



**OSPAR  
COMMISSION**

## Riverine Inputs and Direct Discharges to Convention Waters

OSPAR Contracting Parties' RID 2015 Data Report

Monitoring and Assessment Series



2017

### **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

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This report has been prepared by Csilla Farkas and Eva Skarbøvik



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National 2015 RID data reports (excel and word files):

[https://odims.ospar.org/en/submissions/ospar\\_rid\\_data\\_reports\\_2015\\_01\\_001/](https://odims.ospar.org/en/submissions/ospar_rid_data_reports_2015_01_001/)

## 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.

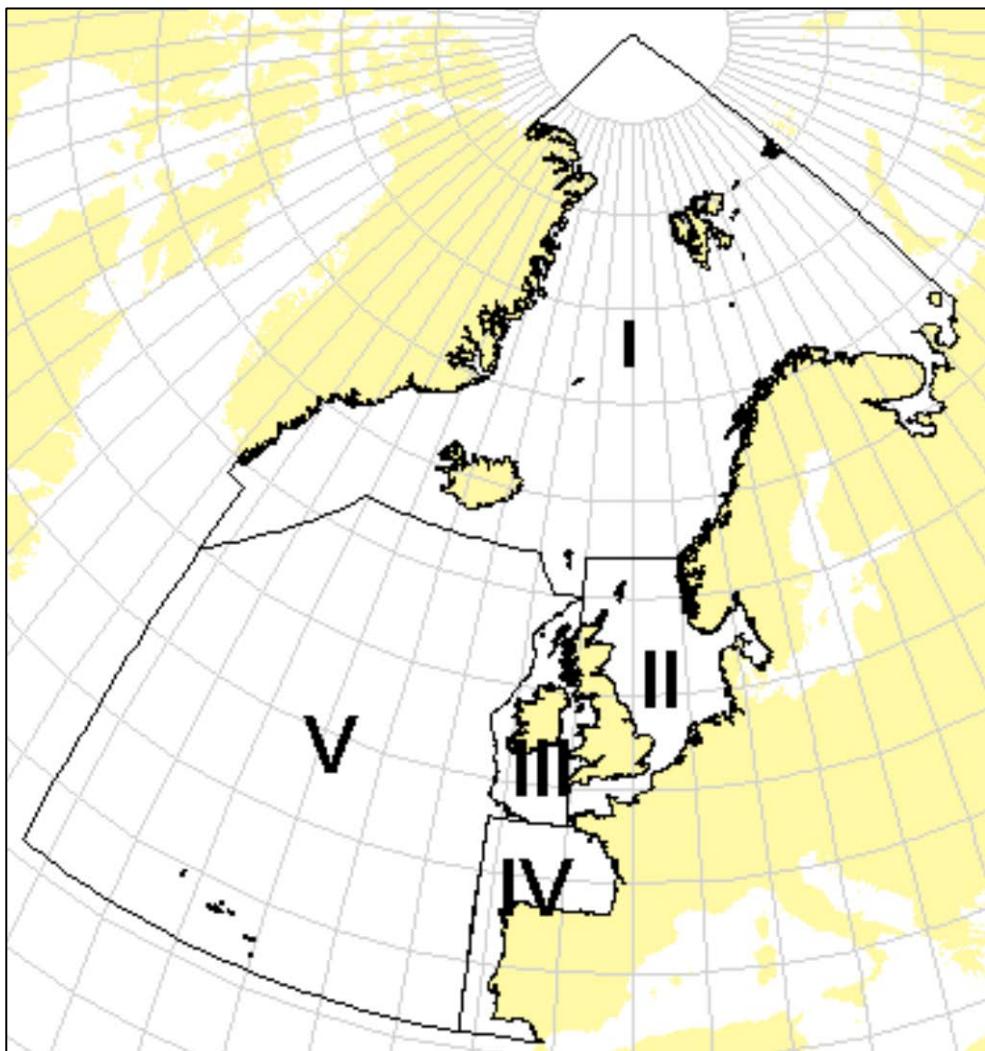
A tributary river should be a minor load bearing river and can be sampled at a frequency determined by each Contracting Party.

**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.*

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

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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).

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 2015

Table 2 provides an overview of the status of 2015 RID data submitted by Contracting Parties by 20 December 2016. All Contracting Parties except Denmark had a deadline of 1 November 2016 for submitting data and text reports. Denmark had a deadline of 1 December 2016.

*Table 2. Overview of submitted 2015 RID information by Contracting Parties (green colour: submitted; orange colour: the data in being validated).*

Contracting Party	RID 2015 written report submitted	RID 2015 Data submitted	RID 2015 Data validated
Belgium	X	X	X
Denmark		X	Being validated
France	X	X	X
Germany	X	X	Being validated
Iceland	X	X	X
Ireland	X	X	X
Netherlands	X	X	X
Norway	X	X	X
Portugal			
Spain	X	X	Being validated
Sweden	X	X	X
United Kingdom	X	x	Being validated

*Table 3. Overview of information for 2015 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 2015 are given in Annex I.

## Status of historical data submission

Following the changes in the RID database in 2013, there was a need for many Contracting Parties to resubmit data in order to ensure a harmonised database. This work is still ongoing, and an overview of the status per May 2017 has therefore been provided (Table 4). Contracting Parties not listed have no remaining tasks at present, but it should be noted that the work with ensuring consistent data is not finalised. The database is now in such an order that the RID Data Center will send the database to all Contracting Parties, as was agreed in INPUT 2016 (Summary Record 6.4 e). This will be done after INPUT 2017, and the RID Data Center will provide a guideline on how to export data from the database. Hence, Contracting Parties can then more easily check their data and report anomalies and errors to the RID Data Center. All corrections will be done by the RID Data Center and validated by the Contracting Parties, according to the usual procedures.

