

**MARINE AGGREGATES**

**THE CROWN ESTATE LICENCES**

**SUMMARY OF STATISTICS 2022**

## **I N D E X**

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NC Non confidential

## **ACCOMPANYING NOTES**

1. These statistics refer to removal of sand and gravel from the bed of the English and Welsh Territorial Sea and Continental Shelf, under licence from The Crown Estate Commissioners. Removals from areas not in The Crown Estate ownership are not included in these statistics, nor are dredged materials removed purely for navigational reasons and not used beneficially.
2. All the statistics relate to royalty returns for the 2022 calendar year.
3. All permitted and actual extraction figures are expressed in metric tonnes. A conversion factor of 1.73 for aggregate and 1.5 for sand, has been applied where necessary, to convert cubic metres to metric tonnes.
4. The reported permitted removal tonnages shown within this report refers to the tonnage permitted within The Crown Estate production agreement. This is correct as at 31 December 2022.
5. The tonnages exclude corrections relating to late declarations and those identified during the audits.
6. The regional landing statistics totals will not equate to the amount dredged from each region, due to the presence of the export market and movement of aggregate to meet differing home market demands.
7. The county landing statistics for England are based on ceremonial counties and preserved counties for Wales.
8. An Official Port Listing is included (pages 17-18), which illustrates the individual landing locations (current and historic) and the standard name used within this document.

**Summary 2022**

**1. Regional Dredging Statistics**

**Licences to Dredge Marine Minerals**

Dredging Area	Permitted Removal * <sup>1</sup>	Primary Aggregates	Rivers and Miscellaneous	Secondary Aggregates		Total Removal
				Beach Nourishment	Reclamation Fill	
Humber	6,875,000	3,691,629	-	690,437	-	4,382,066
East Coast	7,125,000	3,598,657	-		-	3,598,657
Thames Estuary	4,350,000	1,694,808	-		-	1,694,808
East English Channel	9,916,667	4,536,225	-	77,264	-	4,613,489
South Coast	8,125,000	3,652,781	-	20,408	-	3,673,189
South West	2,799,998	1,295,116	-	45,829	-	1,340,945
North West	700,000	217,884	-	976,539	-	1,194,423
<b>Total</b>	<b>39,891,665</b>	<b>18,687,101</b>	<b>-</b>	<b>1,810,477</b>	<b>-</b>	<b>20,497,578</b>

**2. Regional Landing Statistics**

Humber / North East	1,281,774
East Coast	443,773
Thames Estuary	7,886,432
East English Channel	655,872
South Coast	2,214,928
South West	1,293,147
North West	217,884
Export	4,693,291
<b>Primary Aggregates Total</b>	<b>18,687,101</b>
Beach Nourishment / Reclamation Fill / Rivers and Misc	1,810,477
<b>TOTAL LANDED</b>	<b>20,497,578</b>

**3. National Landing Statistics - Primary Aggregate**

England	13,354,514
Wales	639,296
Belgium	1,441,622
France	166,648
Netherlands	3,085,021
<b>Primary Aggregates Total</b>	<b>18,687,101</b>

\*<sup>1</sup> Relates to Average Annual Tonnages (total tonnage / term). This does not include specific permitted tonnages for Secondary Aggregates only.

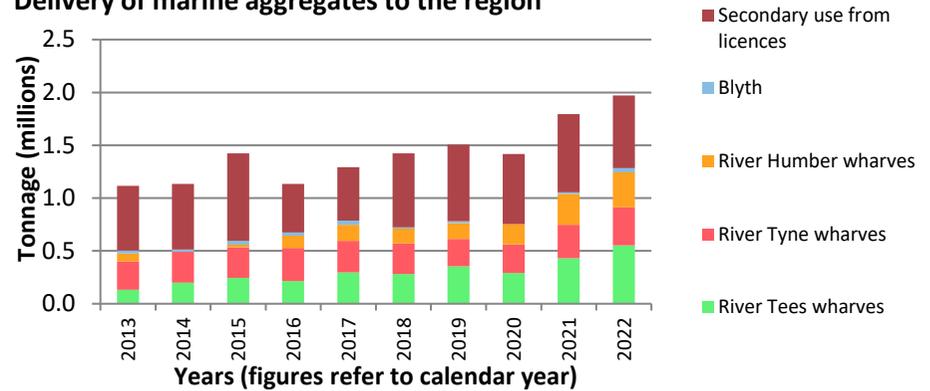
Tonnages exclude corrections. See note 5 on page 1.

# The Humber region

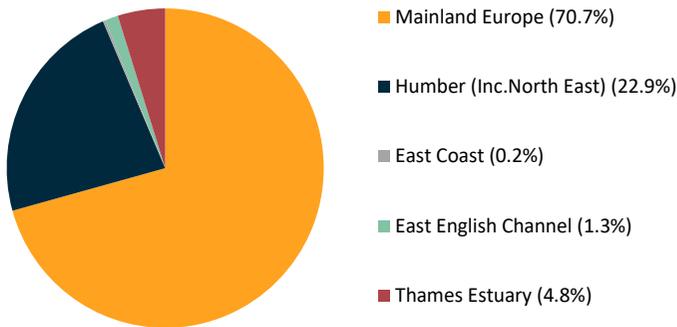
## Tonnage delivered to landing locations in the region

Landing locations	2022 tonnages
Blyth	38,748
River Humber Wharves	330,575
River Tees Wharves	553,842
River Tyne Wharves	358,609
<hr/>	
<b>Humber / North East Total</b>	<b>1,281,774</b>

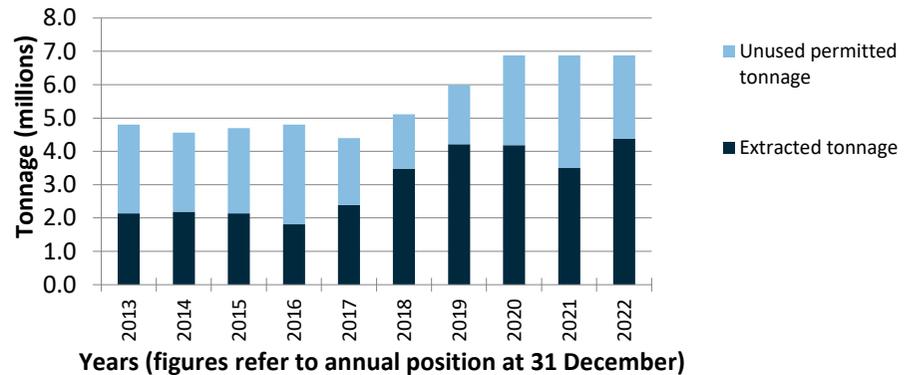
## Delivery of marine aggregates to the region



