

# **Monthly Highlights**

No. 4 / 2021

## In this issue

According to data collected by EUMOFA from 13 EU Member States, Norway lobster and spottail mantis squillid together accounted for 38% of the total first-sales value of the "crustaceans" commodity group in January 2021.

Both the import price and volumes of frozen crabs imported in the EU from Norway have shown a downward trend since week 1 of 2021.

Between February 2018 and January 2021, total household consumption of fresh flounder in Denmark (3.395 tonnes) was 608% higher than that in Sweden (480 tonnes).

The most important commercial fisheries in the Baltic Sea in terms of volume are sprat and herring trawl fisheries. Cod is the most important species in terms of demersal fisheries. These three species accounts for around 95% of total catches.

Cuttlefish are among the most caught and consumed molluscs in the EU. In 2018, the EU landed 23.170 tonnes of cuttlefish worth EUR 158 million.

In March, the EU, Norway, and the UK signed an agreement for the joint management of cod, haddock, saithe, whiting, plaice, and herring in the North Sea.



# EUMOFA

European Market Observatory for Fisheries and Aquaculture Products



## 1. First sales in Europe

In **January 2021**, 13 EU Member States (MS), Norway, and the United Kingdom reported first-sales data for 10 commodity groups<sup>1</sup>. First-sales data are based on sales notes and data collected from auction markets. First-sales data analysed in the section *"First sales in Europe"* are extracted from EUMOFA<sup>2</sup>.

### 1.1. January 2021 compared to January 2020

**Increases in value and volume**: Denmark, Estonia, Lithuania, and Sweden were the only countries that recorded an increase in both first-sales value and volume. All four countries saw a sharp increase due to a higher supply of herring and sprat.

**Decreases in value and volume**: Belgium, Bulgaria, France, Italy, the Netherlands, Poland, Portugal, and Spain recorded decreases in both first-sales value and volume. Poland recorded amongst the highest decreases due to a lower supply of small pelagic species, namely herring and sprat. Clam was behind the sharp decreases seen in Bulgaria.

### Table 1. JANUARY OVERVIEW OF FIRST SALES FROM THE REPORTING COUNTRIES (volume in tonnes and value in million EUR) \*

	Janua 2019	•	Janu 202	•	Janu 202	•	Change January	
Country	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Belgium	1.466	5,08	1.322	5,74	982	3,43	-26%	-40%
Bulgaria	26	0,07	43	0,11	26	0,05	-40%	-51%
Denmark	28.383	31,69	16.750	27,74	50.737	29,69	203%	7%
Estonia	6.209	1.095	5.676	1.871	9.405	2,18	66%	16%
France	15.648	53.015	14.540	51.023	13.644	44,26	-6%	-13%
Italy	5.734	23.666	6.628	25.787	4.513	18,66	-32%	-28%
Latvia	4.760	825	3.819	696	3.829	0,79	0%	14%
Lithuania	125	143	134	114	349	0,18	160%	62%
Netherlands	11.352	23.323	12.467	22.314	6.798	14,17	-45%	-36%
Poland	9.542	2.462	7.275	1.787	2.688	0,60	-63%	-66%
Portugal	7.268	19.560	4.497	16.153	4.138	14,96	-8%	-7%
Spain	31.206	112.194	27.993	102.167	23.472	80,04	-16%	-22%
Sweden	24.433	9.141	11.455	5.713	21.824	7,27	91%	27%
Norway	257.373	237.025	229.244	250.896	259.781	214,52	13%	-14%
United Kingdom	40.338	76.011	33.157	62.225	46.631	61,34	41%	-1%

Possible discrepancies in % changes are due to rounding.

\* Volumes are reported in net weight for EU Member States and the UK, and in live weight equivalent (LWE) for Norway. Prices are reported in EUR/kg (without VAT). For Norway, prices are reported in EUR/kg of live weight.

The most recent weekly first-sales data (up to week 15 of 2021) are available via the EUMOFA website, and can be accessed <u>here</u>.

The most recent monthly first-sales data **for February 2021** are available via the EUMOFA website and can be accessed **here**.

<sup>&</sup>lt;sup>1</sup> Bivalves and other molluscs and aquatic invertebrates, cephalopods, crustaceans, flatfish, freshwater fish, groundfish, salmonids, small pelagics, tuna and tuna-like species, and other marine fish.

<sup>&</sup>lt;sup>2</sup> First sales data updated on 16.3.2021.

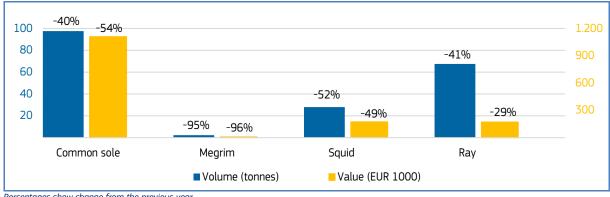
### 1.2. First sales in selected countries

First sales data analysed in this section are extracted from EUMOFA<sup>3</sup>.

### Table 2. FIRST SALES OF THE MAIN COMMERCIAL SPECIES<sup>4</sup> IN BELGIUM

Belgium	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan 2021 vs	EUR 3,4 million,	982 tonnes,	Common sole, megrim, squid, ray, cuttlefish.
Jan 2020	-40%	-26%	

### Figure 1. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN BELGIUM, JANUARY 2021

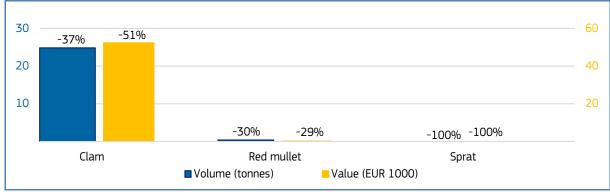


Percentages show change from the previous year.

### Table 3. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN BULGARIA

Bulgaria	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan 2021 vs	EUR 0,05 million,	26 tonnes,	Clam, red mullet, sprat.
Jan 2020	-51%	-40%	

### Figure 2. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN BULGARIA, JANUARY 2021



Percentages show change from the previous year.

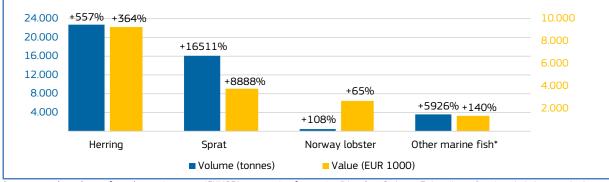
<sup>&</sup>lt;sup>3</sup> First sales data updated on 16.03.2021.

<sup>&</sup>lt;sup>4</sup> Data on fisheries and aquaculture products harmonised in EUMOFA allow comparisons along the different supply chain stages in EUMOFA.

Denmark	First-sales value / trend %	First-sales volume / trend %	Main contributing species	Notes
Jan 2021 vs Jan 2020	EUR 29,7 million, +7%	50.737 tonnes, +203%	Herring, sprat, Norway lobster, other marine fish*, mussel <i>Mytilus</i> spp.	This <b>herring</b> increase might partially be due to the closure of the Norwegian part of the North Sea in January 2021, as part of the post-Brexit trilateral negotiations. This closure provoked that higher quota of herring was recorded for the North Sea basin compared to previous years since pelagic vessels in this basin focused on North Sea <b>sprat</b> and Norwegian pout <sup>5</sup> fishery where herring can also be caught as by-catch.

### Table 4. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN DENMARK





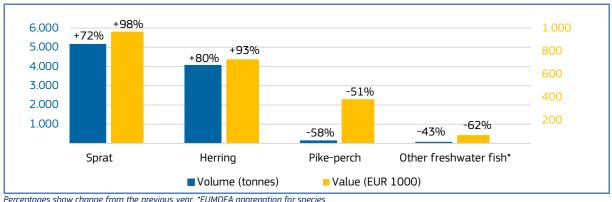
Percentages show change from the previous year. \*EUMOFA aggregation for species (Metadata 2, Annex 3: http://eumofa.eu/supply-balance-and-othermethodologies).

### Table 5. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN ESTONIA

Estonia	First-sales value / trend %	First-sales volume / trend %	Main contributing species	Notes
Jan 2021 vs Jan 2020	EUR 2,2 million, +16%	9.405 tonnes, +66%	Sprat, herring. Pike-perch and other freshwater fish* slowed the increasing trend.	One of the reasons behind the increased sales of <b>sprat</b> in January 2021 was the favourable weather condition compared with January 2020 which allowed the increase of fishing effort. Moreover, in 2021, quotas for herring were reduced by 31% compared to 2020 <sup>6</sup> .

<sup>&</sup>lt;sup>5</sup> Belongs to main commercial species (MCS) of "other marine fish"

<sup>&</sup>lt;sup>6</sup> Council Regulation (EU) 2020/1579 https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32020R1579



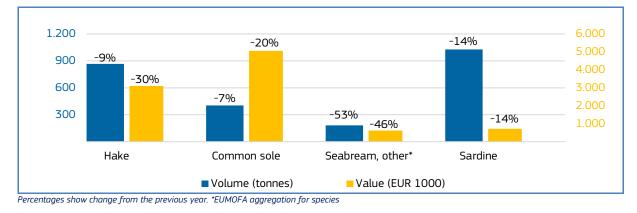
#### FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN ESTONIA, JANUARY 2021 Figure 4.

Percentages show change from the previous year. \*EUMOFA aggregation for species

#### Table 6. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN FRANCE

France	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan 2021 vs	EUR 44,3 million,	13.644 tonnes,	Hake, common sole, seabream other than gilthead*, sardine.
Jan 2020	-13%	-6%	

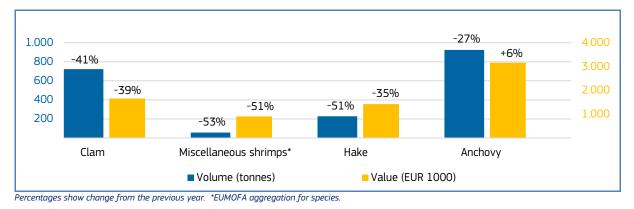
#### Figure 5. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN FRANCE, JANUARY 2021



#### FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN ITALY Table 7.

Italy	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan 2021 vs	EUR 18,7 million,	4.513 tonnes,	Clam, miscellaneous shrimps*, hake, anchovy, deep-water rose shrimp.
Jan 2020	-28%	-32%	

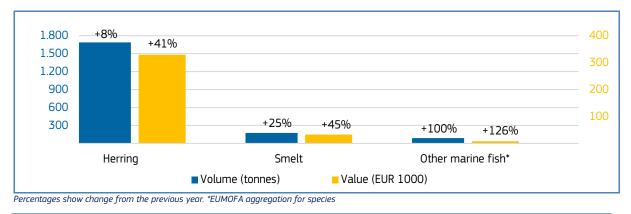
### Figure 6. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN ITALY, JANUARY 2021



### Table 8. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN LATVIA

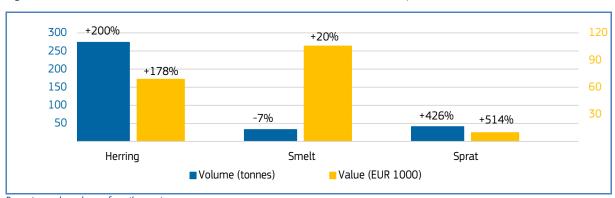
Latvia	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan 2021 vs	EUR 0,8 million,	3.829 tonnes,	Herring, smelt, other marine fish*.
Jan 2020	+14%	no change	

### Figure 7. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN LATVIA, JANUARY 2021



### Table 9. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN LITHUANIA

Lithuania	First-sales value / trend %	First-sales volume/ trend %	Main contributing species	Notes
Jan 2021 vs Jan 2020	EUR 0,2 million, +62%	349 tonnes, +160%	Herring, sprat. Smelt recorded increase in first-sales value only.	<b>Herring</b> recorded significant increases in first sales. The main reason is linked with the Latvian and Estonian fish processing companies, which purchased a subsidiary fish company in Lithuania. Since the activities were carried out by this company but recorded in Lithuania, sales increased by a significant percentage in this country compared to the previous year.



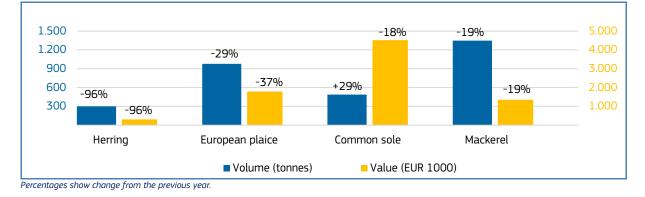


Percentages show change from the previous year.

### Table 10. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN THE NETHERLANDS

The Netherlands	First-sales value / trend %	First-sales volume / trend %	Main contributing species	Notes
Jan 2021 vs Jan 2020	EUR 14,2 million, -36%	6.798 tonnes, -45%	Herring, European plaice, common sole, mackerel.	While the level of <b>herring</b> production recorded in January 2021 is extremely low compared to the previous years, it should be noted that it is highly variable, with around 3.600 tonnes in January 2019 and 5.200 tonnes in January 2018. This is mostly due to a change in fishing strategies, with only one Dutch pelagic vessel targeting herring in the Channel during the first two weeks of 2021.

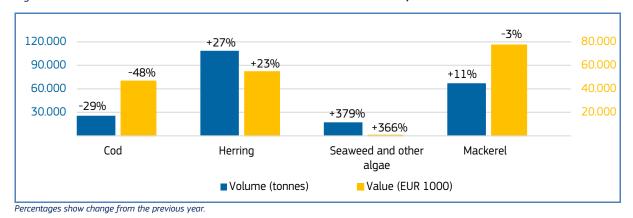
### Figure 9. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN THE NETHERLANDS, JANUARY 2021



#### Table 11. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN NORWAY

Norway	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan 2021 vs	EUR 214,5 million	259.781 tonnes,	Value: cod, haddock, mackerel.
Jan 2020	-14%	+13%	Volume: herring, seaweed and other algae, mackerel.