*Table 4. Overview of status of the RID database.*

Contracting Party	Tasks performed	Tasks remaining
Belgium	All data up to and including 2015 validated and confirmed. Heavy metal data for the Channel Gent-Terneuzen was deleted for years 2011-2015 as BE loads are included in the NL report. Years 2002-2010 did not include HM data from Be for that area.	Belgium and the Netherlands are in discussions on how to deal with the transboundary Channel Gent-Terneuzen to Wester Scheldt.
Denmark	Denmark has resubmitted its historical data.	NIBIO has uploaded the data in the database. The data files are sent to the CP for validation.
France	All data up to and including 2015 validated and confirmed.  France provided new corrected discharge tables in non-RID formats for the other years (2005-2011).	NIBIO is in contact with France about the discharge data for years 2005-2011, in order to ensure correct input formats and avoid errors.
Iceland	Historical data (1996 - 2014) received in a non-database format in December 2016.	NIBIO has asked Iceland to re-submit their data in the correct format. 2015 data have been validated.
Norway	All data up to and including 2015 validated and confirmed.	New submission of historical data expected in 2017 due to recalculation of direct discharges due to changes in a

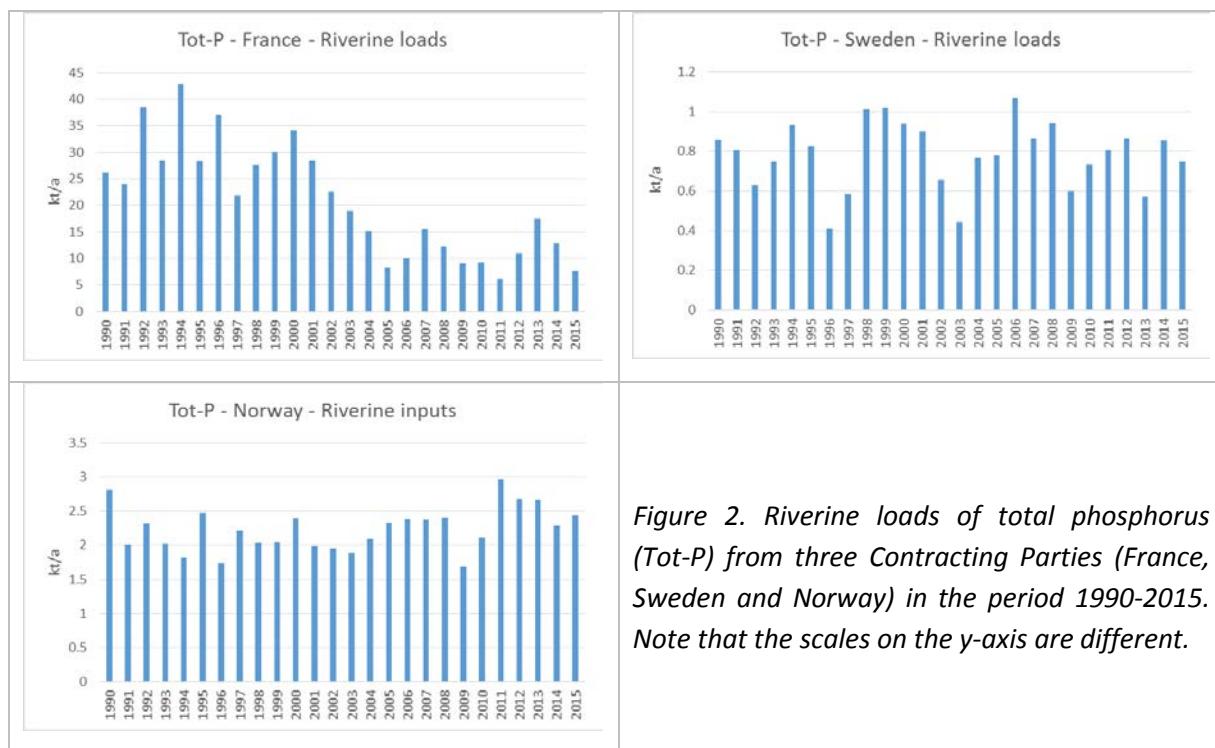
<b>Contracting Party</b>	<b>Tasks performed</b>	<b>Tasks remaining</b>
		model used.
Spain	Data for 1990-2014 have been sent to Spain for validation in December 2016. 2015 data is being validated.	Data for aquaculture has to be imported in the database manually. NIBIO is in contact with Spain on this issue. Spain will separate aquaculture discharges from now, but most likely, it will not possible to do back in time.
Sweden	All data up to and including 2015 validated and confirmed.	No further actions required, although Sweden and NIBIO must sort out an issue discovered about the time series for water discharges from Sweden.
UK	Re-reported data for the period 2008-2011 have been uploaded to the database and sent to UK for validation in March 2016. 2015 data is being validated.	UK is to validate the 2008-2011 data. 2012 -2014 data have been validated.

## Preliminary results 2015

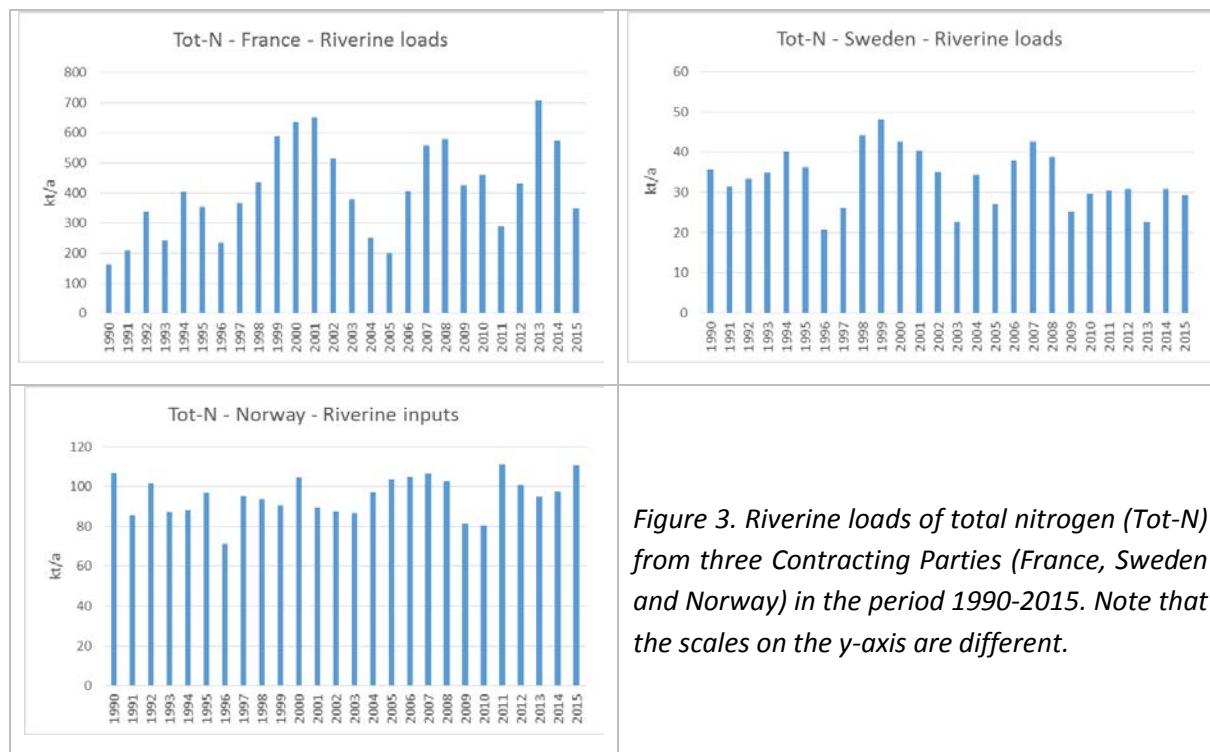
Given the fact that only five Contracting Parties had delivered by 20 December 2016, a comparison of loads to sea areas over the years was not meaningful. Instead, an overview of 2015 data as compared to former years has been done for some selected substances for the Contracting Parties that have delivered. These Contracting Parties include France, Iceland, the Netherlands, Norway, and Sweden. However, data from the Netherlands are incomplete since they have not received discharges from the Lake IJsselmeer. Also, Iceland has resubmitted historical data, but in a format that could not be directly imported into the database. Hence, discussions on the year 2015 could only be done for three Contracting Parties, France, Norway and Sweden.