## During 2022 material extracted from the region was delivered to:



## Permitted and extracted tonnage



**3.69**

million tonnes of primary aggregate were extracted out of the permitted **6.87 million tonnes** from **10 licences\***

**0.69**

million tonnes of aggregate were extracted for **Beach Nourishment**

**16**

Current estimates suggest there are **16 years** of primary aggregate production permitted \*

**1**

Current application for a licence could, if approved **increase** the permitted tonnage by **0.5 million tonnes** annually \*

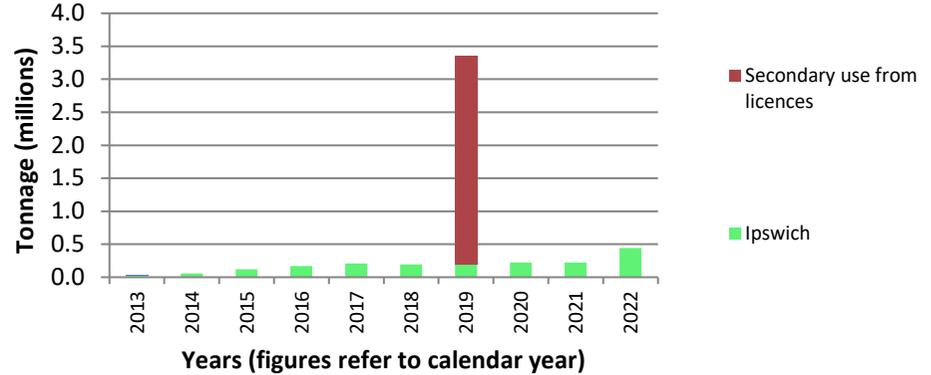
\* As at March 2023

# The East Coast region

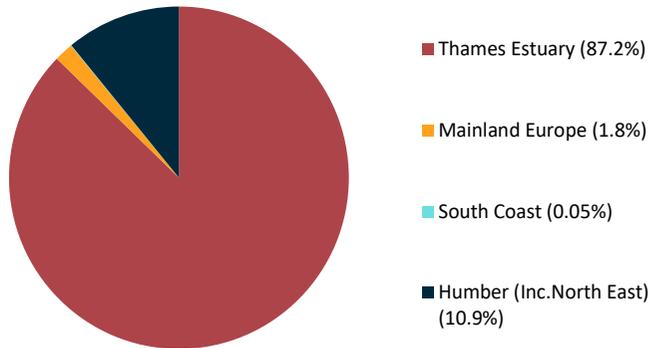
## Tonnage delivered to landing locations in the region

Landing locations	2022 tonnages
Ipswich Wharves	443,773
<hr/>	
<b>East Coast Total</b>	<b>443,773</b>

## Delivery of marine aggregates to the region



## During 2022 material extracted from the region was delivered to:



## Permitted and extracted tonnage



**3.6**

**million tonnes** of primary aggregate were extracted out of the permitted **7.1 million tonnes** from **11 licences**\*

**No** marine aggregate was extracted for **Beach Nourishment**

**10**

Current estimates suggest there are **10 years** of primary aggregate production permitted \*

**1**

Current application for a licence could, if approved **increase** the permitted tonnage by **0.65 million tonnes** annually\*

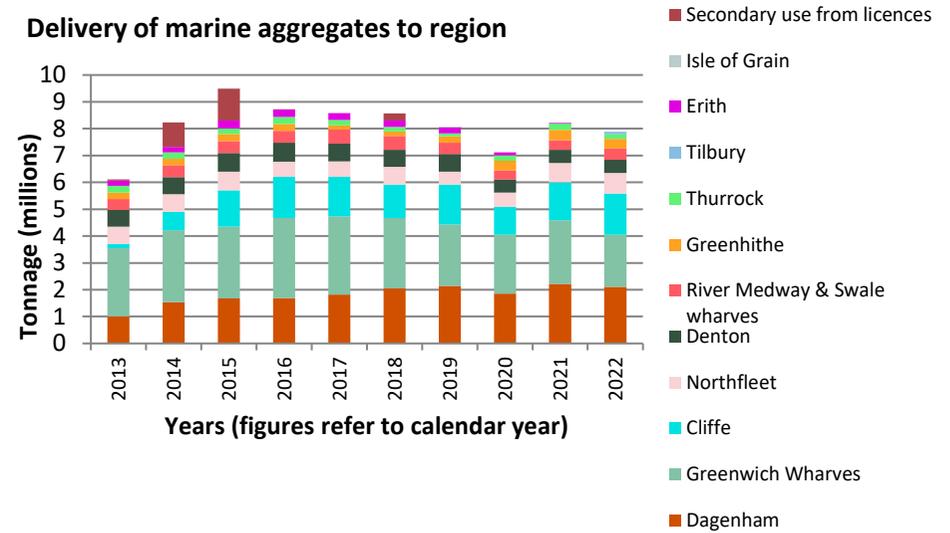
\* As at March 2023

# The Thames region

## Tonnage delivered to landing locations in the region

Landing locations	2022 tonnages
Cliffe	1,533,384
Dagenham	2,112,314
Denton	491,161
Greenwich Wharves	1,943,207
Greenhithe	367,126
Northfleet	757,895
River Medway & Swale wharves	379,282
Swale Wharves	41,191
Thurrock	163,334
Tilbury	97,540
<b>Thames Estuary Total</b>	<b>7,886,432</b>

