		100	107.0	74-07	
Ribe å	675	<i>DK</i>	675	100		100	756.6	33-07	
Kongeaen	426.6	<i>DK</i>	427	100		100	627.0	90-07	
Sneum å	223	<i>DK</i>	223	100		100	283.1	66-07	
Varde å	815	<i>DK</i>	815	100		100	1048.8	69-07	
Skjern å	1558.4	<i>DK</i>	1558	100		100	2108.2	74-07	
Stor å	1096.7	<i>DK</i>	1097	100		100	1427.3	71-07	
Brede å	290	<i>DK</i>	290	100		100	311.0	22-07	
Omme å	612	<i>DK</i>	612	100		100	743.1	83-07	
Grøn å	563	<i>DK</i>	563	100		100	606.2	59-07	
Total	<b>10809</b>	<b>=Total of Danish rivers discharging to the North Sea</b>						<b>8230</b>	<b>71-90</b>
Liver å	249.8	<i>DK</i>	250	100		100	226.4	89-07	
Uggerby å	347.5	<i>DK</i>	348	100		100	351.3	89-07	
	<b>1097</b>	<b>=Total of Danish rivers discharging to the Skagerrak</b>						<b>863</b>	<b>71-90</b>
Karup å	626.8	<i>DK</i>	527	100		100	635.2	86-07	
Jordbro å	110.9	<i>DK</i>	111	100		100	110.7	80-07	
Skals å	556.4	<i>DK</i>	556	100		100	389.7	73-07	
Simmersted å	214.9	<i>DK</i>	215	100		100	207.6	92-07	
Elling å	132.2	<i>DK</i>	132	100		100	123.2	89-07	
Voer å	238.7	<i>DK</i>	239	100		100	247.6	89-07	
Ger å	153.8	<i>DK</i>	154	100		100	149.6	85-07	
Lindeborg å	317.8	<i>DK</i>	318	100		100	310.3	83-07	
Haslevgard å	75	<i>DK</i>	75	100		100	62.3	89-07	
Kastbjerg å	96.3	<i>DK</i>	96	100		100	70.1	76-07	
Guden å	2602.9	<i>DK</i>	2 603	100		100	2837.8	78-07	
Ry å	285	<i>DK</i>	285	100		100	264.7	72-07	
	<b>15828</b>	<b>=Total of Danish rivers discharging to the Kattegat</b>						<b>5284</b>	<b>71-90</b>