### Nutrient loads

Data on riverine loads are shown for total phosphorus (Tot-P) and total nitrogen (Tot-N) for France, Norway and Sweden in Figures 2 and 3. France reported relatively low water discharges and consequently also lower loads in 2015 than many previous years. On the other hand, both Sweden and Norway reported comparatively high water flows in 2015. For Sweden, this resulted in somewhat higher inputs of most reported variables than normal, and for Norway the inputs were high especially in the Skagerrak region.



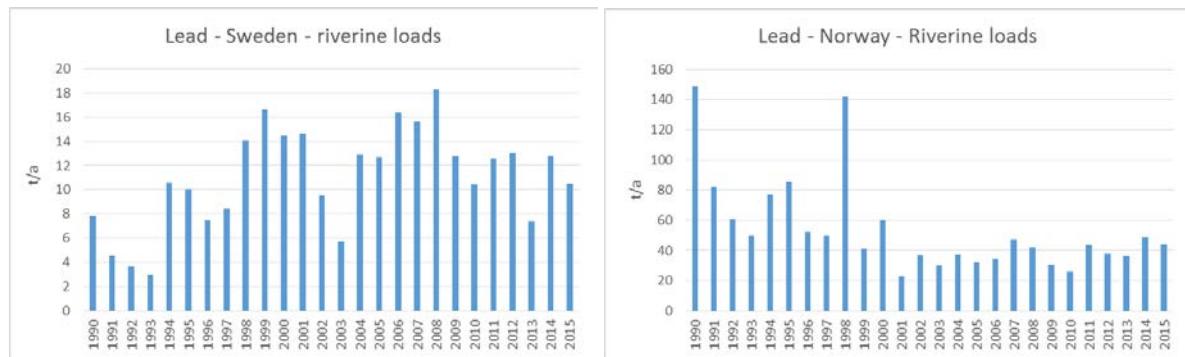
*Figure 2. Riverine loads of total phosphorus (Tot-P) from three Contracting Parties (France, Sweden and Norway) in the period 1990-2015. Note that the scales on the y-axis are different.*



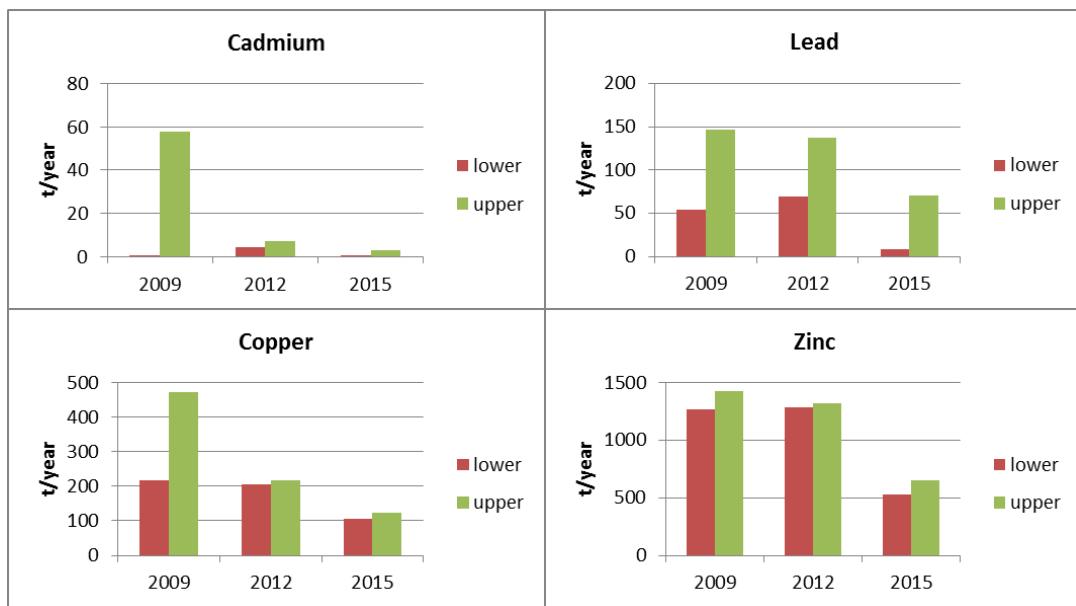
*Figure 3. Riverine loads of total nitrogen (Tot-N) from three Contracting Parties (France, Sweden and Norway) in the period 1990-2015. Note that the scales on the y-axis are different.*

## Metal loads

Loads of metals have been exemplified by charts of lead loads in Norwegian and Swedish rivers for the period 1990-2015 (Figure 4). For France, it should be noted that metal loads in 2015 should only be compared to the years 2009 and 2012, as these three years are the ones with complete data series (Figure 5). This does not include mercury, since that compound was not analysed in waters of the Loire-Bretagne in 2015. The data on copper and zinc are regarded as relatively robust, since there is little difference between lower and upper estimates. These inputs were lower in 2015 than in 2012, which could not be solely explained by the lower flows in 2015. The inputs of cadmium and lead are more uncertain because of a large difference between lower and upper estimates.