## Delivery of marine aggregates to region



## During 2022 materials extracted from the region was delivered to:

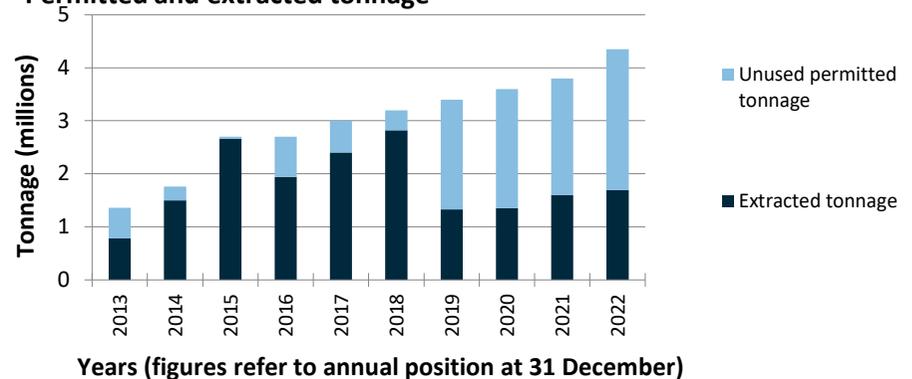


**1.7**

**million tonnes** of primary aggregate were extracted out of the permitted **4.35 million tonnes** from **8 licences\***

**No** marine aggregate was extracted for **Beach Nourishment**

## Permitted and extracted tonnage



**25**

Current estimates suggest there are **25 years** of primary aggregate production permitted \*

**1**

Current application for a licence could, if approved **increase** the permitted tonnage by **0.5 million tonnes** annually\*

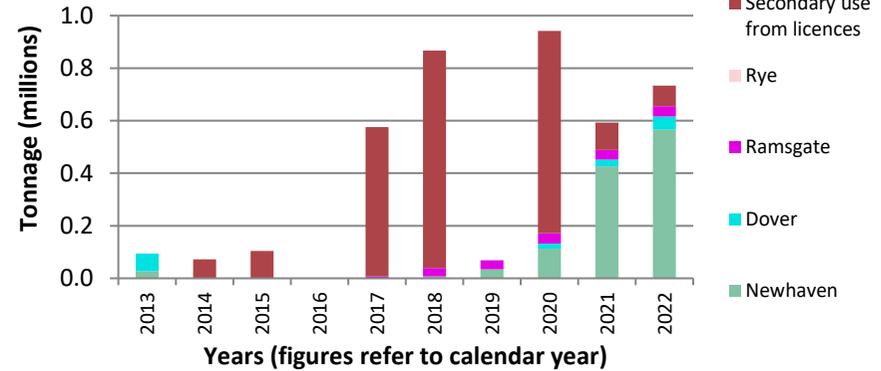
\* As at March 2023

# The East English Channel region

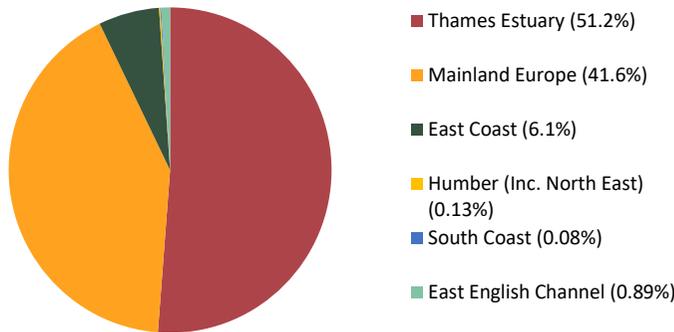
## Tonnage delivered to landing locations in the region

Landing locations	2022 tonnages
Dover	49,686
Newhaven	565,982
Ramsgate	40,205
<hr/>	
<b>East English Channel Total</b>	<b>655,872</b>

## Delivery of marine aggregates to the region



## During 2022 material extracted from the region was delivered to:



## Permitted and extracted tonnage



**4.5**

million tonnes of primary aggregate were extracted out of the permitted **9.1 million tonnes** from **9 licences\***

**0.07**

million tonnes of aggregate were extracted for **Beach Nourishment**

**36**

Current estimates suggest there are **36 years** of primary aggregate production permitted \*

**5**

Current application for a licence could, if approved **increase** the permitted tonnage by **3.4 million tonnes** annually \*

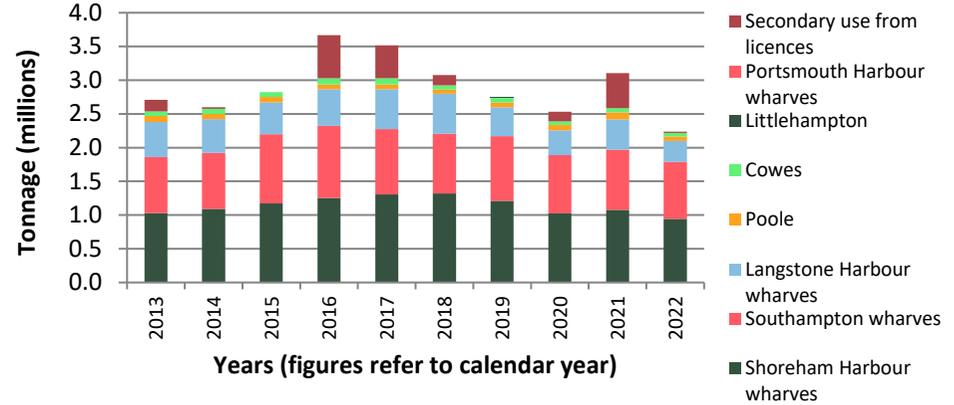
\* As at March 2023

# The South Coast region

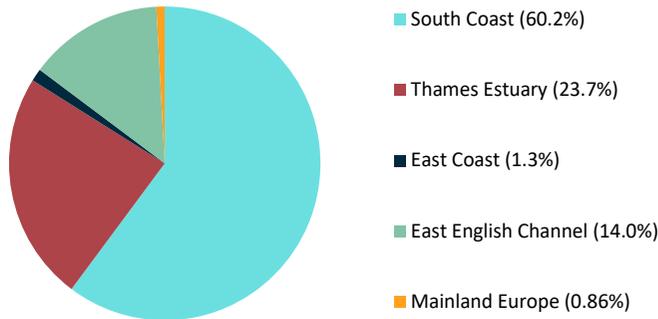
## Tonnage delivered to landing locations in the region

Landing locations	2022 tonnages
Cowes	48,734
Langstone Harbour Wharves	309,089
Poole	67,357
Shoreham Harbour Wharves	945,182
Southampton Wharves	844,565
<b>South Coast Total</b>	<b>2,214,928</b>

## Delivery of marine aggregates to the region



## During 2022 material extracted from the region was delivered to:



## Permitted and extracted tonnage



**3.65**

million tonnes of primary aggregate were extracted out of the permitted **8.13 million tonnes** from **15 licences\***

**0.02**

million tonnes of aggregate were extracted for **Beach Nourishment**

**21**

Current estimates suggest there are **21 years** of primary aggregate production permitted \*