River	Catchment area [km <sup>2</sup> ]	Countries	Share in catchment area		Population (1990)		LTA*	LTA-period
			[km <sup>2</sup> ]	[%]	[10E6]	[%]	[1000 m <sup>3</sup> /d]	[a]
<b>Statistical Information provided by France:</b>								
Coastal area	2308	France		100	0.61	100	2764	1989 - 2006
Canche	3895	France		100	0.38	100	4579	1961 - 2006
Somme	5916	France		100	0.59	100	3197	1963 - 2006
Béthune et Bresle	2153	France		100	0.16	100	2074	1998 - 2006
Saane	1718	France		100	0.16	100	2938	1996 - 2006
Seine	64953	France		100	13.94	100	44842	1974 - 2006
Andelle	789	France		100	0.05	100	691	1972 - 2006
Eure	6023	France		100	0.60	100	2246	1971 - 2006
Coastal area	2439	France		100	0.93	100	1599	1989 - 2006
Risle	2545	France		100	0.16	100	1642	1976 - 2006
Dives	1815	France		100	0.11	100	1296	1968 - 2006
Douve	1474	France		100	0.08	100	625	1989 - 2006
Orne	2976	France		100	0.40	100	2506	1984 - 2006
Seulles	547	France		100	0.06	100	346	1970 - 2006
Touques	1311	France		100	0.10	100	1037	1981 - 2006
Vire	2077	France		100	0.15	100	2246	1993 - 2006
Coastal area	1302	France		100	0.16	100	1174	1989 - 2006
Sélune et Sée	1623	France		100	0.09	100	1987	1994 - 2006
Sienne	1135	France		100	0.09	100	1328	1989 - 2006
Aulne	4312	France		100	0.52	100	6653	1969 - 2006
Rance et Couesnon	2848	France		100	0.27	100	2160	1983 - 2006
Coastal area	4961	France		100	0.49	100	3654	1989 - 2006
	<b>119122</b>	=Total of rivers discharging in ZONE II			20.10		91 582	
Blavet et Scorff	4649	France		100	0.50	100	5702	1982 - 2006
Coastal area	2868	France		100	0.32	100	4558	1989 - 2006
Vilaine	10144	France		100	0.90	100	5443	2001 - 2006
Coastal area	3636	France		100	0.82	100	2847	1989 - 2006
Loire	110178	France		100	6.67	100	73526	1868 - 2006
Sèvre Nantaise	4664	France		100	0.52	100	4234	1993 - 2006
Lay	4522	France		100	0.39	100	3456	1971 - 2006
Sèvre Niortaise	4363	France		100	0.42	100	4752	1992 - 2006
Coastal area	291	France		100	0.02	100	239	1989 - 2006
Boutonne	2141	France		100	0.14	100	1754	1989 - 2006
Charente	7526	France		100	0.43	100	5357	1979 - 2006
Coastal area	1172	France		100	0.09	100	446	1989 - 2006
Seudre	988	France		100	0.06	100	432	1971 - 2006
Eyre	2036	France		100	0.03	100	1814	1967 - 2006
Coastal area	2810	France		100	0.10	100	2264	1989 - 2006
Dordogne	14605	France		100	0.55	100	21859	1997 - 2006
Isle	8472	France		100	0.40	100	6912	1971 - 2006
Coastal area	870	France		100	0.09	100	647	1989 - 2006
Dropt	2672	France		100	0.21	100	1989	1989 - 2006
Garonne	38227	France		100	2.24	100	40003	1966 - 2006
Lot	11541	France		100	0.35	100	12614	2000 - 2006
Coastal area	3875	France		100	0.75	100	10983	1989 - 2006
Coastal area	3105	France		100	0.15	100	2501	1989 - 2006
Adour	7977	France		100	0.37	100	7690	1920 - 2006
Bidouze	1041	France		100	0.04	100	938	1989 - 2006
Gaves réunis	5504	France		100	0.32	100	17453	1925 - 2006
Luy	1367	France		100	0.10	100	1814	1966 - 2006
Nive	1153	France		100	0.12	100	3197	1968 - 2006
Coastal area	644	France		100	0.10	100	1825	1989 - 2006
	<b>263040</b>	=total of rivers discharging in ZONE IV			17.19		247 250	
<b>Statistical Information provided by Germany:</b>								
Ems	15552	Germany	13152	85.00	3.75	85	7690	1941-2006
		Netherlands	2400	15.00	0.6	15		
Weser	46306	Germany	-	-	9.0	-	31541	1941-2003
Elbe	148268	Germany	148268	100	25.11	-	74500	1926-2003
		Czech Republic	96932	65.38	19.09	76.03		
		Austria	50176	33.84	5.97	23.78		
		Poland	920	0.62	0.05	0.20		
			240	0.16	NI	NI		
Eider	2065	Germany	-	-	0.159	-	2391	1974-2006