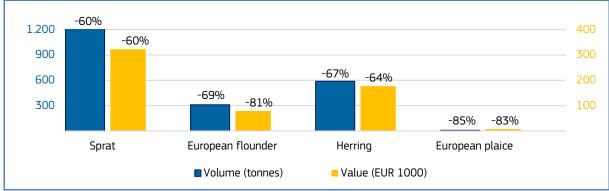
### Figure 10. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN NORWAY, JANUARY 2021





Poland	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan 2021 vs	EUR 0,6 million	2.688 tonnes,	Sprat, European flounder, herring, European plaice.
Jan 2020	-66%	-63%	

### Figure 11. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN POLAND, JANUARY 2021

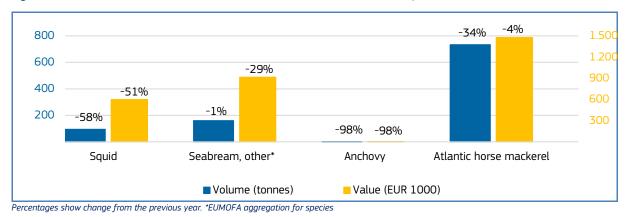


Percentages show change from the previous year.

### Table 13. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN PORTUGAL

Portugal	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan 2021 vs	EUR 15,0 million	4.138 tonnes,	Squid, seabream other than gilthead, anchovy, Atlantic horse mackerel.
Jan 2020	-7%	-8%	

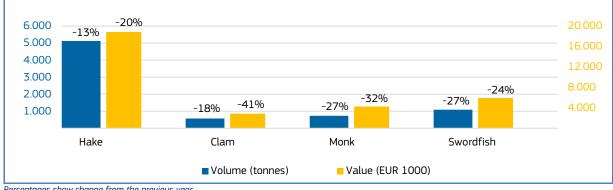




### Table 14. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN SPAIN

Spain	First-sales value / trend in %	First-sales volume / trend %	Main contributing species
Jan 2021	EUR 80,0 million	23.472 tonnes,	Hake, clam, monk, swordfish.
vs Jan 2020	-22%	-16%	

### Figure 13. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN SPAIN, JANUARY 2021



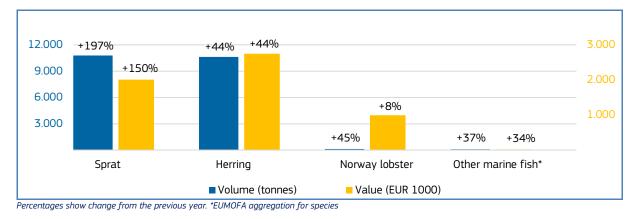
Percentages show change from the previous year.

### Table 15. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN SWEDEN

Sweden	First-sales value / trend in %	First-sales volume / trend %	Main contributing species	
Jan 2021 vs Jan 2020	EUR 7,3 million, +27%	21.824 tonnes, +91%	Sprat, herring, Norway lobster, other marine fish*.	One of the causes for sprat increases in volume might be the weather conditions. Indeed, in January 2020 there were frequent storms which affected fishing capacity. Better weather conditions in January 2021 allowed the increase in fishing capacity. Another factor to consider is the EU Regulation <sup>7</sup> which reduced the total allowable catches (TACs) on other species in the Baltic Sea region. Compared to 2020, the quota was reduced by 31% for herring, 86% for cod, 28% for plaice. This might have led suppliers to intensify the fishing activities on sprat.

<sup>7</sup> Council Regulation (EU) 2020/1579 of 29 October 2020 https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32020R1579

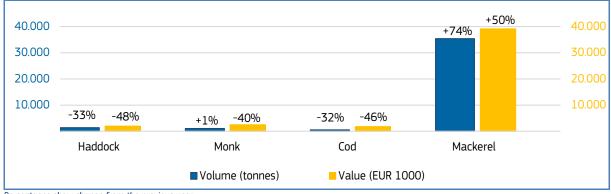
### Figure 14. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN SWEDEN, JANUARY 2021





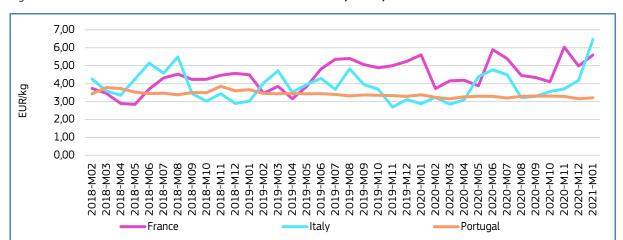
The United Kingdom	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan 2021 vs	EUR 61,3 million	46.631 tonnes,	Value: haddock, monk, cod.
Jan 2020	-1%	+41%	Volume: mackerel.

### Figure 15. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN THE UNITED KINGDOM, JANUARY 2021



Percentages show change from the previous year.

### 1.3. Comparison of first-sales prices of selected species in selected countries<sup>8</sup>



### Figure 16. FIRST-SALES PRICES OF SCABBARDFISH IN FRANCE, ITALY, AND PORTUGAL

EU first sales of **scabbardfish** take place mainly in **Portugal**, as well as in **France** and **Italy**. Average prices in January 2021 (the most recent available data) were 5,59 EUR/kg in France (12% up from the previous month and unchanged from January 2020), and 6,46 EUR/kg in Italy (up from both the previous month and year by 55% and 124%, respectively). In Portugal, the average price was 3,21 EUR/kg (2% higher than December 2020, and 5% lower than January 2020). In January 2021, first-sales volume decreased in all three countries: -8% in France, -94% in Italy, and -14% in Portugal, relative to the previous year. Scabbardfish fisheries are seasonal, with peaks between April and May in France and Italy, and October to November in Portugal. Over the 36-month period, scabbardfish prices exhibited different trends in all three countries: an increasing trend in France, a stable trend in Italy (despite monthly fluctuations), and a decreasing trend in Portugal. During the same period, supply showed an increasing trend in France and Italy, and the opposite in Portugal.

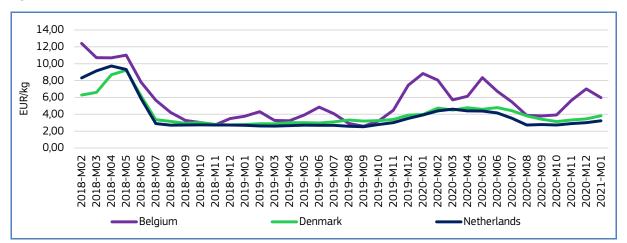
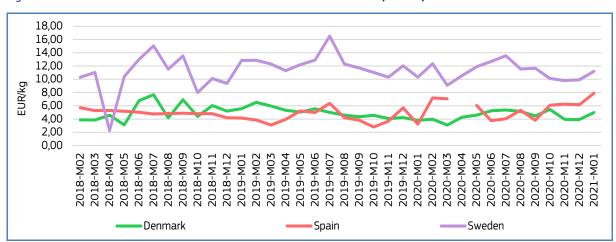


Figure 17. FIRST-SALES PRICES OF SHRIMP CRANGON SPP. IN BELGIUM, DENMARK, AND THE NETHERLANDS

EU first sales of **shrimp** *Crangon* **spp.** occur in multiple countries, including **Belgium**, **Denmark**, and most notably **the Netherlands**. In January 2021, the average first-sales prices of shrimp *Crangon* **spp**. were: 5,96 EUR/kg in Belgium (down from both the previous month and year by 15% and 33%, respectively); 3,82 EUR/kg in Denmark (11% higher than December 2020, and 4% lower than January 2020); and 3,23 EUR/kg in the Netherlands (7% up from the previous month and 18% down from the previous year). In January 2021, supply increased in Belgium (+53%) and decreased in Denmark (-50%) and the Netherlands (-19%) relative to January 2020. Volumes sold in the three markets are seasonal. In Denmark they peak in March–May, and September–November in Belgium and the Netherlands. Over the past 36 months,

<sup>&</sup>lt;sup>8</sup> First sales data updated on 20.03.2021.

shrimp *Crangon* spp. prices showed downward trends. At the same time, volume showed an opposite trend in all the three countries.





EU first sales of **coldwater shrimp** occur predominantly in **Denmark** and **Sweden**, as well as in **Spain**. In January 2021, the average first-sales prices of coldwater shrimp were: 4,99 EUR/kg in Denmark (up from both the previous month and year by 27% and 31%, respectively); 7,88 EUR/kg in Spain (+28% from December 2020, and +145% from January 2020); 11,21 EUR/kg in Sweden (13% higher than December 2020, and 8% higher than January 2020). In January 2021, supply increased significantly in Spain (+219%), and decreased in Denmark (–59%) and Sweden (–30%) compared to December 2020. First-sales volume fluctuated highly in Denmark and Spain and was more stable in Sweden. Supply has different peaks across the three countries. Prices showed high volatility in Sweder; however, in the long term, prices in Sweden and Spain exhibited an upward trend, while the opposite took place in Denmark. Over the past three years, supply was stable and displayed an upward trend in Sweder; at the same time, it exhibited a downward trend in Denmark and Spain.

### 1.4. Commodity group of the month: crustaceans<sup>9</sup>

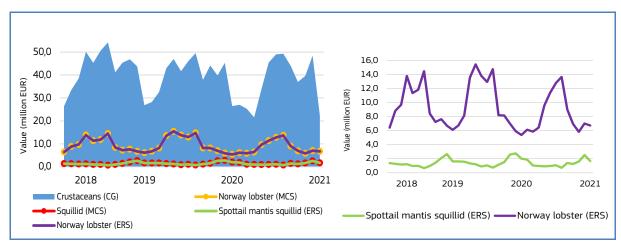


Figure 19. FIRST-SALES COMPARISON AT CG, MCS, AND ERS LEVELS FOR REPORTING COUNTRIES<sup>10</sup>, FEBRUARY 2018 - JANUARY 2021

The "**Crustaceans**" commodity group (CG<sup>11</sup>) recorded the fifth highest first-sales value and eighth highest volume out of the 10 CGs recorded in January 2021<sup>12</sup>. First sales reached a value of EUR 22,2 million and a volume of 3.122 tonnes, representing

<sup>&</sup>lt;sup>9</sup> First sales data updated on 16.03.2021.

<sup>&</sup>lt;sup>10</sup> Norway and the UK excluded from the analyses.

<sup>&</sup>lt;sup>11</sup> Annex 3: http://eumofa.eu/supply-balance-and-other-methodologies

<sup>&</sup>lt;sup>12</sup> More data on commodity groups can be found in Table 1.2 of the Annex.

decreases of 16% and 18%, respectively, from January 2020. In the past 36 months, the highest first-sales value of crustaceans was registered at EUR 54,3 million, in August 2018.

The crustaceans commodity group includes 11 main commercial species (MCS): crab, lobster *Homarus* spp., Norway lobster, rock lobster and sea crawfish, shrimp *Crangon* spp., coldwater shrimp, deep-water rose shrimp, warmwater shrimp, other miscellaneous shrimps, squillid, and the grouping "other crustaceans"<sup>13</sup>.

At Electronic Recording and Reporting System (ERS) level, Norway lobster (30%) and spottail mantis squillid (8%) together accounted for 38% of the total first-sales value of crustaceans of all reporting countries<sup>14</sup> recorded in January 2021.

### 1.5. Focus on Norway lobster



Norway lobster (*Nephrops norvegicus*) is a crustacean species that belongs to the Nephropidae family. It can be found throughout the Atlantic, from Iceland, the Faroe Islands, and Norway to the Azores and the Mediterranean Sea. It lives on muddy bottoms at depths of 20–800 m, and feeds on crustaceans and worms<sup>15</sup>.

Norway lobster males can live up to 12 years and females up to 30 years and can reach a size of typically between 10 and 20 cm long. The species reaches sexual maturity between two and three years of age. Spawning occurs in summer. Commercially important stocks of Norway lobster in EU waters include those in the Irish and North Seas, Bay of Biscay, and on the Atlantic–Iberian coast<sup>16</sup>.

The most common fishery method for catching Norway lobster is trawling. This usually takes place at dusk and dawn, twice per day, when lobsters leave their burrows to feed. A substantial share of the catches of Norway lobster comes from mixed-species fisheries.

In the EU, Norway lobster is subject to a long-term management plan in the North Sea<sup>17</sup>, which includes technical measures and total allowable catches (TACs)<sup>18</sup> set by the European Council based on European Commission proposals. There is also a minimum size for Norway lobster in the Skagerrak/Kattegat region (130 mm overall length, 40 mm for tails) and Mediterranean Sea (70 mm in overall length, 20 mm length of shell)<sup>19</sup>.

### **Selected countries**

## Table 17. COMPARISON OF NORWAY LOBSTER FIRST-SALES PRICES, MAIN PLACES OF SALE, AND CONTRIBUTION TO OVERALL SALES OF CRUSTACEANS IN SELECTED COUNTRIES

Norway lobster		Changes in Nor first sales Jan	•	Contribution of Norway lobster to	Principal places of	
		Compared to Compared to Jan 2020 Jan 2019		total crustaceans first sales in January 2021 (%)	sale in January 2021 in terms of first-sales value	
Denmark	Value	+65%	+22%	73%	Hirtshals, Skagen, Østerby.	
Denmark	Volume	+108%	+56%	68%		
France	Value	+104%	+38%	64%	Lorient, Guilvinec, Concarneau.	
	Volume	+123%	+37%	51%	concurreda.	
Sweden	Value	+8%	-2%	45%	Göteborg (100% of first sales)	
	Volume	+45%	+16%	54%	Sales)	

<sup>13</sup> EUMOFA aggregation for species (Metadata 2, Annex 3: http://eumofa.eu/supply-balance-and-other-methodologies).

<sup>14</sup> Norway and the UK excluded from the analyses - no data at ERS level available.