**0**

There are currently **no applications** for new licences on the South Coast \*

\* As at March 2023

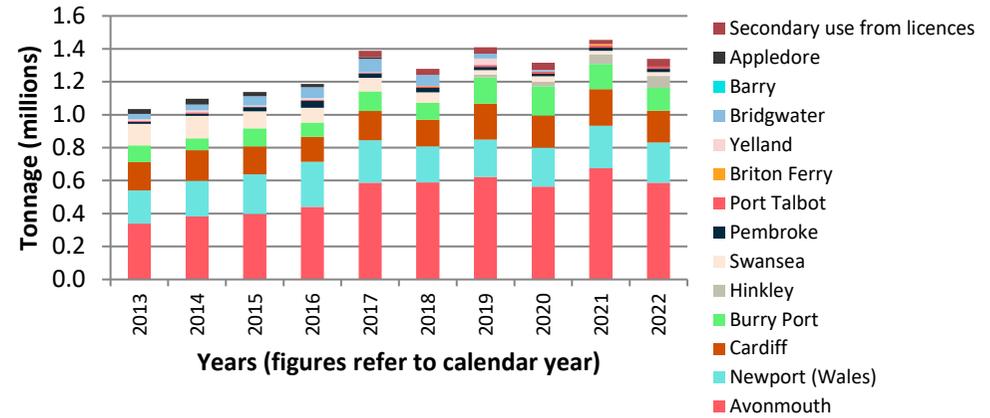
# The South West region

## Tonnage delivered to landing locations in the region

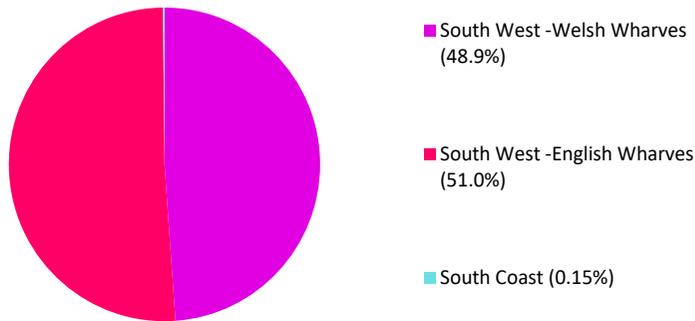
Landing locations	2022 tonnages
Avonmouth	587,665
Briton Ferry	1,105
Burry Port	138,261
Cardiff	193,044
Hinkley	72,490
Newport	243,633
Pembroke	19,562
Port Talbot	13,121
Swansea	24,266

**South West Total** **1,293,147**

## Delivery of marine aggregates to the region



## During 2022 material extracted from the region was delivered to:



**1.3**

**million tonnes** of primary aggregate were extracted out of the permitted **2.8 million tonnes** from **9 licences\***

**0.04**

**million tonnes** of aggregate were extracted for **Beach Nourishment**

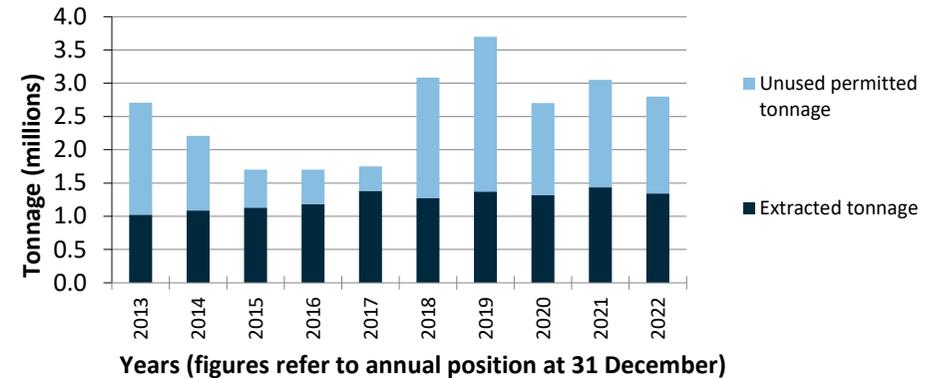
**24**

Current estimates suggest there are **24 years** of primary aggregate production permitted \*

**0**

There are currently **no applications** for new licences in the South West \*

## Permitted and extracted tonnage



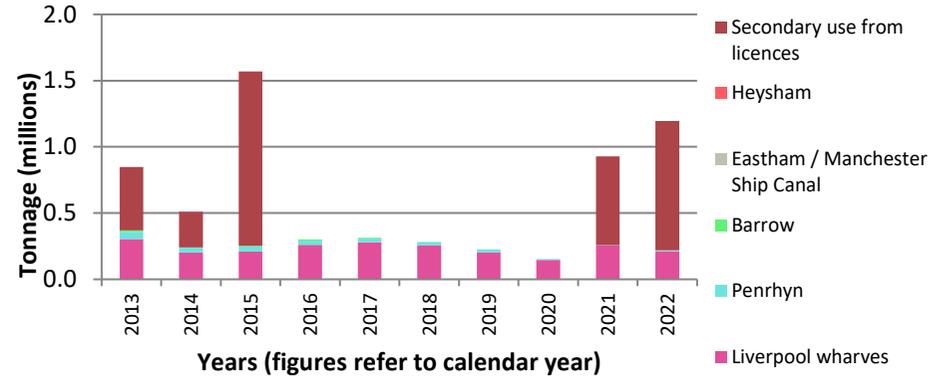
\* As at March 2023

# The North West region

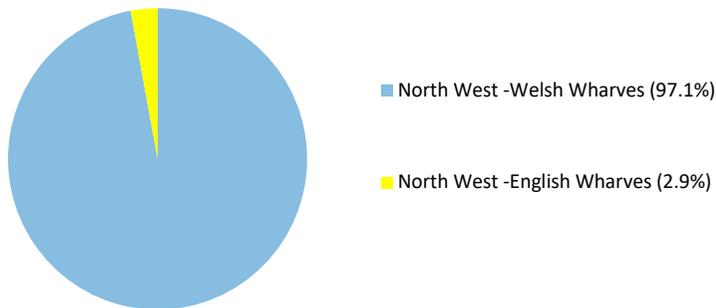
## Tonnage delivered to landing locations in the region

Landing locations	2022 tonnages
Liverpool Wharves	211,580
Penrhyn	6,304
<b>North West Total</b>	<b>217,884</b>