# OSPAR Contracting Parties' RID 2016 Data Report

River	Catchment area [km <sup>2</sup> ]	Countries	Share in catchment area		Population (1990)		LTA* [1000 m <sup>3</sup> /d]	LTA-period [a]
			[km <sup>2</sup> ]	[%]	[10E6]	[%]		
<b>Statistical Information provided by Ireland:</b>								
Boyne	2695	Ireland	-	-	NI	-	3280	1940-2006
Liffey	1256	Ireland	-	-	NI	-	1459	1900-2006
								1956-2006
Avoca	652	Ireland	-	0	NI	-	1562.112	1986-2006
Slaney	1762	Ireland	-	-	NI	-	3208.032	1990-2006
	6365	<b>=Total of main Irish rivers discharging to the Irish Sea</b>						
Barrow	3067	Ireland	-	-	NI	-	3784.32	1996-2006
Nore	2530	Ireland	-	-	NI	-	3602.016	1972-2006
Suir	3610	Ireland	-	-	NI	-	5889.024	1972-2006
								1953-2006
Blackwater	3324	Ireland	-	-	NI	-	7521.984	1955-2006
Lee	1253	Ireland	-	-	NI	-	3435.264	1957-2006
Bandon	608	Ireland	-	-	NI	-	1858	1975-2006
Deel	486	Ireland	-	-	NI	-	624.672	1982-2006
Maigue	1052	Ireland	-	-	NI	-	1513.728	1990-2006
Shannon Old Chan.	11700	Ireland	-	-	NI	-	4499.712	1990-2006
Shannon Tailrace		Ireland					13307.33	1947-2006
Fergus	1042	Ireland	-	-	NI	-	1 598	1956-2006
	28672	<b>=Total of main Irish rivers discharging to the Celtic Sea</b>						
								1973-06 excl.
Corrib	3138	Ireland	-	-	NI	-	9011.52	86-90, 92-93
Moy	2086	Ireland	-	-	NI	-	5405.184	1974-2006
Erne	4372	Ireland/UK	2572/1800	60/40	NI	-	7 333	1951-2006
	9596	<b>=Total of main Irish rivers discharging to the Atlantic</b>						
<b>Statistical Information provided by The Netherlands (with assistance from Germany and Belgium)</b>								
Rhine	185000				2) 55.6		4) 198720	1901-1995
		Switzerland	1) 28000	15	3.0	6		
		France	24000	13	3.7	7		
		Luxembourg	2500	1	0.3	1		
		Germany	105900	57	32.5	65		
		Netherlands	21000	11	10.9	21		
		Belgium	700	0				
		Austria	2500	1				
		Liechtenstein	300	0				
		Italy	100	0				
Meuse	33500				3) 7.15		5) 28080	1911-1995
		France	8500	25	0.50			
		Luxembourg	100	0	0.05			
		Belgium	13150	39	2.00			
		Germany	4300	13	1.00			
		Netherlands	7400	22	3.60			
Scheldt	22004						9331	1949-1995
		France	6680	30.00	-2.7	-27		
		Belgium	13324	61.00	6.9	69		
		Netherlands	2000	9.00	0.4	4		
Ems	15552						7690	1941-2006
		Germany	13152	85.00	3.75	85		
		Netherlands	2400	15.00	0.6	15		
1) Catchment areas rounded off to the nearest hundred km <sup>2</sup>								
2) Population Rhine catchment per country requires further analysis								
3) Population Meuse catchment: rough estimates								
4) Estimated discharge at outlet: 2,300 m <sup>3</sup> /s * 24 h/d * 3600 s/h								
5) Estimated discharge at outlet: 325 m <sup>3</sup> /s * 24 h/d * 3600 s/h								
<b>Statistical Information provided by Norway:</b>								
Glomma (1)	41918	Norway		100.00	0.62	100	61350	1961-1990
Drammenselva (2)	17034	Norway		100.00	0.2	100	28850	1961-1990
Numedalslågen (3)	5577	Norway		100.00	0.04	100	10200	1961-1990
Skienselva (4)	10772	Norway		100.00	0.11	100	23535	1961-1990
Otra (5)	3738	Norway		100.00	0.03	100	12870	1961-1990
	79039	<b>=Total of Norwegian rivers discharging to the Skagerrak</b>						
Orreelva (6)	105	Norway		100.00	0.01	100	335	1961-1990
Suldalslågen (7)	1457	Norway		100.00	0.003	100	7420	1961-1990
	1562	<b>=Total of Norwegian rivers discharging to the North Sea</b>						
Orkla (8)	3053	Norway		100.00	0.02	100	5710	1961-1990
Vefsna (9)	4122	Norway		100.00	0.01	100	15655	1961-1990
	7175	<b>=Total of Norwegian rivers discharging to the Norwegian Sea</b>						
Altaelva (10)	7373	Norway		100.00	0.005	100	7495	1961-1990
	95149	<b>Total catchment for main rivers discharging to all four regions</b>						
	126706	<b>Total catchment for tributary rivers discharging to all four regions</b>						
	221855	<b>Total catchment for monitored rivers</b>						
<b>Statistical Information provided by Portugal:</b>								
Tejo	80149	Portugal	24380	30.8	2.89	32.0	15900	50
		Spain	55769	69.2	6.14	68.0	34800	50
Douro	97600	Portugal	18600	19.1	1.76	43.5	22500	50
		Spain	79000	80.9	2.28	56.5	40900	50
Miño/Minho	17000	Portugal	900	5.3	0.07	7.9	6000	15
		Spain	16100	94.7	0.86	92.1	29000	15