<sup>15</sup> http://www.fao.org/fishery/species/2647/en

<sup>&</sup>lt;sup>16</sup> https://ec.europa.eu/fisheries/marine\_species/wild\_species/norway\_lobster\_en

<sup>&</sup>lt;sup>17</sup> Regulation (EU) 2018/973 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32018R0973

<sup>&</sup>lt;sup>18</sup> Council Regulation (EU) 2021/92 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R0092

<sup>&</sup>lt;sup>19</sup> Council Regulation(EC) No 2406/96 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A01996R2406-20050602

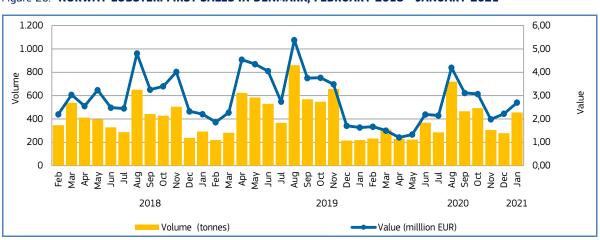
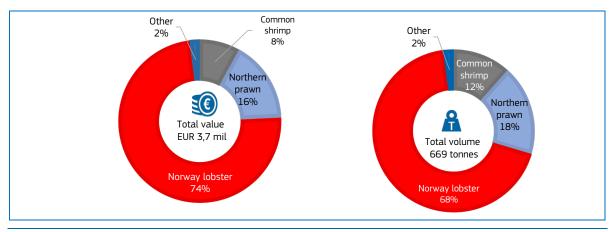


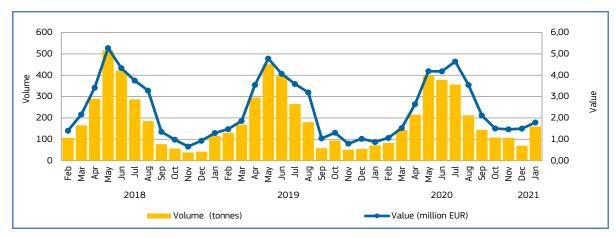
Figure 20. NORWAY LOBSTER: FIRST SALES IN DENMARK, FEBRUARY 2018 - JANUARY 2021

Over the past 36 months, the highest first sales of Norway lobster in **Denmark** occurred in August 2019 (861 tonnes) and August 2020 (720 tonnes). Fishing activity is low in winter due to weather conditions, making supply scarce, which is reflected by low first sales.

Figure 21. FIRST SALES: COMPOSITION OF "CRUSTACEANS" (ERS LEVEL) IN DENMARK IN VALUE AND VOLUME, JANUARY 2021

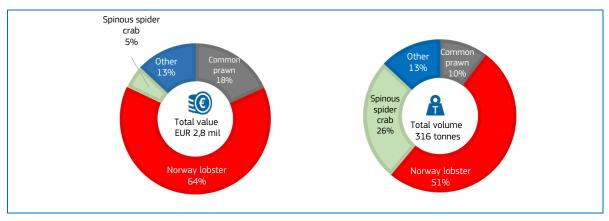




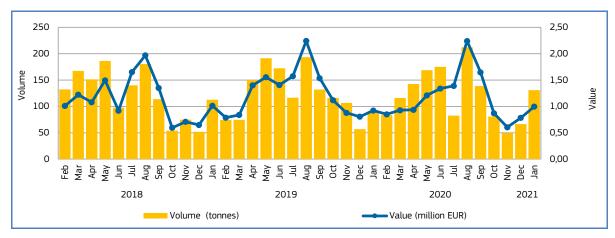


Over the past 36 months in **France**, the highest first sales of common Norway lobster occurred in May and June every year, peaking in May 2018 when 516 tonnes were sold. France's Norway lobster fishery is characterised by a high supply during warmer months and lower supply in autumn and winter<sup>20</sup>.









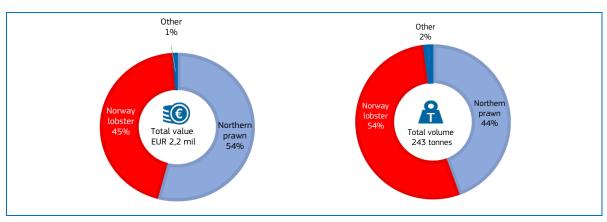
Over the past 36 months in **Sweden**, the highest first sales of common Norway lobster occurred in November 2020 when 26 tonnes were sold. The difference in landing volume between the different months can be explained by temperature (low temperature in winter months implies low catchability<sup>21</sup>), tourism (summer vacationers have a high preference for consumption of shellfish on the west coast), and tradition (consumption peaks in August as it is the month for traditional crayfish parties in Sweden, when crustaceans including Norway lobster are eaten<sup>22</sup>.

<sup>&</sup>lt;sup>20</sup> http://rua.ua.es/dspace/bitstream/10045/78071/1/TFM\_Juan\_Francisco\_Lechuga\_Sanchez\_Final.pdf

<sup>&</sup>lt;sup>21</sup> ICES. 2015. Report of the Working Group for the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK), 28 April–7 May 2014, ICES HQ, Copenhagen, Denmark. ICES CM 2015/ACOM:13. 1031 pp.

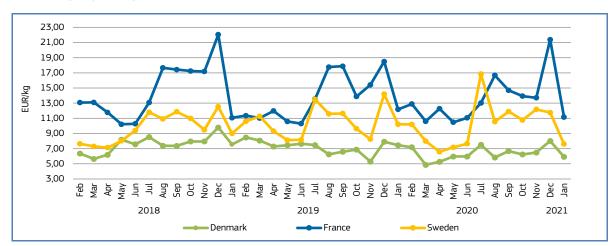
<sup>&</sup>lt;sup>22</sup> S. Hornborg, P. Jonsson, Mattias Sköld, M. Ulmestrand, D. Valentinsson, Ole Ritzau Eigaard, J. Feekings, J. Rasmus Nielsen, F. Bastardie, J. Lövgren, New policies may call for new approaches: the case of the Swedish Norway lobster (*Nephrops norvegicus*) fisheries in the Kattegat and Skagerrak, ICES Journal of Marine Science, Volume 74, Issue 1, January-February 2017, Pages 134–145, https://doi.org/10.1093/icesjms/fsw153

### Figure 25. FIRST SALES: COMPOSITION OF "CRUSTACEANS" (ERS LEVEL) IN SWEDEN IN VALUE AND VOLUME, JANUARY 2021



### **Price trend**

Figure 26. NORWAY LOBSTER: FIRST-SALES PRICES IN SELECTED COUNTRIES, FEBRUARY 2018 -JANUARY 2021



Over the 36-month observation period (February 2018 to January 2021), the average first-sales price<sup>23</sup> of Norway lobster in **France** was 12,54 EUR/kg, which was 82% higher than in **Denmark** (6,90 EUR/kg) and 23% higher than in **Sweden** (9,70 EUR/kg).

In **Denmark** in January 2021, the average first-sales price of Norway lobster (5,92 EUR/kg) decreased by 21% compared with January 2020, and by 22% compared with the same month of 2019. During the past 36 months, average price ranged from 4,86 EUR/kg for 309 tonnes in March 2020, to 9,79 EUR/kg for 238 tonnes in December 2018.

In **France** in January 2021, the average first-sales price of Norway lobster (11,16 EUR/kg) decreased by 8% from January 2020 and increased by 1% relative to January 2019. During the observed period, the lowest average price (10,22 EUR/kg for 516 tonnes) was seen in May 2018, while the highest average price was recorded in December 2018 at 22,04 EUR/kg, for 42 tonnes. Average price was highest in December each year, a spike linked to the Christmas holidays, which traditionally prompt higher demand for seafood products, including Norway lobster.

In **Sweden** in January 2021, the average first-sales price of Norway lobster (7,61 EUR/kg) decreased by 25% compared with January 2020 and by 15% compared with 2019. During the past 36 months, average price ranged from 4,29 EUR/kg for four tonnes in November 2018, to 11,59 EUR/kg for 269 kg in January 2019.

<sup>23</sup> Weighted average price

### 1.6. Focus on spottail mantis squillid



Spottail mantis squillid or spottail mantis shrimp (*Squilla mantis*) is a stomatopod which belongs to the Squillidae family. It is a species of mantis shrimp found in shallow coastal areas of the Atlantic from the Gulf of Cádiz, the Canary Islands, and Madeira, to as far south as Angola, and the Mediterranean Sea. Its abundance has led to it being the only

commercially fished mantis shrimp in the Mediterranean. *Squilla mantis* digs burrows in muddy and sandy bottoms, remaining in its burrow during the day and emerging at night to hunt<sup>24</sup>. The spawning period is concentrated from winter to spring. Populations consist of 3 year-classes, with a maximum age of 3 years. The species can reach a maximum size of 20 cm, but more commonly has a length of 12 to 18 cm<sup>25</sup>.

It is found in high densities in the Mediterranean Sea, and Italy and Spain are among the most important EU catching nations in terms of volume. Spottail mantis squillid fisheries are highly seasonal, as catches occur mainly in the winter and spring months. The species is mainly caught by bottom trawlers, although catches with trammel nets, gill nets, and baited traps also occur. It also presents an important by-catch of the fishing activity carried out on the continental shelf at depths of 30 to 80 m<sup>26</sup>. In the EU, the fishery for spottail mantis squillid is not specially regulated. There are some technical measures (seasonal closures, minimum mesh size, fishing area restrictions) applied to trawl fisheries at a national level, which indirectly contribute to better management of this species.

### **Selected countries**

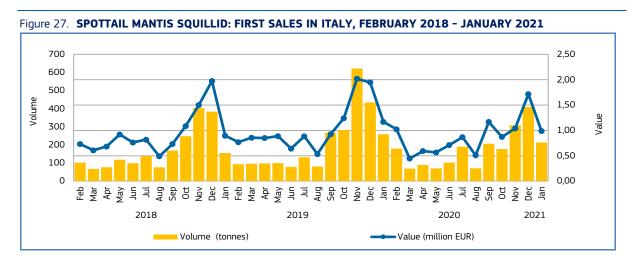
 Table 18.
 COMPARISON OF SPOTTAIL MANTIS SQUILLID FIRST-SALES PRICES, MAIN PLACES OF SALE AND CONTRIBUTION TO OVERALL SALES OF CRUSTACEANS IN SELECTED COUNTRIES

Spottail mantis squillid		Changes in spot squillid first sal Jan 2021 (%)		Contribution of spottail mantis squillid to total	Principal places of sales in Jan-Jan 2020 in terms of first-sales		
		Compared to Jan 2020	Compared to Jan 2019	crustaceans first sales in January 2021 (%)	value		
Italy	Value	-15%	+10%	24%	Porto Garibaldi, Porto Tolle, Rimini.		
	Volume	-18%	+37%	36%			
Spain	Value	-16%	-3%	9%	Sanlúcar De Barrameda, Sant Carles de la Rápita,		
	Volume	-25%	-9%	19%	Peñíscola.		

<sup>&</sup>lt;sup>24</sup>. Maynou, P. Abelló & P. Sartor (2004). "A review of the fisheries biology of the mantis shrimp, *Squilla mantis* (L., 1758) (Stomatopoda, Squillidae) in the Mediterranean". Crustaceana. 77 (9): 1081–1099
<sup>25</sup> https://www.sealifebase.ca/summary/Squilla-mantis

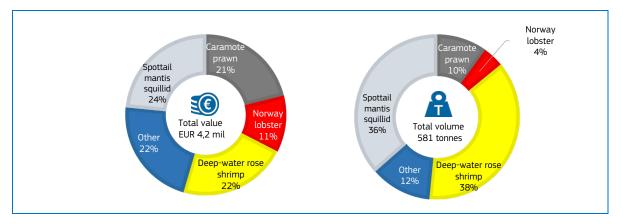
<sup>&</sup>lt;sup>26</sup> Maynou, Francesc & Abello, Pere & Sartor, Paolo. (2004). A review of the fisheries biology of the mantis shrimp, *Squilla mantis* (L, 1758) (Stomatopoda, Squillidae) in the Mediterranean. Crustaceana. 77. 1081-1099.

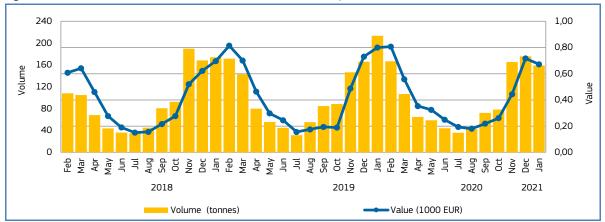
 $https://www.researchgate.net/publication/249580772\_A\_review\_of\_the\_fisheries\_biology\_of\_the\_mantis\_shrimp\_Squilla\_mantis\_L\_1758\_Stomatopoda\_Squillidae\_in\_the\_Mediterranean$ 



In **Italy**, over the past 36 months the spottail mantis squillid fishery was marked with seasonal variations in catch with the highest first sales registered during autumn and winter. The greatest peak in first sales was recorded in November 2019, when 622 tonnes were sold.

### Figure 28. FIRST SALES: COMPOSITION OF "CRUSTACEANS" (ERS LEVEL) IN ITALY IN VALUE AND VOLUME, JANUARY 2021

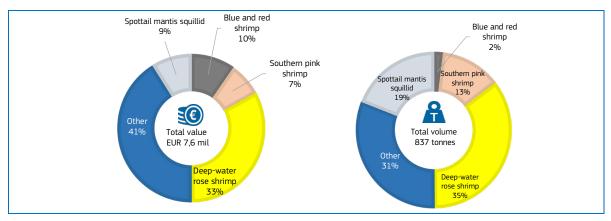




### Figure 29. SPOTTAIL MANTIS SQUILLID: FIRST SALES IN SPAIN, FEBRUARY 2018 - JANUARY 2021

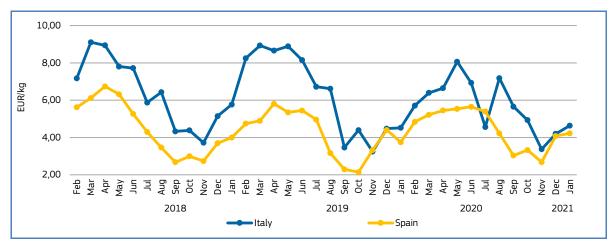
In **Spain**, over the past 36 months the spottail mantis squillid fishery fluctuated regularly, with the highest first sales registered during the winter mating period, making it a seasonal fisheries species. The highest first sales were recorded in January 2020 when 213 tonnes were sold.





### **Price trend**

Figure 31. SPOTTAIL MANTIS SQUILLID: FIRST-SALES PRICES IN SELECTED COUNTRIES, FEBRUARY 2018 -JANUARY 2021



Over the 36-month observation period (February 2017 – January 2021), the average first-sales<sup>27</sup> price of spottail mantis squillid in **Italy** (5,17 EUR/kg) was 19% higher than that in **Spain** (4,18 EUR/kg). In general, average price is linked with supply, meaning lower price occurs when supply is the highest in winter, while price increases when supply is scarce.