## Delivery of marine aggregates to the region



## During 2022 material extracted from the region was delivered to:



## Permitted and extracted tonnage



**0.2**

million tonnes of primary aggregate were extracted out of the permitted **0.7 million tonnes** from **2 licences\***

**0.98**

million tonnes of aggregate were extracted for **Beach Nourishment**

**33**

Current estimates suggest there are **33 years** of primary aggregate production permitted \*

**1**

Current application for a licence could, if approved **increase** the permitted tonnage by **0.5 million tonnes** annually \*

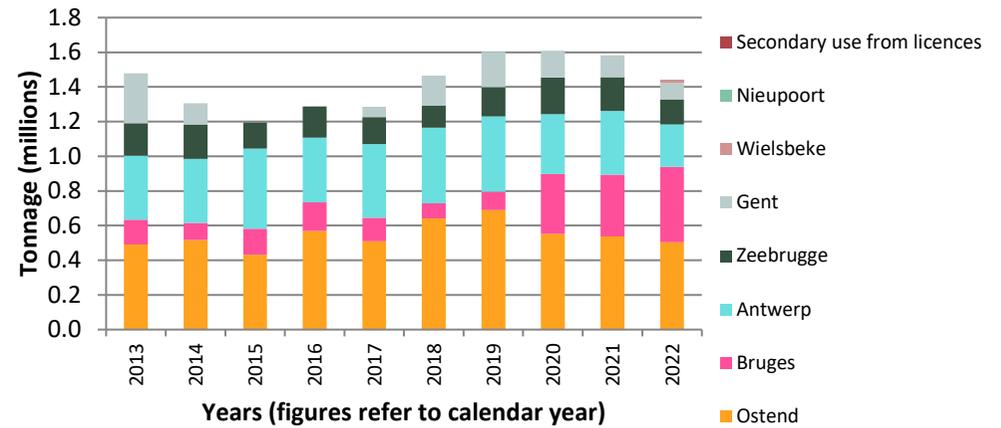
\* As at March 2023

# Exports

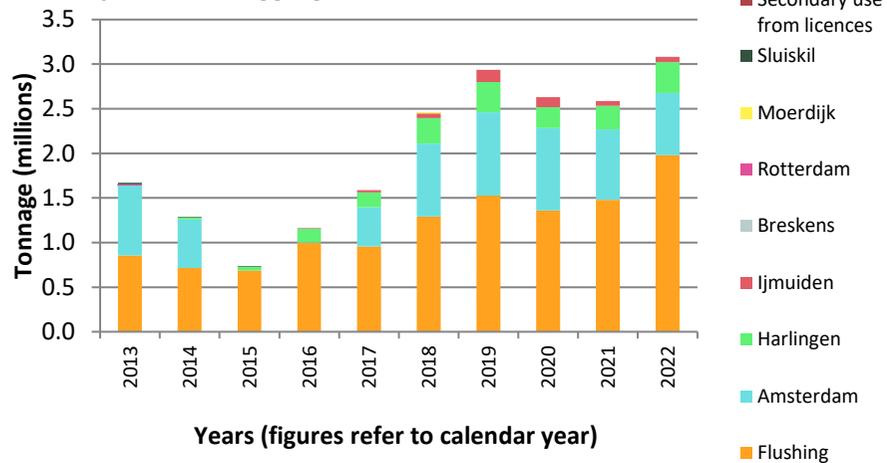
## Tonnage delivered to landing locations in the region

Landing locations	2022 tonnages
Amsterdam	696,087
Antwerp	244,772
Breskens	3,338
Bruges	433,183
Dunkirk	124,983
Fecamp	34,808
Gent	99,106
Harlingen	346,333
Ijmuiden	57,870
Le Havre	6,857
Ostend	504,829
Vlissingen	1,981,394
Wielsbeke	14,294
Zeebrugge	145,438
<b>Export Total</b>	<b>4,693,291</b>

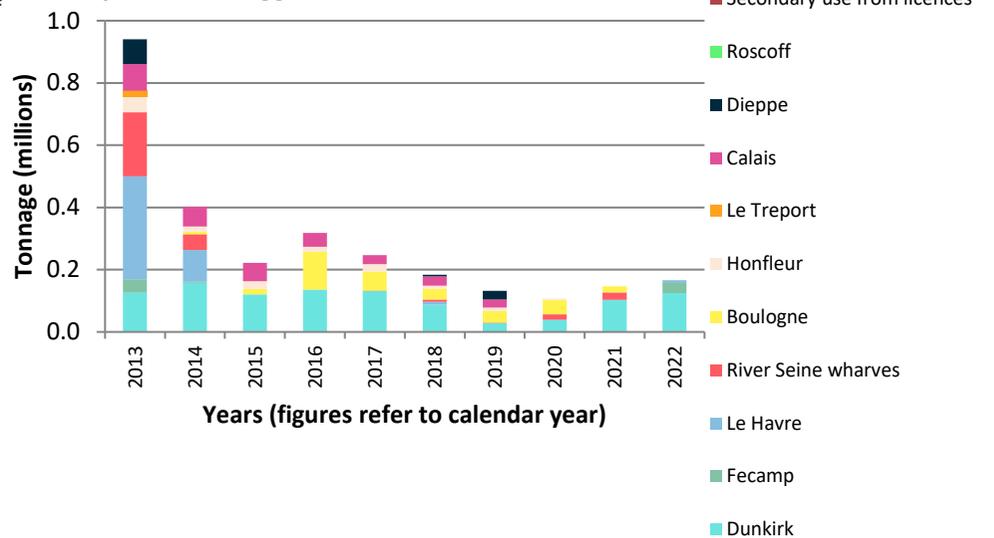
## Delivery of marine aggregate to Belgium