River	Catchment area [km <sup>2</sup> ]	Countries	Share in catchment area		Population (1990)		LTA* [1000 m <sup>3</sup> /d]	LTA-period [a]
			[km <sup>2</sup> ]	[%]	[10E6]	[%]		
<b>Statistical Information provided by Spain:</b>								
Oyarzun	74	Spain	74	100	0.055	100	166	
Urumea	266	Spain	266	100	0.176	100	633	
Oria	860	Spain	860	100	0.020	100	740	
Cadagua		Spain						
Asua		Spain						
Galindo		Spain						
Ibaizabal		Spain						
Urola	342	Spain	342	100	0.082	100	447	
Deva	531	Spain	531	100	0.146	100	694	
Artibay	106	Spain	106	100	0.016	100	NI	
Lea	81	Spain	81	100	0.010	100	NI	
Oca	132	Spain	132	100	0.022	100	NI	
Butron	175	Spain	175	100	0.024	100	NI	
Barbadun	135	Spain	135	100	0.020	100	NI	
Nervión	1764	Spain	1764	100	0.997	100	1 105	
Pas	620	Spain	606	97				
Eo	818	Spain	715	87				
Saja	955	Spain	955	100	0.104	100	1 166	
Nalón	4866	Spain	4866	100	0.539	100	6 977	
Miera	291	Spain	291	100	0.016	100	352	
Sella	1246	Spain	1246	100	0.035	100	832	
Masma	291	Spain	291	100	0.014	100	404	1970-2005
Oro	189	Spain	189	100	0.007	100	389	1970-2005
Landro	270	Spain	270	100	0.017	100	629	1975-2005
Sor	202	Spain	202	100	0.007	100	528	1996-2005
Mera	127	Spain	127	100	0.007	100	435	1970-2005
Forcadas	68	Spain	68	100	0.000	100	183	1970-2005
Grande de Jubia	182	Spain	182	100	0.004	100	318	1970-2005
Belelle	60	Spain	60	100	0.003	100	1 484	1970-2005
Eume	470	Spain	470	100	0.013	100	1 696	1970-2005
Mandeo	457	Spain	457	100	0.039	100	771	1970-2005
Mero	345	Spain	345	100	0.042	100	456	1984-2005
Allones	516	Spain	516	100	0.049	100	988	1970-2005
Grande	283	Spain	283	100	0.002	100	647	1970-2005
Castro	140	Spain	140	100	0.004	100	167	1970-2005
Jallas	504	Spain	504	100	0.022	100	739	1970-2005
Tambre	1530	Spain	1530	100	0.059	100	3828	1994-2005
Furelos		Spain						
Deza		Spain						
Traba	122	Spain	122	100	0.004	100	316	1970-2005
Ulla	2803	Spain	2803	100	0.104	100	1337	1971-2005
	156	Spain	156	100				
Umia	440	Spain	440	100	0.052	100	846	1970-2005
Lerez	450	Spain	450	100	0.085	100	1249	1970-1999
Verdugo	334	Spain	334	100	0.021	100	484	1970-2005
Miño	17247	Spain	16347	94.8	0.881		25716	1975-95
		Portugal	900	5.2				
Duero	97670	Spain	78960	80.8	3.093			
		Portugal	18710	19.2				
Tajo	80190	Spain	55810	69.6	6.459			
		Portugal	24380	30.4				
Guadiana	67122	Spain	55597	82.8	1.800		8556	1.912 - 1.995
		Portugal	11525	17.2				
Piedras	550	Spain	550	100	0.034	100	61	
Odiel	2417	Spain	2417	100	0.211	100	1 200	1967-1995
Guadaira		Spain						
Tinto	1727	Spain	1727	100	0.090	100	178	1966-1995
Guadalquivir	63241	Spain	63241	100	4.966	100	3423	1942-88
Guadamar								
Guadalete	3360	Spain	3360	100	0.555	100	413	
<b>TOTAL</b>	<b>356726</b>	<b>Spain</b>	<b>301093</b>	<b>84.4</b>	<b>20.907</b>	<b>NI</b>	<b>70553</b>	
		<b>Portugal</b>	<b>55515</b>	<b>15.6</b>	<b>NI</b>			
		<b>TOTAL</b>	<b>356608</b>	<b>100</b>				