In **Italy**, in January 2021 the average first-sales price of spottail mantis squillid was 4,64 EUR/kg, 3% over the same month in 2020 and 20% lower compared to January 2019. The lowest price in the past 36 months was registered in November 2019, at 3,25 EUR/kg for 622 tonnes. The highest price of 9,11 EUR/kg was observed in March 2018 when the supply was lowest (67 tonnes).

In **Spain** in January 2021, the average first-sales price of spottail mantis squillid (4,22 EUR/kg) increased by 13% compared to January 2020 and by 6% compared to January 2019. The lowest average price was registered in October 2019 at 2,14 EUR/kg for 88 tonnes. The highest average price at 6,74 EUR/kg for 68 tonnes was registered in April 2018.

<sup>27</sup> Weighted average price

### 2. Extra-EU imports

Every month, the weekly extra-EU import prices (average values per week, in EUR per kg) are examined for nine different species. The three most relevant species in terms of value and volume remain consistent, and are examined every month: fresh whole Atlantic salmon from Norway, frozen Alaska pollock fillets from China, and frozen tropical shrimp (Penaeus spp.) from Ecuador. The other six species change each month. Three are chosen from the commodity group of the month, which this month is "Crustaceans". The featured commodity species this month are: frozen Norway lobsters from Iceland, frozen crabs from Norway, and prepared or preserved shrimps and prawns from Vietnam. The remaining three species examined each month are randomly selected and, this month, include frozen Atlantic and Danube salmon from Chile, prepared or preserved sardines (whole or in pieces) from Morocco, and prepared or preserved tunas, skipjack, or other fish of genus Euthynnus from Thailand.

## Table 19. EVOLUTION OF WEEKLY PRICE AND VOLUME OF THE THREE MOST RELEVANT FISHERIES AND AQUACULTURE PRODUCTS IMPORTED INTO THE EU

Extra-EU Imports	5	Week 09/2021	Preceding 4- week average	Week 09/2020	Notes
Fresh whole Atlantic salmon imported from Norway (Salmo salar,	Price (EUR/kg)	6,02	5,20 (+16%)	7,19 (– <mark>16</mark> %)	Lower average price in February 2021 than February 2020, but higher than February 2019. Upward trend since the beginning of the year.
CN code 03021440)	Volume (tonnes)	10.832	12.344 (–12%)	11.096 ( <b>-2%</b> )	Higher average volume in February 2021 than February 2020, and slightly higher than February 2019. Downward trend since the beginning of the year.
Frozen Alaska pollock fillets imported from China (Theragra chalcogramma, CN code 03047500)	Price (EUR/kg)	2,44	2,46 (–1%)	2,92 (–16%)	February 2021 average price was lower than the same month in previous year, and close to the February 2019 price. Downward trend since the beginning of the year.
	Volume (tonnes)	2.029	2.362 (–14%)	2.759 ( <mark>–26%</mark> )	Fluctuations in supply. Lower average volume in February 2021 than the same month in previous years. Downward trend since the beginning of the year.
Frozen tropical shrimp imported from Ecuador (genus <i>Pengeus</i> ,	Price (EUR/kg)	4,67	5,10 (–8%)	5,79 (–19%)	Downward trend since week 1 of 2021. Average price in February 2021 slightly lower than February 2019 and 2020 prices.
CN code 03061792)	Volume (tonnes)	2.884	1.708 (+69%)	1.809 (+59%)	Fluctuations in supply. Upward trend since week 1 of 2021. Average volume in February 2021 higher compared with January 2019 and 2020.

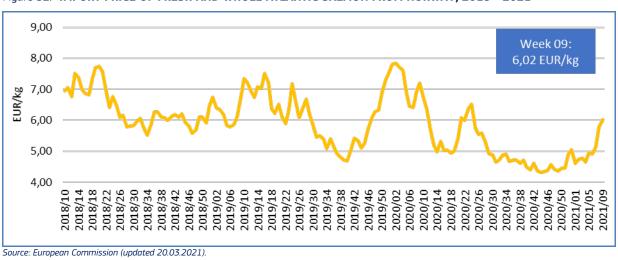


Figure 32. IMPORT PRICE OF FRESH AND WHOLE ATLANTIC SALMON FROM NORWAY, 2018 - 2021

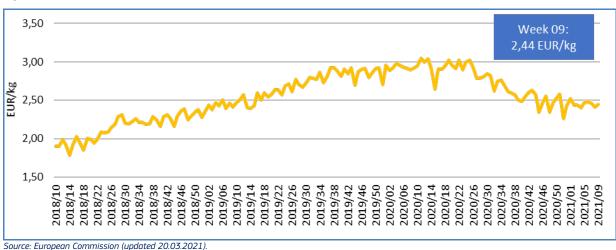
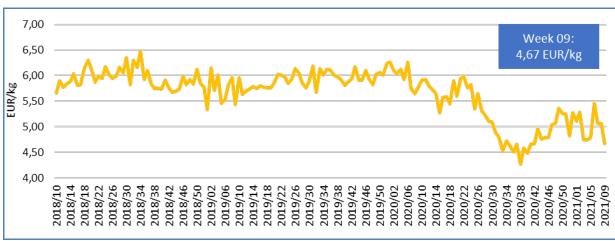


Figure 33. IMPORT PRICE OF FROZEN ALASKA POLLOCK FILLETS FROM CHINA, 2018 - 2021

Figure 34. IMPORT PRICE OF FROZEN TROPICAL SHRIMP FROM ECUADOR, 2018 - 2021

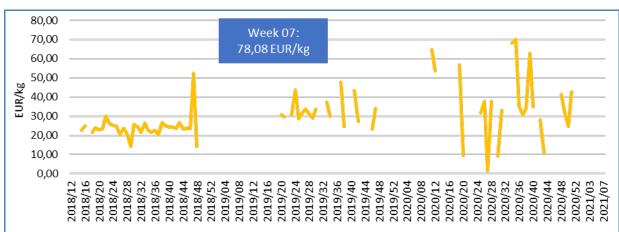


# Table 20. EVOLUTION OF WEEKLY PRICE AND VOLUME OF THIS MONTH'S THREE FEATURED COMMODITY PRODUCTS IMPORTED INTO THE EU

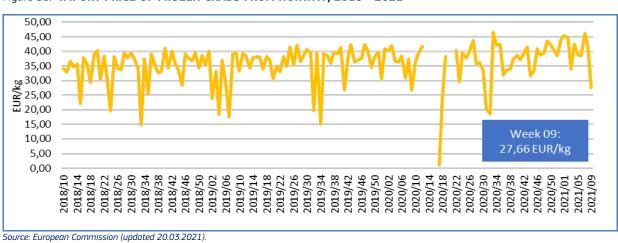
Extra-EU Imports		Week 09/2021	Preceding 4- week average	Week 09/2020	Notes
Frozen Norway lobsters from Iceland (Nephrops	Price (EUR/kg)	78,07*	1,20** (+6407%)	n/a	Trade flow is limited. High fluctuations in price. Upward trend over the past three years.
norvegicus, CN code 03061500)	Volume (tonnes)	0,019	3.000 ( <mark>–99%</mark> )	n/a	Data is limited. High fluctuations in supply. Downward trend from week 10 of 2018 to week 7 of 2021.
Frozen crabs from Norway (Paralithodes	Price (EUR/kg)	27,66	41,16 (–33%)	26,81 (+3%)	Upward trend from 2018 to 2021. On average, price is around 35,66 EUR/kg.
camchaticus, Chionoecetes spp. <b>and</b> Callinectes sapidus, CN code 03061410)	Volume (tonnes)	5	6 (–25%)	10 (–53%)	High fluctuations in supply, from 0,005 to 92 tonnes. Downward trend from 2018 to 2021.
	Price (EUR/kg)	6,72***	6,71**** (+0%)	6,60*****(+2%)	Downward trend over the past three years. On average, price is around 7,27 EUR/kg. Price spike in week 47 of 2019 correlates with drop in supply.
	Volume (tonnes)	164***	145**** (+13%)	168***** (–3%)	Fluctuations in supply, from 53 to 329 tonnes. Upward trend over the past three years.

Source: European Commission (updated 20.03.2021).

\* Data refers to week 7 of 2021 (the most recent available); \*\*data refers to week 5 of 2021; \*\*\* data refers to week 8 of 2021; \*\*\*\* average of weeks 4 to 7 of 2021; \*\*\*\* data refers to week 8 of 2020.

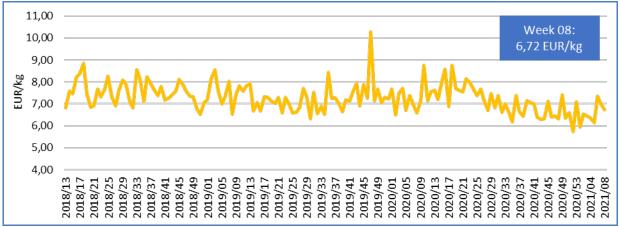


### Figure 35. IMPORT PRICE OF FROZEN NORWAY LOBSTERS FROM ICELAND, 2018 - 2021



### Figure 36. IMPORT PRICE OF FROZEN CRABS FROM NORWAY, 2018 - 2021





Source: European Commission (updated 20.03.2021).

In 2018 – 2021, the average price of frozen Norway lobsters from Iceland displayed an increasing trend. Over the past three years, price fluctuated from 1,20 to 78,08 EUR/kg.

Both price and volume of frozen crabs from Norway showed a downward trend since week 1 of 2021. Over the past three years, price fluctuated from 1,15 to 46,54 EUR/kg.

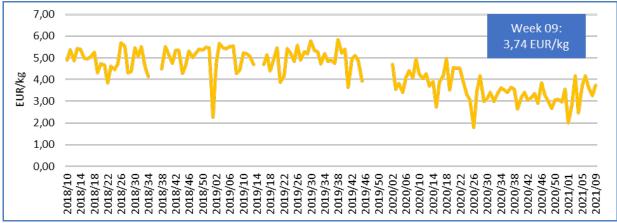
In 2018 – 2021, price of prepared or preserved shrimps and prawns from Vietnam fluctuated from 5,75 to 10,27 EUR/kg. Since the beginning of 2021, price exhibited an upward trend while volume showed the opposite.

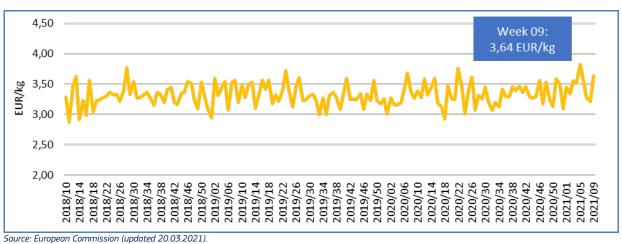
# Table 21. EVOLUTION OF WEEKLY PRICE AND VOLUME OF EU IMPORTS OF OTHER THREE FISHERIES AND AQUACULTURE PRODUCTS RELEVANT TO THE EU MARKET

Extra-EU Imports		Week 09/2021	Preceding 4- week average	Week 09/2020	Notes
Frozen Atlantic and Danube salmon from Chile (Salmo salar and Hucho	Price (EUR/kg)	3,74	3,70 (+1%)	4,92 (–24%)	Downward trend from 2018 to 2021. On average, price is around 3,55 EUR/kg. Price decreases do not correlate with increase of supply.
<i>hucho,</i> CN code 03031300)	Volume (tonnes)	58	33 (+75%)	20 (+188%)	High fluctuations in supply, from 5 to 497 tonnes. Upward trend from 2018 to 2021.
Prepared or preserved sardines from Morocco (CN code 16041319)	Price (EUR/kg)	3,64	3,47 (+5%)	3,27 (+11%)	Stable trend from 2018 to 2021. On average price is around 3,33 EUR/kg. Price spikes correlate with drop of supply.
·,	Volume (tonnes)	342	446 (– <mark>23%</mark> )	609 ( <del>-44%</del> )	Slight downward trend from 2018 to 2021. High fluctuations in supply, from 236 to 1.144 tonnes.
Prepared or preserved tunas from Thailand (CN code 16042070)	Price (EUR/kg)	3,50	5,76 (–39%)	2,91 (+20%)	Stable trend from 2018 to 2021. On average price is around 3,76 EUR/kg. Price spikes correlate with sudden drop of supply.
Source: European Commissio	Volume (tonnes)	25,8	26,1 (– <mark>1%</mark> )	14 (+87%)	Volume exhibited a stable trend from 2018 to 2020, despite high weekly fluctuations. Volume ranged from 0,009 to 2.314 tonnes.

Source: European Commission (updated 20.03.2021).









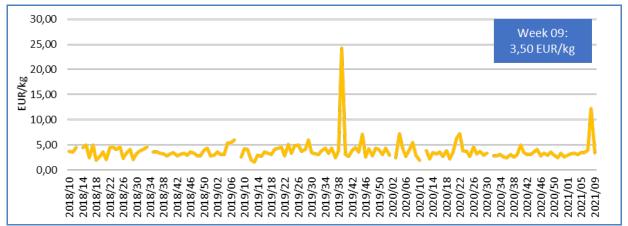


Figure 40. IMPORT PRICE OF PREPARED OR PRESERVED TUNAS FROM THAILAND, 2018 - 2021

Source: European Commission (updated 20.03.2021).

Since the first week of January 2021, the prices of frozen Atlantic and Danube salmon from Chile have exhibited an upward trend, while volume has displayed an opposite trend.

During the first nine weeks of 2021, price of prepared or preserved sardines from Morocco exhibited a slight downward trend. Over the past three years, price ranged from 2,88 EUR/kg to 3,83 EUR/kg.

Since the beginning of the year, price of prepared or preserved tunas from Thailand exhibited an upward trend, while volume had an opposite trend. Over the past three years, price ranged from 1,58 EUR/kg to 24,24 EUR/kg.

## 3. Consumption

### **3.1. HOUSEHOLD CONSUMPTION IN THE EU**

In January 2021, household consumption of fresh fisheries and aquaculture products increased in both volume and value relative to January 2020 in the majority of the Member States analysed. Italy and Spain saw the highest increase. Salmon was the main species responsible for the increase in both Italy (+69%) and Spain (+34%). The additional species contributing to the increase were gilthead seabream in Italy (+37%) and cod and sardine in Spain (+64% and +62%, respectively).