## Delivery of marine aggregates to The Netherlands



## Delivery of marine aggregates to France



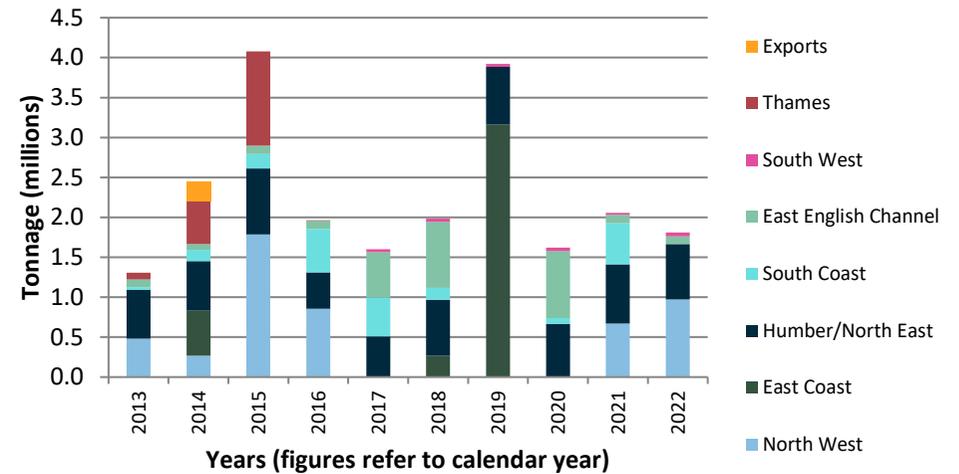
# Secondary use aggregate

Beach nourishment/reclamation fill/rivers and miscellaneous

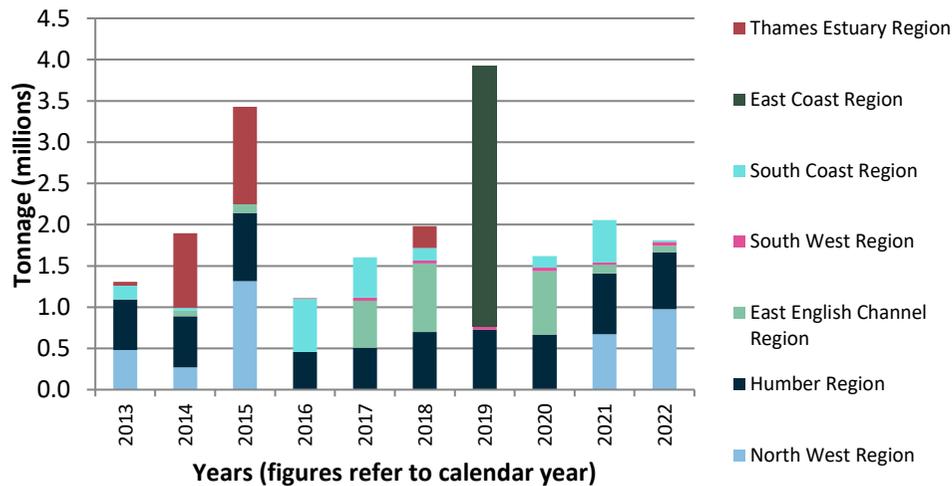
## Secondary use aggregate delivered to landing locations

Landing locations	2022 tonnages
Colwyn Bay	973,871
Eastbourne	11,517
Lincshore	690,437
Lydd	77,264
Pevensy Beach	8,891
Yelland	48,497
<b>Beach Nourishment Total</b>	<b>1,810,477</b>

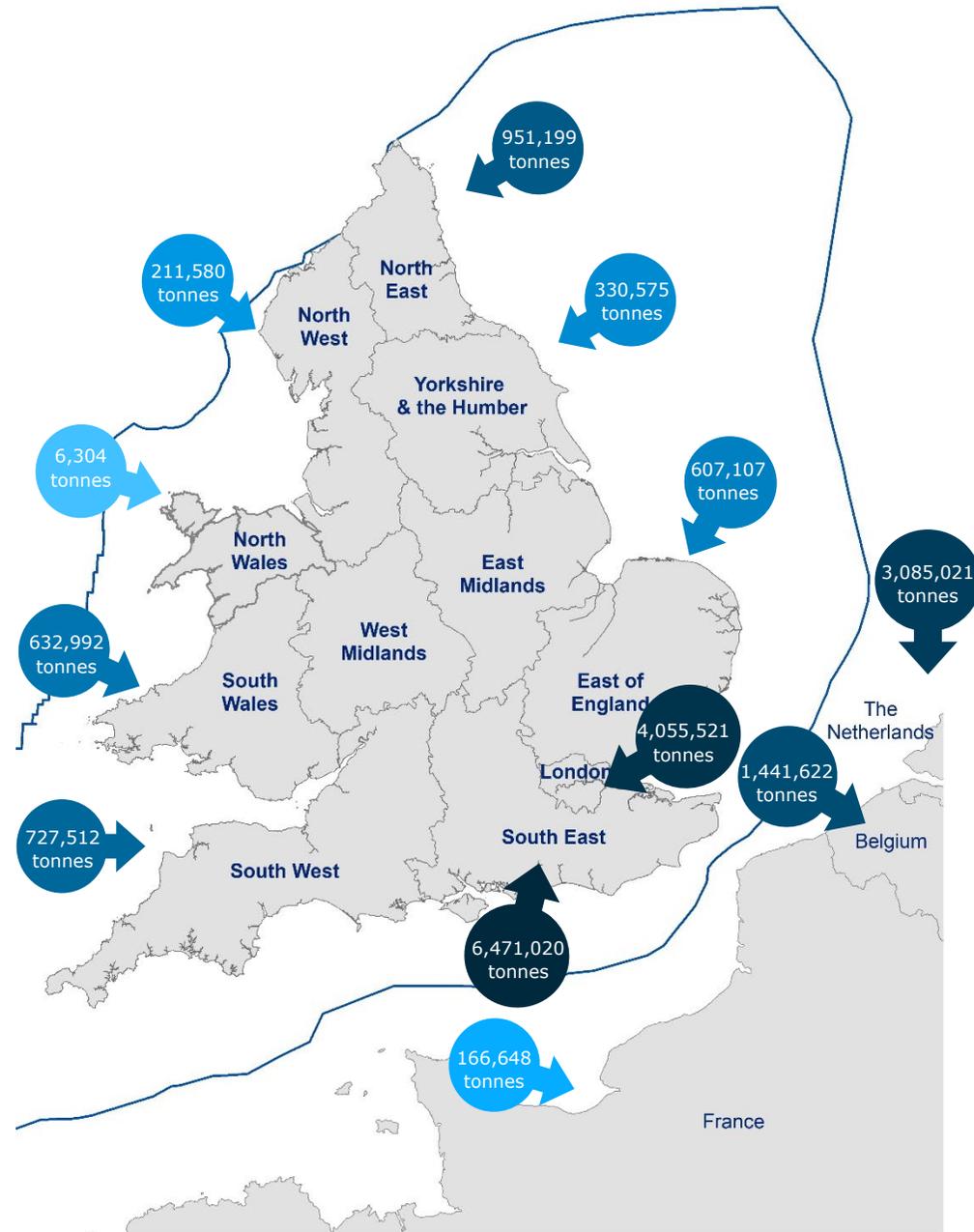
## Secondary use aggregate was delivered to these regions:



## Secondary use aggregate was extracted from these regions:



# Delivery by region/country



# Reserves and Resources

Region	Total current primary reserves	10-year average annual offtake	3-year average annual offtake	Peak annual offtake during 10-year period*	Annual permitted offtake (as March 2023)	Regional reserve life @ 10-year average annual offtake
		Primary (construction aggregate)				
<b>Humber</b>	40.57	2.47	3.57	3.69	6.88	16.46
<b>East Coast</b>	38.97	4.01	3.26	4.72	7.13	9.71
<b>Thames Estuary</b>	35.78	1.44	1.55	1.94	4.35	24.93
<b>East English Channel</b>	146.80	4.08	4.36	4.65	9.92	36.02
<b>South Coast</b>	70.65	3.39	3.61	3.99	8.13	20.86
<b>South West</b>	29.41	1.25	1.34	1.43	2.80	23.61
<b>North West</b>	8.75	0.27	0.21	0.38	0.70	32.77
<b>TOTAL</b>	<b>370.93</b>	<b>16.89</b>	<b>17.90</b>	<b>18.10</b>	<b>39.89</b>	<b>21.96</b>

All figures are in millions of tonnes

\*Totals are national peaks, not the sum of regional figures

## Reserves and Resource

The PERC code defines “**reserves**” as the proportion of a mineral “**resource**” that can be mined for economic purposes

**22**

Current national estimates suggest there are **22 years** of primary marine aggregate production permitted

**371**

Million tonnes estimated national primary reserve

**SUMMARY OF NATIONAL LANDING STATISTICS  
FOR MARINE DREDGED PRIMARY AGGREGATES - 2022**

<b>Landing Locations</b>		<b>2022 Tonnage</b>
<b>England</b>	Avonmouth	587,665
	Blyth	38,748
	Cliffe	1,533,384
	Cowes	48,734
	Dagenham	2,112,314
	Denton	491,161
	Dover	49,686
	Greenhithe	367,126
	Greenwich Wharves	1,943,207
	Hinkley	72,490
	Ipswich Wharves	443,773
	Langstone Harbour Wharves	309,089
	Liverpool Wharves	211,580
	Newhaven	565,982
	Northfleet	757,895
	Poole	67,357
	Ramsgate	40,205
	River Humber Wharves	330,575
	River Medway Wharves	379,282
	River Tees Wharves	553,842
	River Tyne Wharves	358,609
	Shoreham Harbour Wharves	945,182
	Southampton Wharves	844,565
	Swale Wharves	41,191
	Thurrock	163,334
	Tilbury	97,540
		-----
	<b>England Total</b>	<b>13,354,514</b>

**SUMMARY OF NATIONAL LANDING STATISTICS  
FOR MARINE DREDGED PRIMARY AGGREGATES - 2022**

<b>Landing Locations</b>		<b>2022 Tonnage</b>
<b>Wales</b>	Briton Ferry	1,105
	Burry Port	138,261
	Cardiff	193,044
	Newport (Wales)	243,633
	Pembroke	19,562
	Penrhyn	6,304
	Port Talbot	13,121
	Swansea	24,266
	<b>Wales Total</b>	<b>639,296</b>
-----		
<b>Belgium</b>	Antwerp	244,772
	Bruges	433,183
	Gent	99,106
	Ostend	504,829
	Wielsbeke	14,294
	Zeebrugge	145,438
		<b>Belgium Total</b>
-----		
<b>France</b>	Dunkirk	124,983
	Fecamp	34,808
	Le Havre	6,857
		<b>France Total</b>
-----		
<b>Netherlands</b>	Amsterdam	696,087
	Breskens	3,338
	Harlingen	346,333
	Ijmuiden	57,870
	Vlissingen	1,981,394
		<b>Netherlands Total</b>
-----		
	<b>Total</b>	<b>18,687,101</b>
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**SUMMARY OF COUNTY LANDING STATISTICS  
FOR MARINE DREDGED PRIMARY AGGREGATES -  
2022**

LANDING LOCATIONS		<b>2022 Tonnage</b>
<b>ENGLAND</b>	Bristol	587,665
	Dorset	67,357
	East Riding of Yorkshire	305,233
	East Sussex	924,123
	Essex	163,334
	Greater London	4,153,060
	Hampshire	1,153,654
	Isle of Wight	48,734
	Kent	1,747,263
	Lincolnshire	25,342
	Medway	1,912,666
	Merseyside	211,580
	Middlesbrough	39,913
	North Yorkshire	513,929
	Northumberland	38,748
	Somerset	72,490
	Suffolk	443,773
	Tyne & Wear	358,609
	West Sussex	587,040
	<b>England Total</b>	<b>13,354,514</b>
<b>WALES</b>	Carmarthenshire	138,261
	Gwent	243,633
	Gwynedd	6,304
	Pembrokeshire	19,562
	South Glamorgan	193,044
	West Glamorgan	38,492
	<b>Wales Total</b>	<b>639,296</b>