## OSPAR Contracting Parties' RID 2016 Data Report

River	Catchment area [km <sup>2</sup> ]	Countries	Share in catchment area		Population (1990)		LTA* [1000 m <sup>3</sup> /d]	LTA-period [a]
			[km <sup>2</sup> ]	[%]	[10E6] 2005	[%]		
<b>Statistical Information provided by Sweden:</b>								
Vege å (95)	498	Sweden	498	100	0.0430	100	440	1961-1990
Rönne å (96)	1890	Sweden	1890	100	0.0903	100	2030	1961-1990
Stensån (97)	284	Sweden	284	100	0.0065	100	350	1961-1990
Lagan (98)	6444	Sweden	6444	100	0.1181	100	7410	1961-1990
Genevadsån (99)	225	Sweden	225	100	0.0046	100	350	1961-1990
Fylleån (100)	359	Sweden	359	100	0.0092	100	650	1961-1990
Nissan (101)	2682	Sweden	2682	100	0.0834	100	3690	1961-1990
Suseån (102)	441	Sweden	441	100	0.0074	100	640	1961-1990
Åtran (103)	3343	Sweden	3343	100	0.0657	100	5070	1961-1990
Himleån (104)	214	Sweden	214	100	0.0127	100	330	1961-1990
Viskan (105)	2201	Sweden	2201	100	0.1236	100	2760	1961-1990
Rolfsån (106)	723	Sweden	723	100	0.0281	100	1030	1961-1990
Kungsbackaån (107)	310	Sweden	310	100	0.0404	100	410	1961-1990
Göta älv (108)	50230	Sweden	42780.00	85.20	0.8776	ni	50530	1961-1990
		Norway	7450.00	14.80		ni		
<b>69844</b>		<b>=Total of Swedish rivers discharging to the Kattegat</b>						
Bäveån (109)	302	Sweden	302	100	0.0226	100	350	1961-1990
Örekilsälven (110)	1327	Sweden	1327	100	0.0138	100	2050	1961-1990
Strömsån (111)	253	Sweden	253	100	0.0056	100	390	1961-1990
Enningsdalsälven (112)	704	Sweden	704	100	0.0029	100	1360	1961-1990
<b>2586</b>		<b>=Total of Swedish rivers discharging to the Skagerrak</b>						
<b>Statistical Information provided by the United Kingdom:</b>								
Ness (SC2b)	NI	-	-	-	NI	-	7 600	NI
Conon (SC2b)	NI	-	-	-	NI	-	NI	NI
Baeuly (SC2b)	NI	-	-	-	NI	-	NI	NI
Findhorn (SC2b)	NI	-	-	-	NI	-	NI	NI
Shin (SC2b)	NI	-	-	-	NI	-	NI	NI
Helmsdale (SC2b)	NI	-	-	-	NI	-	NI	NI
Naver (SC2b)	NI	-	-	-	NI	-	NI	NI
Thurso (SC2b)	NI	-	-	-	NI	-	NI	NI
Brora (SC2b)	NI	-	-	-	NI	-	NI	NI
Oykel (SC2b)	NI	-	-	-	NI	-	NI	NI
Nairn (SC2b)	NI	-	-	-	NI	-	NI	NI
Carron (Sutherland) (SC2b)	NI	-	-	-	NI	-	NI	NI
Wick (SC2b)	NI	-	-	-	NI	-	NI	NI
Halladale (SC2b)	NI	-	-	-	NI	-	NI	NI
Hope (SC2b)	NI	-	-	-	NI	-	NI	NI
Alness (SC2b)	NI	-	-	-	NI	-	NI	NI
Cassley (SC2b)	NI	-	-	-	NI	-	NI	NI
Fleet (SC2b)	NI	-	-	-	NI	-	NI	NI
Berriedale Water (Sc2b)	NI	-	-	-	NI	-	NI	NI
Borgie (SC2b)	NI	-	-	-	NI	-	NI	NI
Forss Water (SC2b)	NI	-	-	-	NI	-	NI	NI
Loch of Stenness (SC2b)	NI	-	-	-	NI	-	NI	NI
Glass (SC2b)	NI	-	-	-	NI	-	NI	NI
Strathy (Sc2b)	NI	-	-	-	NI	-	NI	NI
Mickle Burn (SC2b)	NI	-	-	-	NI	-	NI	NI
Dunbeath Water (SC2b)	NI	-	-	-	NI	-	NI	NI
Spey (SC3)	NI	-	-	-	NI	-	5 600	NI