Salmon and cod were the main species responsible for increased consumption in Germany (+17% and +87%, respectively), as well as in France (+42% and +14%, respectively). During the aforementioned period, salmon was also the most consumed species in Ireland, with consumption increasing by 31%, as well as miscellaneous shrimp (+208%).

### Table 22. JANUARY OVERVIEW OF THE REPORTING COUNTRIES (volume in tonnes and value in million EUR)

Country	Per capita consumption 2018* (live weight equivalent, LWE) kg/capita/year	Janual	ry 2019	Janua	ary 2020	Decen	nber 2020	Jan	uary 2021	Janu	ange from ary 2020 to uary 2021
		Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Denmark	39,83	1.016	16,09	1.145	17,77	1.176	20,95	1.195	18,59	4%	5%
France	33,52	16.920	192,16	14.629	182,37	28.207	333,51	17.164	215,37	17%	18%
Germany	14,50	5.424	75,49	5.097	75,95	8.530	123,97	7.015	97,36	38%	28%
Hungary	6,12	245	1,22	402	2,24	2.388	11,97	373	2,37	7%	6%
Ireland	23,13	1.067	15,43	897	13,67	1.014	15,32	1.423	22,60	59%	65%
Italy	31,02	23.441	245,98	22.414	242,23	40.676	438,25	26.954	295,59	20%	22%
Netherlands	20,90	2.252	35,92	2.305	37,47	3.923	71,32	2.656	44,06	15%	18%
Poland	13,02	3.653	22,20	3.405	22,55	12.102	65,94	3.855	26,71	13%	18%
Portugal	60,92	5.267	35,43	4.975	36,57	7.556	57,65	6.429	44,11	29%	21%
Spain	46,01	50.314	403,19	44.557	383,18	63.681	591,89	48.773	433,82	9%	13%
Sweden	26,61	610	8,62	522	7,40	1.220	15,48	930	11,96	78%	62%

Source: EUMOFA, based on Europanel (updated 25.03.2021).

\*Data on per capita consumption of all fisheries and aquaculture products for all EU Member States can be found at:

https://www.eumofa.eu/documents/20178/415635/EN\_The+EU+fish+market\_2020.pdf/

Over the past three years, average household consumption of fresh fisheries and aquaculture products in January has been below the annual average in terms of both volume and value, in the majority of Member States analysed. Only in Denmark, Germany, and Ireland were the average volume and value higher in January than the yearly average.

The most recent weekly consumption data (up to **week 12 of 2021**) are available on the EUMOFA website and can be accessed **here**.

### **3.2. Fresh flounder**

Habitat: A flatfish living in marine, fresh, and brackish waters, up to depths of 100 m.

**Catch area:** Eastern Atlantic (coastal and brackish waters of western Europe), from the White Sea to the Mediterranean and the Black Sea.

Catching countries in the EU: Denmark, Latvia, the Netherlands, Poland.

Production method: Caught.

Main consumers in the EU: Denmark, Sweden, the Netherlands.

Presentation: Whole, fillets.

Preservation: Fresh, chilled, frozen.

### 3.2.1. Overview of household consumption in Denmark and Sweden

Denmark and Sweden are among the EU Member States with a high per capita apparent consumption<sup>28</sup> of fisheries and aquaculture products. In Denmark in 2018, this amounted to 39,83 kg, which is an increase of 14% compared to the previous year. This was 29% higher than the EU average (24,36 kg LWE). It was 54% lower than per capita apparent consumption of Malta<sup>29</sup>, the Member State with the highest per capita apparent consumption (85,95 kg LWE) in 2018.

In 2018, Sweden's per capita apparent consumption was 26,61 kg, 4% lower than in 2017, and 33% lower than in Denmark, but 9% higher than the EU average (2018).

See more on per capita apparent consumption in the EU in Table 23.

Over the past three years (from February 2018 to January 2021), total household consumption of fresh flounder was 608% higher in Denmark – at 3.395 tonnes – than in Sweden, at 480 tonnes. During the same period, Danish consumers spent 5% less for a kilogram of fresh flounder (14,77 EUR/kg on average), than Swedish consumers (15,52 EUR/kg).

We have covered **flounder** in previous *Monthly Highlights*:

**First Sales:** Estonia 3/2018; Latvia 3/2018, 10/2015; Lithuania 3/2018, 6/2016, 2/2015, 1/2014; Sweden 7/2015, May 2013.

Consumption: Denmark 7/2016; Sweden 11/2018, 7/2016.

Overview | 1. First sales in Europe | 2. Extra-EU imports | 3. Consumption

4. Fisheries Management in the Baltic | 5. Cuttlefish in the EU | 6. Global highlights | 7. Macroeconomic context

<sup>&</sup>lt;sup>28</sup> "Apparent consumption" is calculated by using the supply balance sheet that provides an estimate of the supply of fisheries and aquaculture products available for human consumption at the EU level. The calculation of the supply balance sheet is based on the equation: *Apparent consumption* = [(total catches – industrial catches) + aquaculture + imports] – exports. Catches targeted for fishmeal (industrial catches) are excluded. Non-food use products are also excluded from imports and exports. It is worth highlighting that the methodologies for estimating apparent consumption at EU and Member State levels are different, the first being based on data and estimates as described in the Methodological Background, the latter also requiring the adjustment of abnormal trends due to the higher impact of stock changes.

<sup>&</sup>lt;sup>29</sup> The high per capita apparent consumption in Malta could be due to higher consumption of fisheries and aquaculture products during the tourist season.

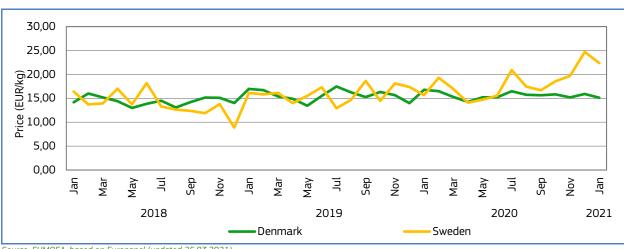


Figure 41. PRICE OF FRESH FLOUNDER PURCHASED BY DANISH AND SWEDISH HOUSEHOLDS

Source: EUMOFA, based on Europanel (updated 25.03.2021).

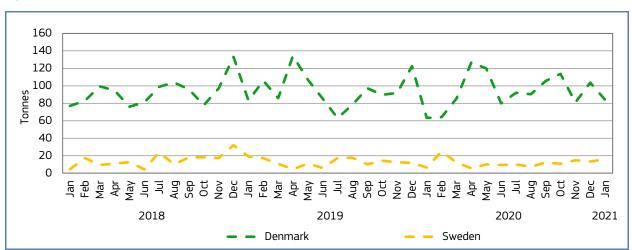


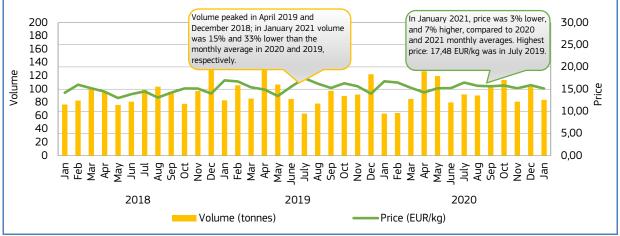
Figure 42. HOUSEHOLD PURCHASES OF FRESH FLOUNDER IN DENMARK AND SWEDEN

Source: EUMOFA, based on Europanel (updated 25.03.2021).

### 3.2.2. Household consumption trends in Denmark

Long-term trend (January 2018 to January 2021): Upward trend both in price and volume.
Yearly average price: 14,39 EUR/kg (2018), 15,66 EUR/kg (2019), 15,67 EUR/kg (2020).
Yearly consumption: 1.118 tonnes (2018), 1.144 tonnes (2019), 1.165 tonnes (2020).
Average price: 15,13 EUR/kg.
Consumption (January 2021): 84 tonnes



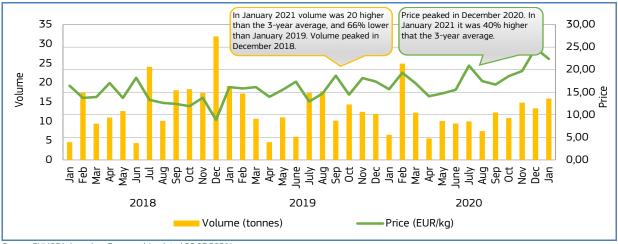


Source: EUMOFA, based on Europanel (updated 25.03.2021)

### 3.2.3. Household consumption trends in Sweden

Long-term trend (January 2018 to January 2021): Upward trend in price, downward trend in volume.
Yearly average price: 13,83 EUR/kg (2018), 15,93 EUR/kg (2019), 17,86 EUR/kg (2020).
Yearly consumption: 179 tonnes (2018), 152 tonnes (2019), 137 tonnes (2020).
Average price: 22,38 EUR/kg.
Consumption (January 2021): 16 tonnes.

### Figure 44. RETAIL PRICE AND VOLUME OF FRESH FLOUNDER PURCHASED BY HOUSEHOLDS IN SWEDEN, FEBRUARY 2018 – JANUARY 2020



Source: EUMOFA, based on Europanel (updated 25.03.2021).

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### 4. Case study: Fisheries management in the Baltic

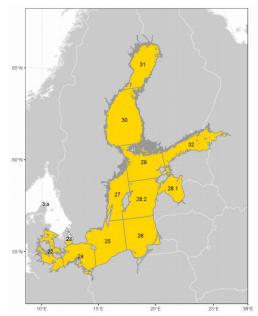
### 4.1. Introduction

The Baltic Sea is an arm of the North Atlantic Ocean<sup>30</sup> and is one of the largest areas of brackish water in the world<sup>31</sup>. It covers an area of around 377.000 km<sup>2</sup> and has a coastline of 8.000 km bordering nine countries - Denmark, Germany, Poland, Lithuania, Latvia, Estonia, Russia, Finland and Sweden. The Baltic Sea is characterised by large variations in temperature and salinity, from relatively warm and saline waters in the southwestern part to cold and almost freshwater in the northern parts. It has only a narrow connection to the North Sea and is therefore relatively isolated. It takes approximately 30 years for the waters to be fully exchanged.

The Baltic Sea is an intensively fished marine area, and fisheries and environmental factors have caused several fish populations to decline<sup>32</sup>. In order to preserve the fish stocks in the Baltic Sea, various measures have been implemented by both the European Commission and the Helsinki Commission (HELCOM).

The International Council for the Exploration of the Sea (ICES) and the European Commission's Scientific, Technical and Economic Committee for Fisheries (STECF) are important organisations in terms of providing scientific advice on fisheries to decision makers.

Some of the measures taken include a reduction of Total Allowable Catches (TACs) and the cessation of targeted fisheries for the eastern Baltic Cod stock in 2021. Through HELCOM and their Baltic Sea action plan, several science-based projects have contributed to environmental improvements, likely strengthening fish stocks in the long term<sup>33</sup>.



Source: ICES

The Baltic Sea ecoregion (highlighted in yellow). ICES Subdivision 23 is usually defined as part of the Greater North Sea Ecoregion, but to be consistent with the current fisheries management regime, it is included in this overview.

### 4.2. Fisheries in the Baltic Sea

The commercial fisheries in the Baltic Sea target only a few stocks. The pelagic fisheries account for the largest catches in terms of volume and consist mainly of trawl fisheries for sprat and herring. Cod is the most important species when it comes to demersal fisheries. The three species cod, herring, and sprat account for around 95% of total catches in the Baltic Sea. Other targeted fish species of local economic importance are salmon, plaice, dab, brill, turbot, flounder, pikeperch, pike, perch, vendace, whitefish, eel, and sea trout. Fishing vessels from all nine surrounding countries operate in the Baltic Sea fisheries. The highest numbers of large vessels (over 12 m) come from Sweden, Denmark, and Poland<sup>34</sup>.

According to ICES, the state of the stock for many fish species in the Baltic Sea is poor. Compared with most European seas, contaminant levels are elevated and nutrient concentrations are high. Regional goals for the maximum amount of nutrient input in the Baltic Sea have been set by HELCOM. Although the overall loading of nutrient has decreased over the past four decades, the annual input still exceeds the goals in many regions. The environmental situation affects the fish stocks and therefore also fishing opportunities<sup>35</sup>.

33 helcom.fi/baltic-sea-action-plan/

<sup>&</sup>lt;sup>30</sup> www.britannica.com/place/Baltic-Sea

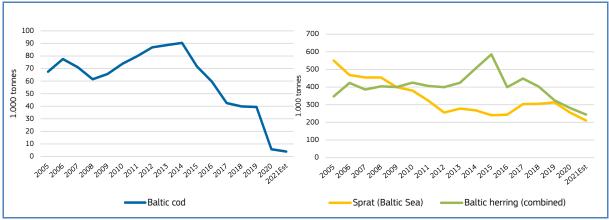
<sup>&</sup>lt;sup>31</sup> http://stateofthebalticsea.helcom.fi/in-brief/our-baltic-sea/

<sup>&</sup>lt;sup>32</sup> Ibidem

<sup>&</sup>lt;sup>34</sup> ICES-Baltic Sea ecoregion-fisheries overview

<sup>&</sup>lt;sup>35</sup> https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32020R1781

Cod, herring, sprat, salmon, and plaice fisheries in the Baltic Sea are managed using TACs. During the past 15 years, a strong decline was seen in the Baltic cod TACs (Eastern and Western stock combined). In 2014, combined TACs on cod reached the highest level over the past 15 years at 90.000 tonnes. Since then, both cod stocks have been sharply reduced. The ICES TAC advice for the Western stock has been set to 3.395 tonnes in 2021, and the ICESTAC advice for the Eastern stock has been set to zero, but with allowed by-catch of 595 tonnes. According to ICES, the reasons why the Eastern Baltic cod stock is suffering is complex. The unsustainably low biomass is a result of a combination of declining recruitment, low availability of prey species, environmental factors and changes within the ecosystem.





Source: ICES.