*Figure 4. Riverine lead loads in Swedish and Norwegian rivers. Note that the scales on the y-axis are different.*



*Figure 5. Metal loads in French rivers in the comparable years 2009, 2012 and 2015 (Charts derived from France's annual word report for 2015).*

Annex I      Annual Overview Tables for the reporting year 2015 (AA Tables)

- AA Table 1a Information Received on Inputs to the Maritime Area of the OSPAR Convention in 2015
- AA Table 1b Determinands Reported by Contracting Parties in 2015
- AA Table 2 Direct Discharges to the Maritime Area of the OSPAR Convention in 2015 by Country
- AA Table 3 Riverine Inputs to the Maritime Area of the OSPAR Convention in 2015 by Country
- AA Table 4a Sum of Direct (Table 2) and Riverine (Table 3) Inputs to the Maritime Area of the OSPAR Convention in 2015 by Country
- AA Table 4b Sum of Direct and Riverine Inputs to the Maritime Area of the OSPAR Convention in 2015 by Sea Area

**AA Table 1a. 2015****Information Received on Inputs to the Maritime Area of the OSPAR Convention in 2015**

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		+	+
- Kattegat (DK)	+	+	+	NI		+	+
- North Sea (DK)	+	+	+	NI		+	+
France							
- Channel	NI	NI	NI	NI		+	+
- Atlantic	NI	NI	NI	NI		+	+
Germany							
- North Sea (GER)	+	+	NI	NI		+	+
Iceland							
- Atlantic	NI	NI	NI	NI		+	NI
Ireland							
- Irish Sea	+	+	NI	NI		+	+
- Celtic Sea	+	+	NI	NI		+	+
- Atlantic	+	+	NI	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 (PO)	NI	NI	NI	NI		NI	NI
Spain							
- Atlantic (ESP)	+	+	NI	NI		+	NI
Sweden							
- Kattegat (SWE)	+	+	NI	NI		+	+
- Skagerrak (SWE)	+	+	NI	NI		+	+
UK							
- North Sea (North)	+	+	+	NI		+	NI
- North Sea (South)	+	+	NI	NI		+	NI
- Channel	+	+	NI	NI		+	NI
- Irish Sea	+	+	NI	NI		+	NI
- Celtic Sea	+	+	NI	NI		+	NI
- Atlantic	+	+	+	NI		+	NI

+ = Information available

NI = No information

NA = Not applicable

**AA Table 1b. 2015**

**Determinands reported by Contracting Parties in 2015**

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

+ : 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. 2015****Direct Discharges to the Maritime Area of the OSPAR Convention in 2015 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 North Sea (DK) lower upper 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 NI NI	0.047 0.047 0.016 0.016 0.006 0.006	0.423 0.423 0.116 0.116 0.006 0.024	0.037 0.037 0.006 0.006 0.132 0.024	0.47 0.47 0.132 0.132 0.009 0.001	0.056 0.056 0.009 0.009 0.003 0.031	0.056 0.056 0.009 0.009 0.003 0.003	NI NI NI NI NI NI	
France	Atlantic lower upper 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 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	0.001 0.055	0.006 0.048	1.658 2.278	1.617 2.258	8.114 13.12	0.011 0.271	0.03 1.84	1.647 1.647	1.682 1.682	0.065 0.065	3.483 3.483	0.372 0.372	1.533 1.533
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 Celtic Sea lower upper Irish Sea lower upper	0.005 0.005 0.169 0.169 0.035 0.035	6E-04 6E-04 0.022 0.022 0.006 0.006	0.414 0.414 1.63 1.63 2.761 2.761	0.165 0.165 1.293 1.293 0.842 0.842	2.535 2.535 8.585 8.585 13.46 13.46	NI NI NI NI NI NI	NI NI NI NI NI NI	NI NI NI NI NI NI	NI NI NI NI NI NI	0.597 0.597 1.788 1.788 4.27 4.27	0.075 0.075 0.259 0.259 0.789 0.789	1.466 1.466 4.282 4.282 6.701 6.701	
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 (NC) lower upper North Sea (NO) lower upper Norwegian Sea ( lower upper Skagerrak (NO) lower upper	2E-04 2E-04 0.087 0.087 0.01 0.01 0.028 0.028	8E-05 8E-05 0.004 0.004 7E-04 7E-04 0.016 0.016	239.9 239.9 326.2 326.2 413.6 413.6 7.581 7.581	0.003 0.003 0.76 0.76 0.135 0.135 0.553 0.553	0.141 0.141 10.22 10.22 1.935 1.935 16.57 16.57	NI NI NI NI NI NI NI NI	NI NI NI NI 0 0 1.082 1.082	12.16 12.16 18.42 18.42 22.07 22.07 4.95 4.95	1.605 1.605 2.305 2.305 2.835 2.835 0.332 0.332	1.733 1.733 2.472 2.472 3.087 3.087 0.103 0.103	15.28 15.28 23.3 23.3 27.82 27.82 6.598 6.598	2.533 2.533 3.639 3.639 4.532 4.532 0.171 0.171	4.2 4.2 131.1 131.1 2.943 2.943 1.652 1.652
Portugal	Bay of Biscay and Iberian Coast (PO) 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	0.001 0.64	0.135 0.398	0.299 2.154	0.176 1.29	3.081 14.14	0.031 0.165	2.516 3.378	2.794 5.661	0.894 0.912	0.432 0.678	4.969 9.588	0.462 1.04	5.163 248.1
Sweden	Kattegat (SWE) lower upper Skagerrak (SWE) lower upper	0.034 0.034 4E-04 4E-04	0.005 0.005 0.001 0.001	1.383 1.383 0.149 0.149	0.162 0.162 0.005 0.005	4.466 4.466 1.132 1.132	NI NI NI NI	NI NI 0.153 0.153	1.011 1.011 0.153 0.153	NI NI NI NI	1.695 1.695 0.317 0.317	0.049 0.049 0.009 0.009	NI NI NI NI	
UK	Atlantic lower upper Celtic Sea lower upper Channel lower upper Irish Sea lower upper North Sea (North) lower upper North Sea (South) lower upper	0.003 0.117 0.01 0.028 0.005 0.011 0.007 0.067 0.021 0.053 0.044 0.105	0.004 0.006 0.002 0.004 9E-04 0.002 0.003 0.007 0.008 0.013 0.06 0.07	66.7 66.89 1.388 1.395 2.411 2.434 1.741 6.943 13.89 13.91 22.85 22.89	0.607 0.881 0.43 0.741 0.244 0.387 0.449 6.501 1.591 1.746 3.872 4.32	31.05 31.13 11.3 11.32 6.501 6.501 5.659 33.96 0.775 34.17 52.18 52.22	0.628 0.647 0.007 1.441 0.195 0.2304 0.006 0 0.775 3.663 0.037 14.66	NI NI NI NI 0 6.22 NI 0 3.677 13.73 0 66.29	3.052 3.052 3.597 3.677 0 4.016 0.295 10.49 0.775 2.275 2.557 14.22	1.227 1.23 0.759 0.775 3.968 4.016 0.079 3.226 0.668 6.534 14.22 14.24	0.591 0.591 0.337 0.354 2.244 2.275 0.05 1.845 0.668 0.951 14.22 14.24	13.25 13.25 1.224 1.267 6.504 6.534 0.951 21.05 5.507 0.668 5.107 14.22 14.24	1.84 1.84 0.337 0.354 0.626 0.668 0.088 2.941 5.507 0.668 5.107 14.22 14.24	