## UK cont.

River	Catchment area [km <sup>2</sup> ]	Countries	Share in catchment area		Population (1990)		LTA* [1000 m <sup>3</sup> /d]	LTA-period [a]
			[km <sup>2</sup> ]	[%]	[10E6]	[%]		
Dee (Grampian) (SC3)	NI	-	-	-	NI	-	NI	NI
Don (SC3)	NI	-	-	-	NI	-	NI	NI
Deveron (SC3)	NI	-	-	-	NI	-	NI	NI
Ythan (SC3)	NI	-	-	-	NI	-	NI	NI
Ugie (SC3)	NI	-	-	-	NI	-	NI	NI
Bervie Water (SC3)	NI	-	-	-	NI	-	NI	NI
Lossie (SC3)	NI	-	-	-	NI	-	NI	NI
Tay (SC4)	NI	-	-	-	NI	-	14 000	NI
Earn (SC4)	NI	-	-	-	NI	-	NI	NI
North Esk (Tayside) (SC4)	NI	-	-	-	NI	-	NI	NI
South Esk (Tayside) (SC4)	NI	-	-	-	NI	-	NI	NI
Eden (SC4)	NI	-	-	-	NI	-	NI	NI
Lunan Water (SC4)	NI	-	-	-	NI	-	NI	NI
Dighty Water (SC4)	NI	-	-	-	NI	-	NI	NI
Tweed (SC5)	NI	-	-	-	NI	-	NI	NI
Forth (SC5)	NI	-	-	-	NI	-	4 300	NI
Whiteadder Water (SC5)	NI	-	-	-	NI	-	NI	NI
Leven (Fife) (SC5)	NI	-	-	-	NI	-	NI	NI
Almond (SC5)	NI	-	-	-	NI	-	NI	NI
Esk (Lothian) (SC5)	NI	-	-	-	NI	-	NI	NI
Tyne (SC5)	NI	-	-	-	NI	-	3 900	NI
Allan Water (SC5)	NI	-	-	-	NI	-	NI	NI
Devon (SC5)	NI	-	-	-	NI	-	NI	NI
Carron (Falkirk) (SC5)	NI	-	-	-	NI	-	NI	NI
Avon (SC5)	NI	-	-	-	NI	-	NI	NI
Eye Water (SC5)	NI	-	-	-	NI	-	NI	NI
Water of Leith (SC5)	NI	-	-	-	NI	-	NI	NI
Tweed (E1)	NI	-	-	-	NI	-	NI	NI
Coquet (E1)	NI	-	-	-	NI	-	NI	NI
Wansbeck (E1)	NI	-	-	-	NI	-	NI	NI
Blyth (E1)	NI	-	-	-	NI	-	NI	NI
Tyne (E2)	NI	-	-	-	NI	-	NI	NI
Derwent (E2)	NI	-	-	-	NI	-	NI	NI
Team (E2)	NI	-	-	-	NI	-	NI	NI
Wear (E3)	NI	-	-	-	NI	-	NI	NI
Skerne (E5)	NI	-	-	-	NI	-	NI	NI
Tees (E5)	NI	-	-	-	NI	-	NI	NI
<b>Tot.N.Sea (N) catch.</b>	50000						89300	1960 to 1990
Aire (E8)	NI	-	-	-	NI	-	NI	NI
Derwent (E8)	NI	-	-	-	NI	-	NI	NI
Don (E8)	NI	-	-	-	NI	-	NI	NI
Ouse (E8)	NI	-	-	-	NI	-	NI	NI
Wharfe (E8)	NI	-	-	-	NI	-	NI	NI
Ancholme (E8)	NI	-	-	-	NI	-	NI	NI
Trent (E8)	NI	-	-	-	NI	-	7800	NI
Idle (E8)	NI	-	-	-	NI	-	NI	NI
Welland (E9)	NI	-	-	-	NI	-	NI	NI
Nene (E9)	NI	-	-	-	NI	-	NI	NI
Ouse (E9)	NI	-	-	-	NI	-	NI	NI
Witham (E9)	NI	-	-	-	NI	-	NI	NI
Glan (E9)	NI	-	-	-	NI	-	NI	NI
Hundred Foot River (E9)	NI	-	-	-	NI	-	NI	NI
Ten Mile River (E9)	NI	-	-	-	NI	-	NI	NI
Bure (E10)	NI	-	-	-	NI	-	NI	NI
Wensum (E10)	NI	-	-	-	NI	-	NI	NI
Stour (E10)	NI	-	-	-	NI	-	NI	NI
Gipping (E10)	NI	-	-	-	NI	-	NI	NI
Waveney (E10)	NI	-	-	-	NI	-	NI	NI
Yare (E10)	NI	-	-	-	NI	-	NI	NI
Colne (E11)	NI	-	-	-	NI	-	NI	NI
Chalmer (E11)	NI	-	-	-	NI	-	NI	NI
Blackwater (E11)	NI	-	-	-	NI	-	NI	NI
Thames (E12)	NI	-	-	-	NI	-	6700	NI



OSPAR Contracting Parties' RID 2016 Data Report

UK Cont.