Baltic herring and sprat dominate Baltic fishery volumes. Since 2005, landings of sprat decreased by 62% to around 210.000 tonnes in 2020. Baltic herring TACs (all stocks combined) reached a peak in 2015 at 585.000 tonnes. Since then, TACs have shown a decreasing trend and ICES' advice for herring in 2021 has been set at 244.000 tonnes. For Western spring spawning herring, ICES have recommended to stop all fishing in 2021.

### 4.3. Environmental and fisheries management in the Baltic Sea

All countries bordering the Baltic Sea, except Russia, are EU member states. They are all contracting parts of the Helsinki Convention, the purpose of which is to protect the marine environment in the Baltic Sea and to restore a good ecological status. Its governing body is known as HELCOM (Helsinki Commission)<sup>36</sup>, which was formed in 1974 in response to the environmental problems being experienced in the Baltic Sea.

Fisheries advice is provided by ICES, the European Commission's Scientific, Technical and Economic Committee for Fisheries (STECF), the Baltic Sea Advisory Council (BSAC) and BALTFISH.

BALTFISH is a regional body involving the eight EU Member States bordering the Baltic Sea. It provides a platform for discussion on important fisheries issues in the Baltic Sea. BALTFISH is based on the regionalisation of the Common Fisheries Policy (CFP) as referred to in the Basic Regulation<sup>37</sup> and its main objective is to promote cooperation among fisheries administrations and other key stakeholders in developing sustainable fisheries in the Baltic Sea region<sup>38</sup>.

BSAC is an advisory council composed of representatives from the commercial fisheries and other interest groups, mainly environmental NGOs<sup>39</sup>. Its main function is to advise the European Commission and Member States on matters relating to management of the fisheries in the Baltic Sea in accordance with Article 44 of the CFP Regulation on the tasks of Advisory Councils.

<sup>38</sup> https://helcom.fi/action-areas/fisheries/management/baltfish-forum/

<sup>&</sup>lt;sup>36</sup> https://www.ices.dk/sites/pub/Publication%20Reports/Advice/2020/2020/EcosystemOverview\_BalticSea\_2020.pdf

<sup>&</sup>lt;sup>37</sup> Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy

<sup>&</sup>lt;sup>39</sup> http://www.bsac.dk/

Baltic fisheries and environmental management is, ultimately, governed by the EU and Russia as they are members of the Helsinki Convention. Together, the EU and the Helsinki Convention constitute the core of the Baltic Sea governance system<sup>40</sup>.

In 2011, STECF considered whether enforcement of the TACs in the Baltic had been sufficient to control catches, and whether the TACs had been effective in limiting fishing mortalities in the Baltic stocks. STECF also evaluated the effectiveness of spawning closures in the Baltic in 2011. They concluded that the impact of these measures was unclear, and that as long as TACs are effective in limiting fishing mortality, spawning closures have little effect on the overall fishing mortality. STECF have also evaluated technical measures such as gear limitations, minimum landing size and maximum bycatch percentages. STECF concluded that for cod most of the measures had a positive impact on exploitation patterns and therefore a positive impact on recruitment.<sup>41</sup>

The EU implemented a multiannual fisheries management plan in 2016, covering the Baltic Sea fisheries for cod, herring, and sprat. The plan specifies targets and harvest control rules (HCRs) for these stocks. An obligation to land all catch in the cod, salmon, herring, and sprat fisheries in the Baltic Sea was implemented in 2015; and plaice catches were included in the landing obligations in 2017.<sup>42</sup>

The multiannual plan<sup>43</sup> by the EU for the Baltic Sea requires that remedial measures are introduced when scientific advice indicates that a stock is threatened. Such remedial measures could include suspension of a targeted fishery. The measures need to be in accordance with the situation of the stock. Based on the stock assessment for Eastern Baltic cod, a regulation prohibiting union fishing vessels from fishing for cod in ICES subdivisions 24, 25, and 26 was implemented in July 2019 lasting until 31st December 2019<sup>44</sup>. The prohibition has impacted fisheries in the Eastern Baltic Region, especially when it comes to small-scale, artisanal fishing.

### 4.4. Catch of cod, herring, and sprat

The catches of cod, herring, and sprat in Estonia, Finland, Latvia, Lithuania, Poland, Denmark, and Sweden reached 689.700 tonnes live weight in 2019. Herring accounted for 52% of the total, at 357.100 tonnes, followed by sprat at 321.500 tonnes (47%) and cod at 11.100 tonnes (2%). Sweden was the largest catch nation of these three species combined, followed by Finland, Latvia, and Poland.

Overview | 1. First sales in Europe | 2. Extra-EU imports | 3. Consumption

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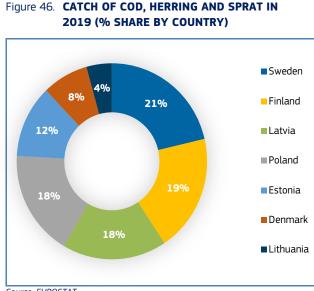
 <sup>&</sup>lt;sup>40</sup> Reusch, T. B. H., Dierking, J., Andersson, H. C., Bonsdorff, E., Carstensen, J., Casini, M., et al. (2018). The Baltic Sea as a time machine for the future coastal ocean. Science Advances (https://advances.sciencemag.org/content/4/5/eaar8195).
 <sup>41</sup> BalticSeaEcoregion\_FisheriesOverviews.pdf (ices.dk)

<sup>&</sup>lt;sup>42</sup> Ibidem

<sup>&</sup>lt;sup>43</sup> Regulation (EU) 2016/1139 – establishing a multiannual plan for the stocks of cod, herring and sprat in the Baltic Sea and the fisheries exploiting those stocks.

<sup>&</sup>lt;sup>44</sup> Commission implementing Regulation (EU) 2019/1248 of 22 July 2019 establishing measures to alleviate a serious threat to the conservation of the eastern Baltic cod (*Gadus morhua*) stock.





There have been large variations in catch volumes of sprat and herring in the Baltic Sea since 2000. In recent years, the catch of herring has shown an increasing trend. The catch of cod has been declining following the TAC reductions every year, since the peak in 2014.

Source: E	UROSTAT.
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Table 23.	CATCH IN BALTIC SEA, SUBDIVISIONS 22-32 (TONNES LIVE WEIGHT)								
Species	2010	2015	2016	2017	2018	2019			
Herring	289.100	379.800	426.600	398.500	434.100	357.100			
Sprat	426.100	278.300	269.700	301.800	335.600	321.500			
Cod	59.800	47.600	37.100	27.400	18.500	11.100			
Total	774.900	705.600	733.400	727.700	788.200	689.700			

Source: EUROSTAT.

Herring is mainly caught in the central part of the Baltic Sea, in the waters between Latvia, Estonia, Finland, and Sweden. The main fishing areas are subdivisions 28, 29, and 30, which together account for 71% of the total catch over the past 10-year period. An additional 15% of the total catches were caught in the waters between Poland, Lithuania, and Sweden (subdivisions 25 and 26). The largest catching nation of herring is Finland, accounting for 35% of total herring catch over the past decade. The second largest catching nation is Sweden with 20%, followed by Latvia (14%), Estonia (13%), and Poland (10%). Between 2010 and 2019, these five MS accounted for 92% of the total herring catch in the Baltic Sea.

Sprat is mainly caught in the southern and central parts of the Baltic Sea, specifically in ICES subdivisions 25-29 in the waters between Poland, Sweden, Lithuania, Latvia, Estonia, and Finland. Over the past decade, 89% of total catch were caught in these 5 subdivisions, of which 41% was caught in subdivision 28. The three main catching nations Poland, Sweden, and Latvia account for 64% of the total sprat catches during the past 10 years, with 22%, 21% and 20%, respectively. Collectively, Denmark and Estonia account for 11% of the catch each.

Over the past 10 years, most of the cod has been caught in the southern parts of the Baltic Sea, specifically in ICES subdivisions 24-26, covering the waters between Lithuania, Sweden, Poland, Germany, and Denmark. Denmark is the largest catching nation, accounting for 32% of total catches of cod over the period. Poland is the second largest catching nation with 26% of catches, followed by Sweden (18%) and Germany (10%). From 2010 to 2019, 87% of cod was caught in subdivisions 24, 25, and 26 with 66.000 tonnes, 184.000 tonnes, and 105.000 tonnes, respectively.

The catches of cod have been declining in all subdivisions and especially in subdivision 25, where yearly catches have been reduced from 31.000 tonnes in 2009 to 3.300 tonnes in 2019.

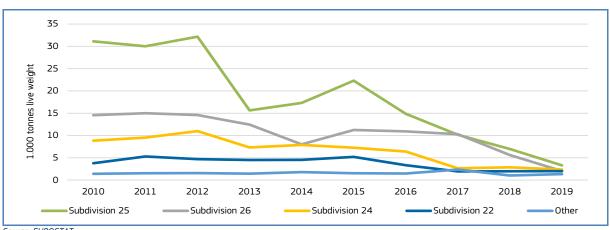


Figure 47. CATCH OF COD IN THE BALTIC SEA BY MAIN SUBDIVISION (TONNES)

Source: EUROSTAT.

### 4.5. First sales of cod, herring, and sprat

### Volume and value

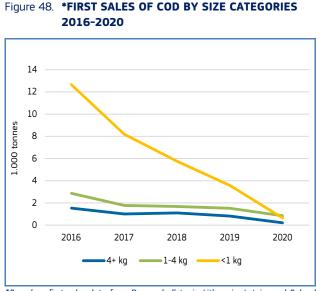
EUMOFA collects monthly first sales data from Baltic Sea locations in Denmark, Estonia, Latvia, Lithuania, and Poland.

Concerning cod, the first-sales data between 2016 and 2019 cover around half of the catch volumes. They do not include two of the main catching nations, Sweden and Germany. Of the available first-sales data, the sales volume for cod was down by 71% in 2020 compared to 2019. The reduction is especially large for Poland where only 280 tonnes were sold in 2020 compared to 3.100 tonnes in 2019. From 2016 to 2020, the decrease in first-sales volume for cod was 90%, with value falling by 79% in the same period.

Table 24.	FIRST SAL	ES OF CO	D IN DENM	ARK, LATV	/IA, LITHUA	NIA, AND	POLAND (1	ONNES, 1	.000 EUR)	
	201	16	201	17	201	18	20:	19	202	20
Country	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Denmark	7.556	11.042	4.611	7.603	3.026	5.567	2.691	5.979	1.356	4.030
Poland	7.360	9.478	4.400	6.131	4.861	6.773	3.102	4.428	279	514
Latvia	1.105	997	1.201	1.227	284	279	84	84	66	95
Lithuania	1.030	1.021	762	851	379	416	54	72	9	15
Total	17.050	22.538	10.973	15.812	8.550	13.034	5.931	10.562	1.710	4.653

Source: EUMOFA.

The reported first sales volume of large cod (4+ kg) declined from 1.540 tonnes in 2016 to 220 tonnes in 2020. For the small sized cod (<1 kg), which have dominated in the Baltic Sea, the decline was dramatic, from a first-sales volume of 12.650 tonnes in 2016 to 640 tonnes in 2020.



For herring, the available first-sales data covers 20-30% of the total catch over the period 2016-2019. The total first-sales volume declined by 4% from 2016 to 2020, with value declining by 22%. Over the 5-year period, volume increased in Estonia while a decrease was observed in Denmark and Poland.

\*Based on first sales data from Denmark, Estonia Lithuania, Latvia, and Poland Source: EUMOFA.

### Table 25. FIRST SALES OF HERRING IN DENMARK, ESTONIA, LATVIA, LITHUANIA, AND POLAND (TONNES, 1.000 EUR)

	• • • • •		•							
	20	16	201	17	201	18	201	19	202	20
Country	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Estonia	27.186	5.145	26.666	4.944	26.261	4.622	32.646	5.780	35.832	6.532
Poland	33.285	10.950	31.287	10.922	39.065	10.506	30.327	8.406	24.316	6.818
Latvia	22.501	4.438	21.241	3.969	17.904	3.199	19.725	3.193	23.555	4.406
Lithuania	332	90	169	64	633	200	503	143	1.721	478
Denmark	7.096	3.298	6.607	3.032	5.414	2.255	3.350	1.588	962	532
Total	90.399	23.921	85.972	22.930	89.277	20.782	86.552	19.110	86.386	18.765
ELIMO	<b>F</b> 4									

Source: EUMOFA.

Concerning sprat, the available first-sales data cover around one third of the total catch volume over the period 2016-2019. The total first-sales volume declined by 13% from 2019 to 2020, mainly driven by first sales in Poland and Latvia. From 2016 to 2020, volumes remained at approximately the same level (-1%) but the value was down 5% from 2016 to 2020.

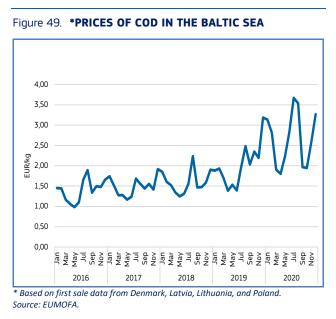
### Table 26. FIRST SALES OF SPRAT IN DENMARK, ESTONIA, LATVIA, LITHUANIA, AND POLAND (TONNES, 1.000 EUR)

	201	L6	201	.7	201	18	201	19	202	20
Country	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Poland	42.559	8.871	44.205	8.219	51.917	9.131	47.561	7.825	39.353	7.565
Estonia	19.206	3.482	18.995	3.353	20.462	4.319	26.316	4.823	26.578	4.487
Latvia	26.480	5.256	32.449	5.827	27.162	4.671	27.494	4.830	21.185	4.670
Lithuania	9	2	0	0	18	3	38	8	357	85
Denmark	46	12	384	65	5	1	36	8	105	20
Total	88.299	17.623	96.033	17.464	99.564	18.126	101.445	17.493	87.578	16.827

Source: EUMOFA.