NI: No information

NA: Not applicable

**AA Table 3. 2015**

**Riverine Inputs to the Maritime Area of the OSPAR Convention in 2015 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 0.376	0.035	11.57	1.133	38.74	4.298	NI	1.475	20.57	0.941	26.61	1.944	241
		upper 0.376	0.035	11.57	1.133	38.74	4.298	NI	1.475	20.57	0.941	26.61	1.944	241
Denmark	Kattegat (DK)	lower NI	NI	NI	NI	NI	NI	NI	0.617	22.04	0.375	26.89	0.867	NI
		upper NI	NI	NI	NI	NI	NI	NI	0.617	22.04	0.375	26.89	0.867	NI
	North Sea (DK)	lower NI	NI	NI	NI	NI	NI	NI	0.567	16.91	0.196	20.16	0.714	NI
		upper NI	NI	NI	NI	NI	NI	NI	0.567	16.91	0.196	20.16	0.714	NI
	Skagerrak (DK)	lower NI	NI	NI	NI	NI	NI	NI	0.074	1.249	0.024	1.567	0.066	NI
		upper NI	NI	NI	NI	NI	NI	NI	0.074	1.249	0.024	1.567	0.066	NI
France	Atlantic	lower 0.35	0.072	76.2	5.197	365	0	NI	3.014	205.6	1.915	144.7	4.658	1491
		upper 2.204	0.675	94.5	62.54	476.9	560.1	NI	3.063	205.6	1.942	255.2	4.659	1495
	Channel	lower 0.294	0	28.52	3.124	166.4	6.053	NI	3.391	159.5	1.938	117.3	2.97	688.4
		upper 0.654	0.513	30.04	7.282	170.8	139.6	NI	3.402	159.5	1.939	181.3	2.97	689.1
Germany	North Sea (GER)	lower 4.009	2.023	163.5	132.8	979.8	9.6	15.7	5.059	107.7	1.621	137	7.078	1663
		upper 4.247	2.031	163.5	135.3	979.8	45.1	40.4	5.089	107.7	1.662	137	7.078	1760
Iceland	Atlantic	lower 0.028	0.023	6.705	0.379	9.564	NI	NI	NI	0.062	0.281	0.337	0.247	NI
		upper 0.028	0.023	6.705	0.379	9.564	NI	NI	NI	0.062	0.281	0.337	0.247	NI
Ireland	Atlantic	lower 0.426	0	32.34	0	77.1	NI	NI	0.129	11.07	0.337	22.96	0.795	95.99
		upper 1.204	1.598	40.07	22.79	80	NI	NI	0.5	11.31	0.431	23	0.821	168.4
	Celtic Sea	lower 0.503	8E-04	42.95	2.428	907	NI	NI	0.666	59.85	0.848	70.49	1.447	221.9
		upper 0.775	0.613	48.78	31.67	909.6	NI	NI	0.919	59.87	0.882	70.49	1.449	287.3
	Irish Sea	lower 0.319	0.018	13.37	3.709	81.72	NI	NI	0.212	20.82	0.185	24.03	0.369	45.24
		upper 0.332	0.151	14.87	10.42	81.72	NI	NI	0.244	20.82	0.191	24.03	0.369	55.6
Netherlands	North Sea (NL)	lower 4.587	0.5	169.8	83.78	775	12.87	49.76	6.947	130.8	3.896	163.4	6.234	966.4
		upper 4.591	0.5	169.8	83.78	775	12.87	56.21	6.954	130.8	3.898	163.4	6.234	1041
Norway	Barents Sea (NO)	lower 0.277	0.02	63.77	4.392	33.98	NI	NI	0.636	5.414	0.154	13.26	0.378	58.96
		upper 0.313	0.042	63.77	4.41	34.21	NI	NI	0.656	5.422	0.157	13.26	0.379	59.09
	North Sea (NO)	lower 0.685	0.039	27.71	12.29	152.5	NI	NI	1.485	21	0.189	35.26	0.568	85.23
		upper 0.696	0.082	27.73	12.3	152.6	NI	NI	1.519	21	0.207	35.26	0.572	85.47
	Norwegian Sea (NO)	lower 0.251	0.035	32.97	3.578	86.39	NI	NI	1.226	13.42	0.167	25.24	0.519	110.3
		upper 0.292	0.075	32.99	3.61	86.43	NI	NI	1.264	13.42	0.185	25.25	0.524	110.6
	Skagerrak (NO)	lower 1.13	0.059	76.95	24.88	441.9	NI	NI	1.126	19.41	0.477	36.94	0.981	465.1
		upper 1.13	0.107	76.95	24.88	441.9	NI	NI	1.141	19.41	0.493	36.94	0.982	465.1
Portugal	Bay of Biscay and Iberian Coast (PO)	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
Spain	Atlantic (ESP)	lower 0.17	0.002	76.64	3.264	115.4	1.214	0	0.738	17.86	0.473	17.13	1.848	138.4
		upper 4.717	0.258	183.6	16.1	258.6	60.37	396.1	0.877	18.45	0.622	19.2	2.201	155.6
Sweden	Kattegat (SWE)	lower 0.338	0.079	33.27	8.98	96.63	NI	NI	0.691	17.12	0.159	26.67	0.632	NI
		upper 0.338	0.079	33.27	8.98	96.63	NI	NI	0.691	17.12	0.159	26.67	0.632	NI
	Skagerrak (SWE)	lower 0.065	0.014	4.79	1.51	16.9	NI	NI	0.084	1.236	0.029	2.717	0.116	NI
		upper 0.065	0.014	4.79	1.51	16.9	NI	NI	0.084	1.236	0.029	2.717	0.116	NI
UK	Atlantic	lower 0.084	0.051	37.44	20.09	137.4	NI	NI	0.899	12.12	0.641	16.47	1.55	210.6
		upper 1.266	0.188	38.23	22.76	141.1	NI	NI	1.214	13.03	0.735	16.75	1.562	223.3
	Celtic Sea	lower 0.243	0.036	42.21	29.86	210.7	0.014	0.234	0.721	35.8	1.311	123.4	1.311	347.3
		upper 1.373	0.159	43.59	41.57	214.6	43.56	39.13	0.836	35.8	1.358	123.4	1.358	354.5
	Channel	lower 0.258	0.021	22.69	8.748	77.54	0.244	0	0.26	22.28	0.575	26.27	0.575	95.19
		upper 0.373	0.075	22.79	10.59	79.64	19.11	50.72	0.343	22.28	0.577	26.27	0.577	97.91
	Irish Sea	lower 0.877	0.054	99.68	40.93	387.2	0.413	0	1.686	33.97	1.785	43.74	2.035	626.8
		upper 1.945	0.19	100.6	45.95	389.5	34.66	63.95	1.979	34.2	1.854	43.77	2.075	637.6
	North Sea (North)	lower 0.394	0.017	38.62	21.43	189.3	0	0	0.575	25.57	0.396	34.62	1.004	243.5
		upper 1.727	0.336	38.77	28.17	191.6	7.499	20	1.055	26.3	0.6	34.76	1.013	267.3
	North Sea (South)	lower 0.986	0.034	41.15	51.86	194.8	0.233	0	1.132	59.65	2.241	59.66	2.242	137.1
		upper 0.996	0.12	41.16	51.98	195.2	27.43	73.1	1.167	59.65	2.242	59.66	2.242	138.4