Beam (E12)	NI	-	-	-	NI	-	NI	NI
Beverley Brook (E12)	NI	-	-	-	NI	-	NI	NI
Brent (E12)	NI	-	-	-	NI	-	NI	NI
Crane (E12)	NI	-	-	-	NI	-	NI	NI
Ingrebourne (E12)	NI	-	-	-	NI	-	NI	NI
Lee (E12)	NI	-	-	-	NI	-	NI	NI
Ravensbourne (E12)	NI	-	-	-	NI	-	NI	NI
Roding (E12)	NI	-	-	-	NI	-	NI	NI
Wandle (E12)	NI	-	-	-	NI	-	NI	NI
<b>Tot.N.Sea (S) catch.</b>	62000						32300	1960 to 1990
Medway (E13)	NI	-	-	-	NI	-	NI	NI
Stour (E13)	NI	-	-	-	NI	-	1130	NI
Rother (E13)	NI	-	-	-	NI	-	NI	NI
Adur (E14)	NI	-	-	-	NI	-	NI	NI
Ouse (E14)	NI	-	-	-	NI	-	NI	NI
Cuckmere (E14)	NI	-	-	-	NI	-	NI	NI
Arun (E14)	NI	-	-	-	NI	-	NI	NI
Itchen (E15)	NI	-	-	-	NI	-	NI	NI
Test (E15)	NI	-	-	-	NI	-	NI	NI
Blackwater (E15)	NI	-	-	-	NI	-	NI	NI
Frome (E16)	NI	-	-	-	NI	-	NI	NI
Stour (E16)	NI	-	-	-	NI	-	NI	NI
Avon (E16)	NI	-	-	-	NI	-	1330	NI
Axe (E17)	NI	-	-	-	NI	-	NI	NI
Dart (E17)	NI	-	-	-	NI	-	NI	NI
Exe (E17)	NI	-	-	-	NI	-	1360	NI
Gara (E17)	NI	-	-	-	NI	-	NI	NI
Otter (E17)	NI	-	-	-	NI	-	NI	NI
Teign (E17)	NI	-	-	-	NI	-	NI	NI
Cober (E18)	NI	-	-	-	NI	-	NI	NI
Erme (E18)	NI	-	-	-	NI	-	NI	NI
Fal (E18)	NI	-	-	-	NI	-	NI	NI
Fowey (E18)	NI	-	-	-	NI	-	NI	NI
Gara (E18)	NI	-	-	-	NI	-	NI	NI
Lynher (E18)	NI	-	-	-	NI	-	NI	NI
Par (E18)	NI	-	-	-	NI	-	NI	NI
Plym (E18)	NI	-	-	-	NI	-	NI	NI
Porthleven (E18)	NI	-	-	-	NI	-	NI	NI
St Austel (E18)	NI	-	-	-	NI	-	NI	NI
Tavy (E18)	NI	-	-	-	NI	-	NI	NI
Tamar (E18)	NI	-	-	-	NI	-	1940	NI
<b>Tot.Channel catch.</b>	22000						16500	1960-1990
Camel (E19)	NI	-	-	-	NI	-	NI	NI
Hayle (E19)	NI	-	-	-	NI	-	NI	NI
Menalhyl (E19)	NI	-	-	-	NI	-	NI	NI
Red River (E19)	NI	-	-	-	NI	-	NI	NI
Taw (Yeo) (E19)	NI	-	-	-	NI	-	NI	NI
Taw (2) (E20)	NI	-	-	-	NI	-	NI	NI
Torridge (E20)	NI	-	-	-	NI	-	NI	NI
Parrett (E21)	NI	-	-	-	NI	-	NI	NI
Tone (E21)	NI	-	-	-	NI	-	NI	NI
Bristol Avon (E22)	NI	-	-	-	NI	-	NI	NI
Severn (2) (E22)	NI	-	-	-	NI	-	9100	NI
Wye (E23)	NI	-	-	-	NI	-	6200	NI
Usk (E23)	NI	-	-	-	NI	-	NI	NI
Rhymney (E23)	NI	-	-	-	NI	-	NI	NI
Ely (E23)	NI	-	-	-	NI	-	NI	NI
Afon Lwyd (E23)	NI	-	-	-	NI	-	NI	NI
Ebbw Fawr (E23)	NI	-	-	-	NI	-	NI	NI
Taff (E23)	NI	-	-	-	NI	-	NI	NI
Cadoxton (E24)	NI	-	-	-	NI	-	NI	NI
Neath (E24)	NI	-	-	-	NI	-	NI	NI
Ogmore (E24)	NI	-	-	-	NI	-	NI	NI
Thaw (E24)	NI	-	-	-	NI	-	NI	NI
Tawe (E24)	NI	-	-	-	NI	-	NI	NI
Ewenny (E24)	NI	-	-	-	NI	-	NI	NI
Nant Y Fendrod (E24)	NI	-	-	-	NI	-	NI	NI
Thaw Kenson (E24)	NI	-	-	-	NI	-	NI	NI
Dafen (E25)	NI	-	-	-	NI	-	NI	NI

UK Cont.