### PRICES

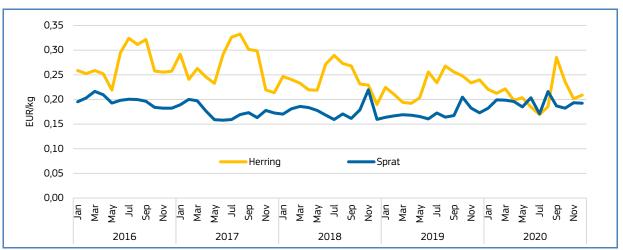
The first-sales price of cod in the Baltic Sea for the past 5 years was characterised by large variations and an increasing trend. The weighted average price for cod in 2020 was 2,72 EUR/kg, an increase of more than 100% from 1,32 EUR/kg in 2016. Large variations in first-sales price were found between the different Member States. For example, in 2020, the weighted average first-sales price was 1,45 EUR/kg in Latvia, 1,84 EUR/kg in Poland, and 2,97 EUR/kg in Denmark. As the first-sales volume decline, the price variations increase.



For herring, the weighted average first-sales price in the Baltic Sea in 2020 was 0,22 EUR/kg, 18% lower than 0,26 EUR/kg in 2016. The price follows the seasonal trend of the volume, where prices are high between June and August when volumes are low. Over the past five years, the first-sales price of herring has trended downwards, following the general decreasing global prices for Herring. There are also large variations in first-sales prices between the Member States. In 2020, the weighted average first-sales price of herring was 0,18 EUR/kg in Estonia, 0,19 EUR/kg in Latvia, 0,28 EUR/kg in Poland and Lithuania, and 0,55 EUR/kg in Denmark.

In 2020, the weighted average first-sales price of sprat was 0,19 EUR/kg, 4% lower than 0,20 EUR/kg in 2016. During 2016, the prices trended downwards but have shown an upward trend since mid-2019. The prices also vary between Member States with a weighted average price in 2020 of 0,17 EUR/kg in Estonia, 0,19 EUR/kg in Poland and Denmark, 0,22 EUR/kg in Latvia, and 0,24 EUR/kg in Lithuania.

### Figure 50. MONTHLY WEIGHTED AVERAGE FIRST-SALES PRICES\* OF HERRING AND SPRAT IN THE BALTIC SEA 2016-2020



\* Based on first sale data from Denmark, Estonia, Latvia, Lithuania, and Poland Source: EUMOFA.

### 4.6. Status and future prospects

The Baltic Sea has experienced drastic changes in the whole ecosystem, and traditional management is no longer sufficient according to some scientists<sup>45</sup>. It is also an area where research activity, scientific knowledge, data availability, and effective management are high compared to other sea areas<sup>46</sup>.

The research activities - and the data available - are all for the purpose of improving and ultimately recovering the Baltic ecosystem. Knowledge of the ecosystem is therefore advanced, and is used to understand the processes responsible for the environmental imbalance and decreasing fish stocks.

There are several science-based projects that have been established to improve the environment in the Baltic Sea. These projects have been established through the HELCOM Baltic Sea Action Plan (BSAP). Since its adoption in 2007, the BSAP has resulted in several environmental improvements such as a reduction in nutrient inputs to the sea, an improved state of biodiversity and a decrease in maritime ingredients and spills. HELCOM states that although the overall goal of the current BSAP to reach good environmental status of the Baltic Sea by 2021 will not be reached, the Plan has delivered unprecedented results. The Plan is due to be updated at the end of 2021, providing an opportunity for it to be adjusted, and to consider previously unaddressed challenges. As of March 2021, HELCOM states that around 71% of the joint regional actions (89 of 126) and 29% of the national actions (18 of 62) from the Baltic Sea Action Plan have been fully implemented by the HELCOM contracting Parties<sup>47</sup>.

ICES advice for the Baltic Sea quotas in 2021 is based on scientific evidence and provides a status on the state of fish stocks. The recommendation to stop fishing for Eastern Baltic cod and Western spring spawning herring is based on biomass below the minimum threshold for the stock. The TAC advice on Western Baltic cod is also reduced due to record-low recruitment and an unbalanced stock. The sprat stock has had a declining biomass but has been assessed as being above the threshold limit.<sup>48</sup>.

Criticism has been targeted at the EU's regulations and TAC decisions in the Baltic Sea. NGOs have raised concerns regarding actions taken through the Multiannual Plan (MAP). Industry representatives have said the MAP restricts fishing excessively, while environmental organisations believe that it allows too large catches on vulnerable stocks<sup>49</sup>. The European Commission states that the MAP has been helpful in implementing fisheries policy.<sup>50</sup> Thanks to the MAP, all fisheries are now either managed in line with maximum sustainable yield (MSY), or measures have been implemented to bring the stock(s) back to the MSY level – although the ecosystem and fisheries within the Baltic Sea still face challenges<sup>51</sup>.

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<sup>&</sup>lt;sup>45</sup> Reusch, T. B. H., Dierking, J., Andersson, H. C., Bonsdorff, E., Carstensen, J., Casini, M., et al. (2018). The Baltic Sea as a time machine for the future coastal ocean. Science Advances (https://advances.sciencemag.org/content/4/5/eaar8195).
<sup>46</sup> Ibidem

<sup>&</sup>lt;sup>47</sup> https://helcom.fi/baltic-sea-action-plan/follow-up-of-helcom-agreements/

<sup>&</sup>lt;sup>48</sup> ICES advice for Baltic Sea guotas in 2021 – The Fisheries Secretariat (fishsec.org)

<sup>&</sup>lt;sup>49</sup> ANALYSIS: Baltic Sea fishing has not gone according to (multiannual) plan - Baltic Eye

<sup>&</sup>lt;sup>50</sup> Baltic Sea: Commission adopts report on multiannual plan | Fisheries (europa.eu)

<sup>&</sup>lt;sup>51</sup> Baltic Sea: Commission adopts report on multiannual plan | Fisheries (europa.eu)

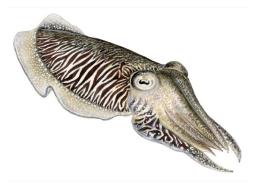
### 5. Case study: Cuttlefish in the EU

Cuttlefish species are among the most commonly caught and consumed molluscs in the EU market and represent an important commercial species for several EU fisheries. In 2018, according to EUROSTAT, landings of cuttlefish species in the EU amounted to 23.170 tonnes for a total value of EUR 158 million. However, cuttlefish imports (mostly frozen) exceeded EU production, with 37.968 tonnes for EUR 154 million imported in 2020 from extra-EU suppliers.

### 5.1. Biology resource and exploitation

### **BIOLOGY**

Cuttlefish are marine molluscs of the order *Sepiida*. They belong to the family of cephalopods. They have a unique internal shell, the cuttlebone,



Source: Scandinavian Fishing Year Book.

which is used for control of buoyancy, and have 10 tentacles (eight arms, and two tentacles furnished with denticulated suckers). They can be found all over the world and are often reported in catches together with bobtail squids, a closely related cephalopods group (order *Sepiolida*), although they have no cuttlebone.

The main species found in European waters is the common cuttlefish (*Sepia officinalis*). It lives on the coast up to 200 m deep. It is found in the Atlantic, from the Baltic Sea and North Sea to South Africa, as well as in the Mediterranean. The cuttlefish is occasionally found on rock seabed, but it will most often be found on soft bottoms, sand, or gravel, in seagrass beds or areas with large algae. Partial burial in the sediment is frequent both for protection from predators and for surprising its prey. It isvery active at night, capturing its prey of fish and crustaceans thanks to its longest tentacles - two arms with suction cups at the end - and its horny beak. The cuttlefish is a migratory species that seeks deeper waters in the winter and comes closer to the coast in the spring<sup>52</sup>. The common cuttlefish can live for up to two years and its most common length size ranges between 15 and 30 cm, but can reach up to 50 cm, with a weight of 4 kg<sup>53</sup>.

### **RESOURCE, EXPLOITATION, AND MANAGEMENT IN THE EU**

Cuttlefish are caught using traps, pots and bottom trawls and, less often, handline<sup>54</sup>. The minimum marketing size applied in the Channel by French fisheries is commonly 100 g<sup>55</sup>, but there is no minimum conservation size at EU level and juveniles are also targeted in some regions. The lifecycle of cephalopods is still poorly understood. From year to year the abundance can be very variable depending on environmental conditions. The rapid lifecycle allows rapid recovery of the stock, which is not currently subject to evaluation nor management measures at EU level. Nevertheless, in some countries like France, the number of vessels allowed to target cuttlefish is regulated through a license system<sup>56</sup>.

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<sup>&</sup>lt;sup>52</sup> https://doris.ffessm.fr/Especes/Sepia-officinalis-Seiche-230

<sup>&</sup>lt;sup>53</sup> https://www.sealifebase.ca/summary/Sepia-officinalis.html

<sup>&</sup>lt;sup>54</sup> https://mare.istc.cnr.it/fisheriesv2/species\_en?sn=33267#ecl-accordion-header-prod-gears

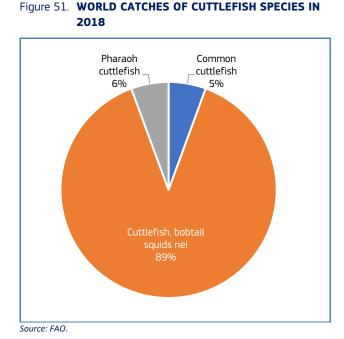
<sup>55</sup> http://www.guidedesespeces.org/fr/seiche

<sup>&</sup>lt;sup>56</sup> http://www.guidedesespeces.org/fr/seiche

### 5.2. Production

### CATCHES

Global production of cuttlefish species amounted to 391.232 tonnes in 2018. Most of catches were reported under undefined cuttlefish species (cuttlefish, bobtail squids nei, 89% of the total). The other species reported were the pharaoh cuttlefish and common cuttlefish. The common cuttlefish, the species most caught by the EU fleet, accounted for only 5% of total world catches.



Cuttlefish species are caught in many regions around the world. The leading producers in 2018 were by far China (33%) and India (22%). Other major producers were the EU28 (6%), Malaysia and Morocco (5% each). EU catches of cuttlefish species accounted for only 6% of world catches, with 23.603 tonnes caught, mostly common cuttlefish.

Over the last decade (2009-2018), reported catches of cuttlefish species have experienced a 25% increase. However, this increase is due to the fact that India started reporting catches under cuttlefish designation only from 2015. Then, from 2015, the total catch has experienced a slight decrease (-11%). Among major producing countries, China has reported slightly increased catches (+4%) whereas the EU28 (-16%), Malaysia (-11%) and Morocco (-13%) have experienced decreases

Table 27.	able 27. TOTAL WORLD CATCHES OF COTTLEFISH SPECIES (Volume in connes)									
Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China	122.075	116.906	127.572	128.672	129.278	137.211	147.647	133.877	136.772	127.257
India	n/a	n/a	n/a	n/a	n/a	n/a	107.846	101.805	109.089	85.655
EU28	27.970	31.499	29.902	30.802	26.713	22.350	29.575	27.975	29.196	23.603
Malaysia	22.551	23.313	23.567	25.825	23.250	24.533	20.684	20.397	20.144	19.966
Morocco	22.790	18.975	20.253	25.482	26.744	19.179	28.730	29.037	26.888	19.781
Oman	6.558	9.795	7.521	6.530	6.371	7.422	5.118	7.500	9.535	16.191
Indonesia	38.696	25.533	25.552	17.751	18.831	17.930	23.123	25.145	26.278	15.517
Thailand	24.045	23.731	22.997	24.670	25.170	20.983	13.813	12.389	14.659	14.595
Sri Lanka	510	780	970	1.220	1.720	4.140	3.790	4.280	7.930	10.640
Others	76.328	80.918	82.067	96.401	89.792	83.730	87.349	80.582	82.120	81.631
Total	313.553	299.951	310.499	326.551	321.156	315.128	438.100	415.012	433.416	391.232

TOTAL WORLD CATCHES OF CLITTLEFISH SPECIES (volume in tonnes)

Source: EUMOFA.

Table 27

Overview | 1. First sales in Europe | 2. Extra-EU imports | 3. Consumption | 4. Fisheries Management in the Baltic | 5. Cuttlefish in the EU | 6. Global highlights | 7. Macroeconomic context

### LANDINGS IN THE EU

In 2018, landings of cuttlefish species<sup>57</sup> in the EU amounted to 23.170 tonnes for a total value of EUR 158 million. France and Italy were the most important landing countries with 29% and 28% of landing volume respectively, and 42% and 22% of the value respectively. Other major landing countries were the UK (18% of landing volume), Spain (9%), and Greece (8%).

Over the 2009-2018 period, cuttlefish landings experienced a 1% decrease in volume. However, among major producing countries, very different trends were experienced. France (+34%), the UK (+82%), and Greece (+15%) experienced increases in landing volumes of cuttlefish species, whereas Italy (-35%) and Spain (-32%) experienced strong decreases. Over the 2009-2018 period, the value of total EU landings increased in real terms by 12% due to an average landing price increase of 13%<sup>58</sup>.

Table 28.		OF CUTTLE	FISH IN TH	IE EU (VOL	UME IN T	ONNES)59				
Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
France	4.954	6.780	13.695	14.329	10.575	7.704	11.041	9.408	8.562	6.635
Italy	9.872	7.580	5.824	5.149	5.764	6.000	6.304	6.081	6.707	6.413
United Kingdom	2.230	3.855	3.310	5.372	3.720	3.109	6.168	5.182	7.196	4.070
Spain	3.206	3.035	2.921	2.697	2.789	2.136	2.522	2.558	2.155	2.170
Greece	1.587	1.448	1.447	1.194	1.550	1.206	906	1.950	1.671	1.824
Portugal	1.039	1.555	1.165	882	985	943	950	963	765	764
Belgium	317	422	351	782	392	358	692	877	886	764
Other	204	351	187	313	410	356	452	425	533	530
Totals	23.409	25.024	28.901	30.718	26.185	21.812	29.034	27.445	28.475	23.170

Source: EUMOFA elaboration of EUROSTAT data.

### **MARKETING AND CONSUMPTION**

Cuttlefish is a well appreciated mollusc in many regions of the world. It is usually marketed fresh or frozen as a highly valued food item, especially in Japan, Korea, Italy, and Spain. In the EU, cuttlefish is marketed either: "black" (because of its ink) without having been washed; cleaned, and gutted; or in the form of cuttlefish flesh, referring to the cleaned mantle (headed, gutted, and cleaned, without the cuttlebone).