NI: No information

**AA Table 4a. 2015****Sum of Direct (Table 2) and Riverine (Table 3) Inputs to the Maritime area of the OSPAR Convention in 2015 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 0.376	0.035	11.57	1.133	38.74	4.30	NI	1.475	20.57	0.941	26.61	1.944	241
		upper 0.376	0.035	11.57	1.133	38.74	4.30	NI	1.475	20.57	0.941	26.61	1.944	241
Denmark	Kattegat (DK)	lower NI	NI	NI	NI	NI	NI	NI	0.664	22.47	0.412	27.36	0.923	NI
		upper NI	NI	NI	NI	NI	NI	NI	0.664	22.47	0.412	27.36	0.923	NI
	North Sea (DK)	lower NI	NI	NI	NI	NI	NI	NI	0.583	17.03	0.202	20.29	0.723	NI
		upper NI	NI	NI	NI	NI	NI	NI	0.583	17.03	0.202	20.29	0.723	NI
	Skagerrak (DK)	lower NI	NI	NI	NI	NI	NI	NI	0.08	1.273	0.025	1.598	0.069	NI
		upper NI	NI	NI	NI	NI	NI	NI	0.08	1.273	0.025	1.598	0.069	NI
France	Atlantic	lower 0.35	0.072	76.2	5.197	365	0	NI	3.014	205.6	1.915	144.7	4.658	1491
	Channel	upper 2.204	0.675	94.5	62.54	476.9	560.12	NI	3.063	205.6	1.942	255.2	4.659	1495
		lower 0.294	0	28.52	3.124	166.4	6.05	NI	3.391	159.5	1.938	117.3	2.97	688.4
		upper 0.654	0.513	30.04	7.282	170.8	139.61	NI	3.402	159.5	1.939	181.3	2.97	689.1
Germany	North Sea (GER)	lower 4.01	2.029	165.1	134.5	987.9	9.61	15.73	6.707	109.4	1.686	140.5	7.449	1664
		upper 4.302	2.079	165.8	137.6	992.9	45.37	42.24	6.737	109.4	1.727	140.5	7.449	1761
Iceland	Atlantic	lower 0.028	0.023	6.705	0.379	9.564	NI	NI	NI	0.062	0.281	0.337	0.247	NI
		upper 0.028	0.023	6.705	0.379	9.564	NI	NI	0.062	0.281	0.337	0.247	NI	NI
Ireland	Atlantic	lower 0.431	6E-04	32.75	0.165	79.64	NI	NI	0.129	11.07	0.337	23.56	0.871	97.46
		upper 1.209	1.599	40.49	22.95	82.53	NI	NI	0.5	11.31	0.431	23.6	0.897	169.9
	Celtic Sea	lower 0.672	0.023	44.58	3.722	915.6	NI	NI	0.666	59.85	0.848	72.28	1.706	226.2
		upper 0.944	0.635	50.41	32.97	918.2	NI	NI	0.919	59.87	0.882	72.28	1.708	291.6
	Irish Sea	lower 0.353	0.024	16.14	4.551	95.18	NI	NI	0.212	20.82	0.185	28.3	1.158	51.94
		upper 0.367	0.158	17.63	11.26	95.18	NI	NI	0.244	20.82	0.191	28.3	1.158	62.3
Netherlands	North Sea (NL)	lower 4.587	0.5	169.8	83.78	775	12.87	49.76	6.947	130.8	3.896	163.4	6.234	966.4
		upper 4.591	0.5	169.8	83.78	775	12.87	56.21	6.954	130.8	3.898	163.4	6.234	1041
Norway	Barents Sea (NO)	lower 0.278	0.021	303.7	4.394	34.12	NI	NI	12.8	7.019	1.887	28.54	2.911	63.16
		upper 0.313	0.042	303.7	4.412	34.35	NI	NI	12.82	7.027	1.89	28.54	2.912	63.29
	North Sea (NO)	lower 0.772	0.044	353.9	13.05	162.8	NI	NI	19.91	23.31	2.661	58.56	4.207	216.3
		upper 0.783	0.086	353.9	13.06	162.8	NI	NI	19.94	23.31	2.679	58.56	4.211	216.5
	Norwegian Sea (NO)	lower 0.261	0.036	446.6	3.713	88.32	NI	0	23.29	16.26	3.255	53.06	5.051	113.2
		upper 0.302	0.075	446.6	3.744	88.37	NI	0	23.33	16.26	3.272	53.06	5.057	113.5
	Skagerrak (NO)	lower 1.158	0.075	84.53	25.43	458.5	NI	1.082	6.077	19.74	0.58	43.54	1.152	466.7
		upper 1.158	0.123	84.53	25.43	458.5	NI	1.082	6.091	19.74	0.596	43.54	1.152	466.7
Portugal	Bay of Biscay and Iberian Coast (PO)	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
Spain	Atlantic (ESP)	lower 0.172	0.137	76.94	3.44	118.5	1.25	2.516	3.531	18.76	0.905	22.1	2.311	143.6
		upper 5.357	0.657	185.8	17.39	272.7	60.53	399.5	6.538	19.36	1.301	28.79	3.241	403.7
Sweden	Kattegat (SWE)	lower 0.372	0.084	34.65	9.142	101.1	NI	NI	1.703	17.12	0.159	28.37	0.68	NI
		upper 0.372	0.084	34.65	9.142	101.1	NI	NI	1.703	17.12	0.159	28.37	0.68	NI
	Skagerrak (SWE)	lower 0.065	0.015	4.939	1.515	18.03	NI	NI	0.237	1.236	0.029	3.034	0.125	NI
		upper 0.065	0.015	4.939	1.515	18.03	NI	NI	0.237	1.236	0.029	3.034	0.125	NI
UK	Atlantic	lower 0.087	0.054	104.1	20.7	168.5	0.63	NI	3.951	13.35	1.232	29.72	3.39	223.8
	Celtic Sea	lower 1.383	0.194	105.1	23.64	172.2	0.65	NI	4.265	14.26	1.326	30	3.402	236.5
		upper 0.253	0.038	43.6	30.29	222	0.02	0.234	4.318	36.56	1.648	124.6	1.648	354.4
	Channel	lower 1.401	0.163	44.98	42.32	225.9	45.01	39.13	4.513	36.58	1.713	124.6	1.713	361.8
	Irish Sea	lower 0.263	0.022	25.1	8.991	84.05	0.44	0	4.228	24.53	1.202	32.78	1.202	100.7
		upper 0.384	0.077	25.22	10.98	86.14	21.41	56.94	4.358	24.56	1.245	32.81	1.245	103.4
	North Sea (North)	lower 0.884	0.057	101.4	41.38	393.8	0.42	0	1.982	34.05	1.835	44.7	2.123	631.9
		upper 2.552	0.197	103.4	47.9	396.4	34.67	63.95	2.313	34.28	1.904	44.73	2.163	642.9
	North Sea (South)	lower 0.414	0.025	52.51	23.02	223.3	0.78	0	11.06	28.8	2.241	55.67	3.945	269.2
		upper 1.78	0.349	52.69	29.91	225.8	11.16	33.72	11.54	29.58	2.454	55.8	3.963	293.1
		lower 1.03	0.094	63.99	55.73	247	0.27	0	3.688	73.87	5.615	79.06	5.615	251.1
		upper 1.102	0.19	64.06	56.3	247.4	42.08	139.4	3.752	73.89	5.619	79.07	5.619	252.8