W Cleddau (E25)	NI	-	-	-	NI	-	NI	NI
Tywi (E25)	NI	-	-	-	NI	-	3700	NI
Taf (E25)	NI	-	-	-	NI	-	NI	NI
Loughor (E25)	NI	-	-	-	NI	-	NI	NI
<b>Tot.Celtic S. catch.</b>	32000						36400	1960-1990
Teifi (E26)	NI	-	-	-	NI	-	NI	NI
Ystwyth (E26)	NI	-	-	-	NI	-	NI	NI
Rheidol (E26)	NI	-	-	-	NI	-	NI	NI
Mawddach (E26)	NI	-	-	-	NI	-	NI	NI
Dyfi (E26)	NI	-	-	-	NI	-	NI	NI
Glaslyn (E26)	NI	-	-	-	NI	-	NI	NI
Afon Goch (2) (E27)	NI	-	-	-	NI	-	NI	NI
Clwyd (E27)	NI	-	-	-	NI	-	NI	NI
Cefni (E27)	NI	-	-	-	NI	-	NI	NI
Conwy (E27)	NI	-	-	-	NI	-	NI	NI
Dee (E27)	NI	-	-	-	NI	-	3020	NI
Nant Glywdyr (E27)	NI	-	-	-	NI	-	NI	NI
Alt (E28)	NI	-	-	-	NI	-	NI	NI
Mersey (E28)	NI	-	-	-	NI	-	3540	NI
Weaver (E28)	NI	-	-	-	NI	-	NI	NI
Darwen (E29)	NI	-	-	-	NI	-	NI	NI
Douglas (E29)	NI	-	-	-	NI	-	NI	NI
Ribble (E29)	NI	-	-	-	NI	-	NI	NI
Kent (E29)	NI	-	-	-	NI	-	NI	NI
Lune (E29)	NI	-	-	-	NI	-	3020	NI
Wyre (E29)	NI	-	-	-	NI	-	NI	NI
Leven (E29)	NI	-	-	-	NI	-	NI	NI
Derwent (E30)	NI	-	-	-	NI	-	NI	NI
Eden (E30)	NI	-	-	-	NI	-	4320	NI
Nith (SC1)	NI	-	-	-	NI	-	NI	NI
Annan (SC1)	NI	-	-	-	NI	-	NI	NI
Dee (Solway) (SC1)	NI	-	-	-	NI	-	NI	NI
Esk (Solway) (SC1)	NI	-	-	-	NI	-	NI	NI
Cree (SC1)	NI	-	-	-	NI	-	NI	NI
Bladnoch (SC1)	NI	-	-	-	NI	-	NI	NI
Water of Luce (SC1)	NI	-	-	-	NI	-	NI	NI
Urr Water (SC1)	NI	-	-	-	NI	-	NI	NI
Lochar Water (SC1)	NI	-	-	-	NI	-	NI	NI
Newry (NI2)	NI	-	-	-	NI	-	NI	NI
Quoile (NI2)	NI	-	-	-	NI	-	NI	NI
Lagan (NI2)	NI	-	-	-	NI	-	NI	NI
<b>Tot.Irish Sea catch.</b>	35000						48400	1960-1990
Clyde (SC2)	NI	-	-	-	NI	-	4 000	NI
Awe (SC2)	NI	-	-	-	NI	-	NI	NI
Leven (Loch Lomond (SC2)	NI	-	-	-	NI	-	NI	NI
Ayr (SC2)	NI	-	-	-	NI	-	NI	NI
Irvine (SC2)	NI	-	-	-	NI	-	NI	NI
Kelvin (SC2)	NI	-	-	-	NI	-	NI	NI
Stinchar (SC2)	NI	-	-	-	NI	-	NI	NI
Doon (SC2)	NI	-	-	-	NI	-	NI	NI
Water of Girvan (SC2)	NI	-	-	-	NI	-	NI	NI
White Cart Water (SC2)	NI	-	-	-	NI	-	NI	NI
Garnock (SC2)	NI	-	-	-	NI	-	NI	NI

OSPAR Contracting Parties' RID 2016 Data Report

UK cont.

Etive (SC2)	NI	-	-	-	NI	-	NI	NI
Eachaig (SC2)	NI	-	-	-	NI	-	NI	NI
Black Cart Water (SC2)	NI	-	-	-	NI	-	NI	NI
Gryfe (SC2)	NI	-	-	-	NI	-	NI	NI
Add (SC2)	NI	-	-	-	NI	-	NI	NI
Lochy (SC2a)	NI	-	-	-	NI	-	5 400	NI
Ewe (SC2a)	NI	-	-	-	NI	-	NI	NI
Shiel (SC2a)	NI	-	-	-	NI	-	NI	NI
Leven (Lochaber) (SC2a)	NI	-	-	-	NI	-	NI	NI
Morar (SC2a)	NI	-	-	-	NI	-	NI	NI
Inver (SC2a)	NI	-	-	-	NI	-	NI	NI
Carron (Wester Ross (SC2a)	NI	-	-	-	NI	-	NI	NI
Gruinard (SC2a)	NI	-	-	-	NI	-	NI	NI
Broom (SC2a)	NI	-	-	-	NI	-	NI	NI
Kirkaig (SC2a)	NI	-	-	-	NI	-	NI	NI
Ling (SC2a)	NI	-	-	-	NI	-	NI	NI
Laxford (SC2a)	NI	-	-	-	NI	-	NI	NI
Abhainn Ghriomarstaidh	NI	-	-	-	NI	-	NI	NI
Aline (SC2a)	NI	-	-	-	NI	-	NI	NI
Loch Linnhe (SC2a)	NI	-	-	-	NI	-	NI	NI
Bush (NI1)	NI				NI		NI	NI
Bann (NI1)	NI				NI		7900	NI
Roe (NI1)	NI				NI		NI	NI
Faughan (NI1)	NI				NI		NI	NI
Burn Dennet NI1	NI				NI		NI	NI
Mourne (NI1)	NI				NI		NI	NI
Finn (NI1)	NI				NI		NI	NI
<b>Tot.Atlantic catchm.</b>	42000						49700	1960-1990

\*) LTA = Long-term average



Victoria House  
37-63 Southampton Row  
London WC1B 4DA  
United Kingdom

t: +44 (0)20 7430 5200  
f: +44 (0)20 7242 3737  
e: [secretariat@ospar.org](mailto:secretariat@ospar.org)  
[www.ospar.org](http://www.ospar.org)

**OSPAR's vision is of a clean, healthy and biologically diverse  
North-East Atlantic used sustainably**

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