**OFFICIAL PORT LISTING**

<b>Region</b>	<b>Landing Port (Standard Name)</b>	<b>Wharves/Alternative Names</b>
North East	Blyth	Blyth
Humber	Immingham	Immingham
	Lincshore	Lincshore
	River Humber Wharves	Goole, Grimsby, Howden, Hull, Hull N&Y, Hull Northern Aggregates, Pyewipe, St Andrew's Quay, Stema Hull
	River Tees Wharves	Able Tees, Billingham, Middlesbrough, Tees, Tees Sand, Seaton, Middlesbrough Dawsons, TCP East Quay (Shire Aggregates)
	River Tyne Wharves	Gateshead, Jarrow, Tyne, Jarrow Wharf (Cemex)
	Sunderland	Hendon, Hendon Dock, Sunderland
East Coast	Bacton	Bacton
	Ipswich	Hanson/ARC Ipswich, Ipswich, East Coast Marine Aggregates
	Lowestoft	Lowestoft
Thames Estuary	Barking	Barking, Docklands Wharf
	Cliffe	Alpha Wharf, Cliffe, North Sea Terminal
	Dagenham	Hanson/ARC Dagenham, Dagenham, Dagenham Deport (Cemex)
	Denton	Denton, Denton B.A.D, Denton Sand, J Clubbs
	Erith	Erith, Pioneer Wharf
	Felixstowe	Felixstowe
	Greenhithe	Greenhithe, Hanson Greenhithe
	Greenwich Wharves	Angerstein, Blackwall Wharf, Charlton, Delta Wharf, Greenwich, Murphy's Wharf, Phoenix Wharf, Victoria Deep Wharf
	London Docklands Wharves (mostly disused)	Canning Town, Cargo Fleet Wharf, Clarence Wharf, East India Dock, Heron Quay, Millwall, Orchard Wharf, Peruvian Wharf, Rotherhithe, Silvertown, Thames Wharf, Thamesmead, Union Wharf, Victoria Wharf
	Northfleet	Northfleet, Northfleet Brett, Robin's Wharf
	River Medway & Swale Wharves	Queenborough, Ridham, Rochester, Rochester Hanson, Sheerness
	Swale Wharves	Ridham, Queenborough
	Tilbury	Tilbury Stema
Thurrock	Purfleet, Purfleet PAL, Thurrock, West Thurrock	
East English Channel	Dover	Dover
	Hythe	Hythe
	Lydd	Lydd
	Newhaven	Newhaven, Cemex Newhaven
	Ramsgate	Ramsgate
	Rye	Rye
South Coast	Cowes	Cowes, East Cowes, IOWA/Isle of Wight Aggregates, Kingston Wharf, Medina Wharf, Cemex/SCS West Cowes, TMD/UMD West Cowes, West Cowes
	Eastbourne	Eastbourne Beach
	Elmer	Elmer Beach
	Langstone Harbour Wharves	Bedhampton, Havant, Kendall's Wharf, Langstone, TMD/UMD Bedhampton/ Portsmouth
	Littlehampton	Littlehampton, TMD/UMD Littlehampton
	Newport, Isle of Wight	Blackhouse Quay (disused), Newport IoW, Solent Services, West Medina Mills (disused)
	Pevensey	Pevensey Beach
	Plymouth	Millbay, Plymouth, Stonehouse
	Poole	Poole
	Portsmouth Harbour Wharves	Fareham, Gosport, LRA Tipner, LRA Upper Wharf, Portsmouth
	Shoreham Harbour Wharves	Hanson/ARC Shoreham, Hall's Wharf, Hiedelberg Portslade, Kendall's Wharf Shoreham, Portslade, Cemex/SCS Shoreham, Shoreham, Shoreham Ferry Wharf, TMD/UMD Shoreham
	Southampton Wharves	Burnley Wharf, Dibles Wharf, Eling Wharf, JP Marks, JPM Super Wool, Leamouth, LRA Marchwood, Marchwood, Cemex/SCS Southampton, Southampton, Southampton (Fawley), Spitfire Wharf, Totton, TMD/UMD Burnley Wharf, Woolston
	Southsea	Southsea
Channel Islands	Guernsey	Guernsey, St Sampson

**OFFICIAL PORT LISTING**

<b>Region</b>	<b>Landing Port (Standard Name)</b>	<b>Wharves/Alternative Names</b>
South West	Appledore	Appledore, Appledore Evans, Bidna
	Avonmouth	Avonmouth, BCA Avonmouth, Cemex/BDL Avonmouth, Hanson Avonmouth, Remix Avonmouth, TMD/UMD Avonmouth
	Barnstaple	Barnstaple
	Barry	Barry
	Bridgwater	Bridgwater, Dunball Wharf
	Briton Ferry	Briton Ferry, Cemex Briton Ferry, Giant's Wharf, Hanson Briton Ferry, Ironworks, Riverside Wharf, Tarmac Briton Ferry
	Burry Port	Burry Port
	Cardiff	Cardiff, TMD Cardiff, Cemex Cardiff, Hanson Cardiff, Empire Wharf, Roath Dock
	Hinkley	Hinkley Jetty
	Newport, Wales	Alexandra Dock, Hanson/ARC Newport, East Bank/Ferry Terminal, Eastern Wharf, Newport, Newport (Wales), Newport 2
	Pembroke	Pembroke
	Port Talbot	Port Talbot
	Swansea	Prince of Wales Dock, Cemex/BDL Swansea, Swansea
Yelland	Yelland	
North West	Barrow	Barrow
	Eastham	Eastham
	Glasson	Glasson
	Heysham	Heysham
	Liverpool Wharves	Albert Dock, Birkenhead, Bramley Moore Dock, Garston, Liverpool, Mersey Wharf, Mostyn
	Penrhyn	Penrhyn
Northern Ireland	Belfast	Belfast
Continental Europe	Amsterdam	Amsterdam, Amsterdam AGM, Amsterdam PAES, Hanson/CM/Hiedelberg Amsterdam, Steen Korrel
	Antwerp	Antwerp, Hanson/CM Antwerp, Kallo, Antwerp Sands
	Breskens	Breskens
	Boulogne	Boulogne, Boulogne-sur-mer
	Bruges	Alzagri, Bruges, Brugge, Hanson/CM Brugge
	Caen	Caen
	Calais	Calais
	Dieppe	Dieppe
	Dunkirk	Hanson/CM Dunkirk Sand, Dunkerque, Dunkirk, Dunkirk Gravel, Dunkirk Sand, Mardyck
	Fecamp	Fecamp, Fecamp Mercier
	Flushing	Flushing, Vlissingen
	Gent	Gent, Kluizendok
	Harlingen	Harlingen
	Honfleur	Honfleur
	Ijmuiden	Ijmuiden
	Le Havre	Le Havre, Treguier
	Le Treport	Le Treport
	Moerdijk	Moerdijk
	Nieupoort	Nieupoort
	Ostend	Ostend, Ostend ISG
	River Seine Wharves	Lillebonne, Rouen, St Wandrille, Vatteville, Vattewille-la-Rue
	River Somme Wharves	Vattier
	Roscoff	Roscoff
	Rotterdam	De Hoop Rotterdam, Europoort, Rotterdam, Schiemond
	Sluiskil	NL Sluiskil, Sluiskil
	Terneuzen	Terneuzen
Thyboron	Thyboron	
Zeebrugge	Zeebrugge, Zeebrugge DVSII, Zeebrugge Hanson	