**AA Table 4b. 2015****Sum of Direct and Riverine Inputs to the Maritime area of the OSPAR Convention in 2015 by Sea Area**

<b>Sea Area</b>		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	0.3	0.0	303.7	4.4	34.1	NI	NI	12.8	7.0	1.9	28.5	2.9	63.2
	upper	0.3	0.0	303.7	4.4	34.3	NI	NI	12.8	7.0	1.9	28.5	2.9	63.3
Atlantic Ocean	lower	0.5	0.1	136.9	20.9	248.1	0.6	NI	4.1	24.4	1.6	53.3	4.3	321.2
	upper	2.6	1.8	145.6	46.6	254.7	0.6	NI	4.8	25.6	1.8	53.6	4.3	406.4
Bay of Biscay and Iberian Coast	lower	0.5	0.2	153.1	8.6	483.5	1.2	2.5	6.5	224.3	2.8	166.8	7.0	1635.0
	upper	7.6	1.3	280.3	79.9	749.6	620.7	399.5	9.6	224.9	3.2	284.0	7.9	1899.0
Celtic Sea	lower	0.9	0.1	88.2	34.0	1137.6	0.0	0.2	5.0	96.4	2.5	196.9	3.4	580.7
	upper	2.3	0.8	95.4	75.3	1144.0	45.0	39.1	5.4	96.4	2.6	196.9	3.4	653.4
Channel	lower	0.6	0.0	53.6	12.1	250.4	6.5	0.0	7.6	184.0	3.1	150.1	4.2	789.1
	upper	1.0	0.6	55.3	18.3	256.9	161.0	56.9	7.8	184.0	3.2	214.1	4.2	792.6
Irish Sea	lower	1.2	0.1	117.6	45.9	489.0	0.4	0.0	2.2	54.9	2.0	73.0	3.3	683.8
	upper	2.9	0.4	121.1	59.2	491.6	34.7	64.0	2.6	55.1	2.1	73.0	3.3	705.2
Kattegat	lower	0.4	0.1	34.7	9.1	101.1	NI	NI	2.4	39.6	0.6	55.7	1.6	NI
	upper	0.4	0.1	34.7	9.1	101.1	NI	NI	2.4	39.6	0.6	55.7	1.6	NI
North Sea (main body)	lower	11.2	2.7	816.9	311.2	2434.7	27.8	65.5	50.4	403.7	17.2	544.0	30.1	3608.2
	upper	12.9	3.2	817.8	321.8	2442.7	115.8	271.6	51.0	404.5	17.5	544.2	30.1	3805.3
Norwegian Sea	lower	0.3	0.0	446.6	3.7	88.3	NI	0.0	23.3	16.3	3.3	53.1	5.1	113.2
	upper	0.3	0.1	446.6	3.7	88.4	NI	0.0	23.3	16.3	3.3	53.1	5.1	113.5
Skagerrak	lower	1.2	0.1	89.5	26.9	476.5	NI	1.1	6.4	22.2	0.6	48.2	1.3	466.7
	upper	1.2	0.1	89.5	26.9	476.5	NI	1.1	6.4	22.2	0.6	48.2	1.3	466.7

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*	LTA-period
			[km <sup>2</sup> ]	[%]	[10E6]	[%]	[1000 m <sup>3</sup> /d]	[a]
<b>Statistical Information provided by Belgium:</b>								
Coastal Area	<b>2675</b>				<b>~0.497</b>			
Western	1689	<i>Belgium</i> <i>France</i>	>1082	NI	>0,305	NI	<b>2367</b>	708
Middle	499	<i>Belgium</i>	NI	NI	0.014	NI	501	
Eastern	487	<i>Belgium</i>			0.177		1158	
Scheldt basin					<b>~10</b>			
Scheldt	<b>22004</b>	<i>Belgium (1)</i> <i>France</i> <i>Netherlands (1)</i>	13324	61	6.9		<b>11139</b>	1949-2008
Ghent-Terneuzen canal	<b>NI</b>	<i>(1) Ghent-Terneuzen canal comprised</i>					<b>1 885</b>	1991-2008
		<i>Belgium</i> <i>Netherlands</i>	NI		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>	

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River	Catchment area [km2]	Countries	Share in catchment area [%]	Population (1990) [10E6]	LTA* [1000 m3/d]	LTA-period [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
Saâne	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	7690 1941-2006
		Netherlands	2400	15.00	0.6	15
Weser	46306	Germany	-	-	9.0	-
Elbe	148268	Germany	148268	100	25.11	-
		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
Eider	2065	Germany	240	0.16	NI	NI
		-	-	0.159	-	2391 1974-2006

River	Catchment area [km <sup>2</sup> ]	Countries	Share in catchment area [km <sup>2</sup> ]	Population (1990) [10E6]	LTA* [1000 m <sup>3</sup> /d]	LTA-period [a]
<b>Statistical Information provided by Ireland:</b>						
Boyne	2695	Ireland	-	NI	3280	1940-2006
Liffey	1256	Ireland	-	NI	1459	1900-2006
Avoca	652	Ireland	-	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
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>				
Corrib	3138	Ireland	-	NI	9011.52	1973-06 excl. 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	Switzerland	1) 28000	2) 55.6	4) 198720	1901-1995
		France	24000	3.0	6	
		Luxembourg	2500	3.7	7	
		Germany	105900	0.3	1	
		Netherlands	21000	32.5	65	
		Belgium	700	10.9	21	
		Austria	2500			
		Liechtenstein	300			
		Italy	100			
Meuse	33500	France	8500	3) 7.15	5) 28080	1911-1995
		Luxembourg	100	0.50		
		Belgium	13150	0.05		
		Germany	4300	2.00		
		Netherlands	7400	1.00		
				3.60		
Scheldt	22004	France	6680	-10	9331	1949-1995
		Belgium	13324	-2.7		
		Netherlands	2000	6.9		
				69		
Ems	15552	France	2000	4	7690	1941-2006
		Belgium	9.00			
		Netherlands	0.4			
				15		
<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
Skjenselva (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
Suldsalslågen (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
		Spain	55769	69.2	6.14	68.0
Douro	97600	Portugal	18600	19.1	1.76	43.5
		Spain	79000	80.9	2.28	56.5
Miño/Minho	17000	Portugal	900	5.3	0.07	7.9
		Spain	16100	9423	0.86	92.1
						50
						50
						15
						15

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River	Catchment area [km <sup>2</sup> ]	Countries	Share in catchment area [km <sup>2</sup> ]	Population (1990) [%]	LTA* [1000 m <sup>3</sup> /d]	LTA-period [a]
<b>Statistical Information provided by Spain:</b>						
Oyarzun	74	Spain	74	100	0.055	100
Urola	266	Spain	266	100	0.176	100
Oria	860	Spain	860	100	0.020	100
Cadagua		Spain				
Asua		Spain				
Galindo		Spain				
Ibaizabal		Spain				
Urola	342	Spain	342	100	0.082	100
Deva	531	Spain	531	100	0.146	100
Artibay	106	Spain	106	100	0.016	100
Lea	81	Spain	81	100	0.010	100
Oca	132	Spain	132	100	0.022	100
Butron	175	Spain	175	100	0.024	100
Barbadun	135	Spain	135	100	0.020	100
Nervión	1764	Spain	1764	100	0.997	100
Pas	620	Spain	606	97		
Eo	818	Spain	715	87		
Saja	955	Spain	955	100	0.104	100
Nalón	4866	Spain	4866	100	0.539	100
Miera	291	Spain	291	100	0.016	100
Sella	1246	Spain	1246	100	0.035	100
Masma	291	Spain	291	100	0.014	100
Oro	189	Spain	189	100	0.007	100
Landro	270	Spain	270	100	0.017	100
Sor	202	Spain	202	100	0.007	100
Mera	127	Spain	127	100	0.007	100
Forcadas	68	Spain	68	100	0.000	100
Grande de Jubia	182	Spain	182	100	0.004	100
Belelle	60	Spain	60	100	0.003	100
Eume	470	Spain	470	100	0.013	100
Mandeo	457	Spain	457	100	0.039	100
Mero	345	Spain	345	100	0.042	100
Allones	516	Spain	516	100	0.049	100
Grande	283	Spain	283	100	0.002	100
Castro	140	Spain	140	100	0.004	100
Jallas	504	Spain	504	100	0.022	100
Tambre	1530	Spain	1530	100	0.059	100
Furelos		Spain				
Deza		Spain				
Traba	122	Spain	122	100	0.004	100
Ulla	2803	Spain	2803	100	0.104	100
	156	Spain	156	100		
Umia	440	Spain	440	100	0.052	100
Lerez	450	Spain	450	100	0.085	100
Verdugo	334	Spain	334	100	0.021	100
Miño	17247	Spain	16347	94.8	0.881	25716
		Portugal	900	5.2		1975-95
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
		Portugal	11525	17.2		1.912 - 1.995
Piedras	550	Spain	550	100	0.034	100
Odiel	2417	Spain	2417	100	0.211	100
Guadaira		Spain				
Tinto	1727	Spain	1727	100	0.090	100
Guadalquivir	63241	Spain	63241	100	4.966	100
Guadiamar		Spain				
Guadalete	3360	Spain	3360	100	0.555	100
<b>TOTAL</b>	<b>356726</b>	Spain	<b>301093</b>	<b>84.4</b>	<b>20.907</b>	<b>NI</b>
		Portugal	55515	15.6		
		TOTAL	356608	100		

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

## UK cont.

River	Catchment area	Countries	Share in catchment area	Population (1990)	LTA*	LTA-period		
	[km2]		[km2]	[%]	[10E6]	[%]	[1000 m3/d]	[a]
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
Caron (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

## 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>	<b>62000</b>							<b>32300</b>	<b>1960 to 1990</b>
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>	<b>22000</b>							<b>16500</b>	<b>1960-1990</b>
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
Torrige (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
Cadogton (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>	<b>32000</b>							<b>36400</b>	<b>1960-1990</b>
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 Glywddy (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>	<b>35000</b>							<b>48400</b>	<b>1960-1990</b>
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

## 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	-		NI	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 Ghriomarstaith	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			NI	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



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