### 5.3 International trade

### **EU TRADE FLOWS AND SUPPLY**

In the CN nomenclature used for registering EU import-export data, cuttlefish is specifically reported as live/fresh whole, frozen whole and smoked, salted, or in brine<sup>60</sup>. However, other codes including a broader variety of cephalopod species may include cuttlefish products, though are not included in the calculations and analysis below (especially prepared and preserved products). In 2020, the EU experienced a trade deficit for cuttlefish products, amounting to EUR 151 million<sup>61</sup>. In 2020,

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<sup>57</sup> Including common cuttlefish, Sepiidae, Sepiolidae (Cuttlefish, bobtail squids nei), African cuttlefish, elegant cuttlefish, pink cuttlefish, cuttlefishes nei.

<sup>&</sup>lt;sup>58</sup> Values are deflated by using the GDP deflator (base=2015).

<sup>&</sup>lt;sup>59</sup> Totals do not correspond exactly to actual sums because of roundings.

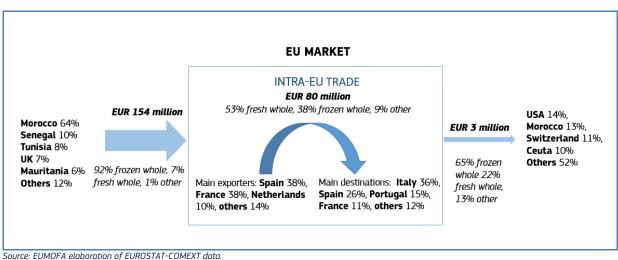
<sup>&</sup>lt;sup>60</sup> 03074210 cuttlefish "Sepia officinalis, Rossia macrosoma, Sepiala spp.", live, fresh or chilled, with or without shell; 03074321 lesser cuttlefish "Sepiala rondeleti", frozen, with or without shell; 03074325 Cuttlefish "Sepiala spp.", frozen, with or without shell (excl. "Sepiala rondeleti"); 03074329 cuttlefish "Sepia officinalis, Rossia macrosoma", frozen, with or without shell; 03074920 cuttlefish "Sepia officinalis, Rossia macrosoma, Sepiala spp.", smoked, dried, salted or in brine. with or without shell.

<sup>&</sup>lt;sup>61</sup> Starting from 2020, the UK is not considered in EU in EU trade statistics, so it considered as an extra-EU partner.

extra-EU imports reached 37.968 tonnes for EUR 154 million, dominated by frozen whole products (92% of total import value).

Morocco was by far the main supplier accounting for 64% of the import value of cuttlefish products. Extra-EU exports of cuttlefish products were much lower (EUR 3 million for 505 tonnes in 2020), dominated by frozen whole (65% in value terms) and destined to a variety of destinations among which the USA (14% of export value), Morocco (13%), and Switzerland (11%) were the most important.

In 2020, intra-EU exports reached EUR 80 million for 16.266 tonnes of cuttlefish products. Of the total value, 53% consisted of fresh whole products, and 38% of frozen whole products. Spain, France, and to a lesser extent the Netherlands were the main cuttlefish suppliers to other EU countries, whereas Italy, Spain, and to a lesser extent Portugal and France were the main destinations. The Netherlands is likely to be an important logistic hub for extra-EU imports of frozen cuttlefish products.



### Figure 52. THE CUTTLEFISH EU-TRADE MARKET IN 2020, IN VALUE

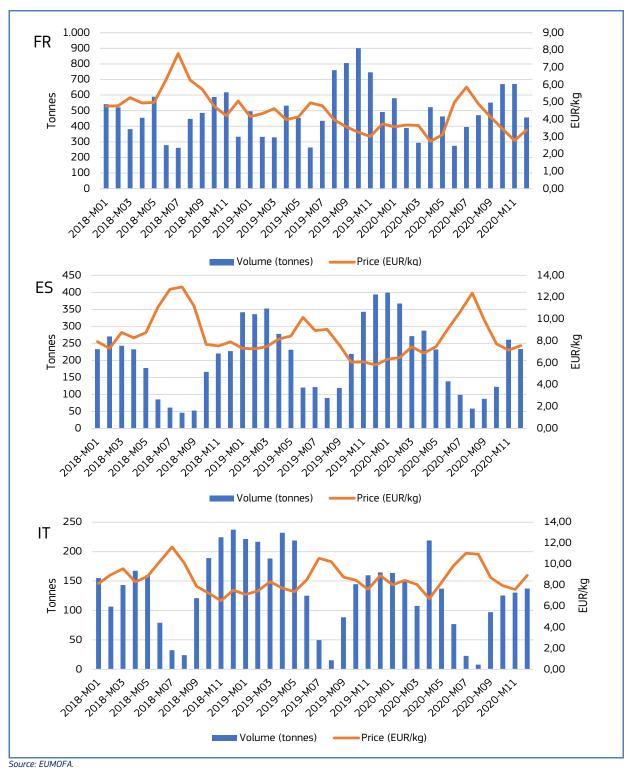
### 5.4. Cuttlefish: first sales in the EU

Monthly first-sales data cover only a share of cuttlefish landings in the EU. However, they provide an interesting source of data for analysing the seasonality of volumes and prices. Indeed, the monthly data for first sales in major producing EU countries show a clear seasonality of the cuttlefish fishery, however this varies slightly between major producing countries. In France, sales volumes increase in late summer to reach a peak in autumn, whereas in Spain and Italy sales volumes increase in autumn to peak in the first quarter, and then slightly decrease in spring. Among the major producing countries, the common cuttlefish accounts for the majority of cuttlefish first-sales volumes: 99% in France, 93% in Spain, and 95% in Italy.

Throughout the year, monthly first-sales volumes in France fluctuate between 260 and 900 tonnes, whereas they are lower in Spain (between 45 and 400 tonnes), and in Italy (between 8 and 240 tonnes). In 2020, the main place of first sale for cuttlefish in France was Boulogne-sur-Mer, accounting for 14% of total cuttlefish first-sales volume in France.

Other important ports were Saint-Quay-Portrieux (10%) and Les Sables-d'Olonne, Port-en-Bessin, and La Cotinière (8% each). In Spain, the main places of sale were Isla Cristina, Sanlucar de Barrameda, and Pasajes, accounting for 13%, 11%, and 9% of total first-sales volume respectively. In Italy, the main place of sale for cuttlefish was Chioggia (21% of total volume) followed by Marano Lagunare (8%), and Ancona and Caorle (6% each).

The variations in first-sales prices seem well correlated with the seasonality of volumes, with increasing prices in the lower season in summer. In France, prices fluctuate between 3,00 EUR/kg in autumn - when volumes are at their peak - and almost 8,00 EUR/kg in summer. In Spain, prices seem to be higher, with variations between 6,00 and 13,00 EUR/kg. This is comparable to what is observed in Italy, where prices are relatively high and range between 6,50 and almost 12,00 EUR/kg.



### Figure 53. FIRST SALES: CUTTLEFISH IN FRANCE, SPAIN, AND ITALY

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## 6. Global highlights

**EU / Seychelles / SFPA**: On 3 and 4 March 2021, the EU and Seychelles met to review the first year of implementation of the new Sustainable Fisheries Partnership Agreement (SFPA) and its six years implementing Protocol, and to discuss mechanisms to strengthen their cooperation and common efforts towards sustainable fisheries. Each year, the EU contributes EUR 2,8 million to promoting the sustainable management of fisheries in the Seychelles, as well as to support the development of small-scale fisheries. The EU-Seychelles SFPA is the most important tuna agreement in place for the EU both in financial terms and in terms of fishing opportunities<sup>62</sup>.

**EU / IOTC**: In March, the Indian Ocean Tuna Commission (IOTC) discussed how to rebuild the yellowfin tuna stock in the Indian Ocean during a



special session. The EU had asked for such a meeting to be held to adopt specific measures addressing the situation of the yellowfin tuna stock. The EU's clear objective was to have a revised plan for yellowfin tuna adopted that would effectively reduce the catches of this stock in line with the recommendations of the IOTC Scientific Committee. The EU presented three successive proposals to accommodate, as far as possible, the requests for flexibility raised by different IOTC members, while safeguarding the overall objective of reducing catches to sustainable levels in line with scientific advice<sup>63</sup>.

**EU / North Sea / TAC**: The EU, Norway, and the UK met for the first time in January this year in a trilateral format to agree on the management of key shared stocks in the North Sea. After two months of negotiations, the three parties signed an agreement on 16 March for the joint management of cod, haddock, saithe, whiting, plaice, and herring. The agreement on quotas for five out of these six stocks have been set at maximum sustainable yield (MSY) levels, in line with scientific advice from the International Council for the Exploration of the Seas (ICES)<sup>64</sup>.

**EU / Control**: On 18 March, the European Border and Coast Guard Agency (Frontex), the European Maritime Safety Agency (EMSA) and the European Fisheries Control Agency (EFCA) signed a new working arrangement allowing them to continue working together to support national authorities on safety and security at sea, including search and rescue, border management, fisheries control, customs activities, law enforcement, and environmental protection. The working arrangement notably covers cooperation on risk analysis and information exchange on threats in the maritime domain as well as compliance with fundamental rights, data protection requirements, and access rights<sup>65</sup>.

**European Parliament / Fisheries Control**: At a Plenary Session on 11 March, the European Parliament (EP) agreed to use new technologies to better enforce fishing rules and improve security and transparency. They also insisted that consumers must be able to know when, where, and how the products they buy are caught. The Members of Parliament adopted it position on a new Fisheries Control system in which on-board cameras (CCTV) should be compulsory for vessels that are likely to not comply, and recreational fishermen who do not respect EU conservation measures or fisheries rules should be penalised. The EP demands measures to address loss of fishing gear, and new rules where fish should be traced throughout the whole food chain, including processed and imported products<sup>66</sup>.

**China / Fisheries / Covid-19**: The Covid-19 pandemic had a substantial impact on Chinese exports of fisheries and aquaculture products. In fact, in 2020, the value of total exports of fisheries and aquaculture products from China was worth EUR 15,5 billion, 7% less than in 2019. Japan and the United States of America remained the main markets for fisheries products from China, together representing roughly one-third of export value<sup>67</sup>.

4. Fisheries and aquaculture in South Africa 5. Horse mackerel in the EU 6. Global highlights

<sup>&</sup>lt;sup>62</sup> https://ec.europa.eu/fisheries/press/sustainable-fisheries-eu-and-seychelles-hold-first-joint-committee-meeting-under-new\_en

<sup>&</sup>lt;sup>63</sup> https://ec.europa.eu/fisheries/press/despite-setback-iotc-special-session-eu-remains-strongly-committed-rebuilding-plan-yellowfin\_en

<sup>&</sup>lt;sup>64</sup> https://ec.europa.eu/commission/presscorner/detail/en/ip\_21\_1206

<sup>&</sup>lt;sup>65</sup> https://ec.europa.eu/fisheries/press/coast-guard-cooperation-3-eu-agencies-strengthen-cooperation-support-member-states\_en

<sup>&</sup>lt;sup>66</sup> https://www.europarl.europa.eu/news/en/press-room/20210304IPR99227/fishing-rules-compulsory-cctv-for-certain-vessels-to-counter-infractions

<sup>&</sup>lt;sup>67</sup> http://www.fao.org/in-action/globefish/news-events/did-you-know/march-2021/en/

## 7. Macroeconomic Context

### 7.1. Marine fuel

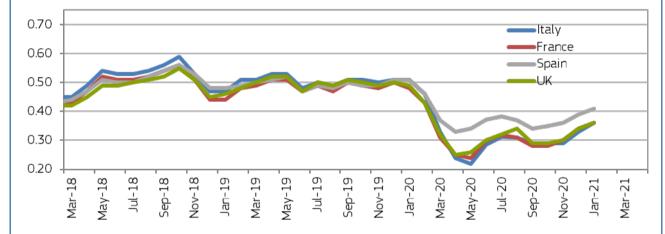
Average prices for marine fuel in **March 2021** ranged between 0,41 and 0,48 EUR/litre in ports in **France, Italy, Spain,** and the **UK**. Prices increased by about 6,1% compared with the previous month and increased by 30,8% compared with the same month in 2020.

Table 29. AVERAGE PRICE	OF MARINE DIESEL IN ITAL)	'. FRANCE. SPAIN	. AND THE UK (EUR/litre)

Member State	Mar 2021	Change from Feb 2021	Change from Mar 2020
France (ports of Lorient and Boulogne)	0,42	5%	35%
Italy (ports of Ancona and Livorno)	0,41	5%	24%
Spain (ports of A Coruña and Vigo)	0,48	7%	30%
The UK (ports of Grimsby and Aberdeen)	0,43	7%	34%

Source: Chamber of Commerce of Forlì-Cesena, Italy; DPMA, France; MABUX.

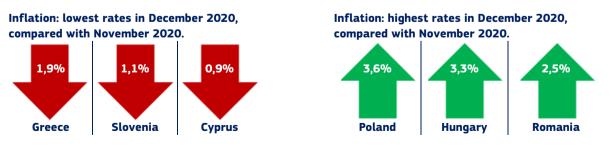




Source: Chamber of Commerce of Forlì-Cesena, Italy; DPMA, France; MABUX.

### 7.2. Consumer prices

The EU annual inflation rate was at 1,3% in February 2021, up from 1,2% in January 2020. A year earlier, the rate was 1,6%.



	Feb	Feb	Jan	Feb	Chang	ge from	Chang	e from
	2019	2020	2021	2021	Jan	2021	Feb	2020
Food and non- alcoholic beverages	106,29	109,07	109,70	110,01	t	0,3%	ŧ	0,9%
Fish and seafood	111,13	112,38	114,49	113,54	ŧ	0,8%	1	1,0%

Source: Eurostat.

### 7.3. Exchange rates

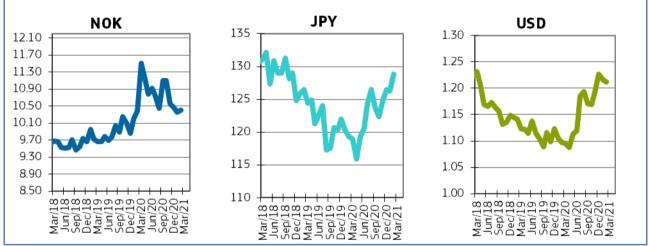
## Table 31. EURO EXCHANGE RATES FOR SELECTED CURRENCIES

Currency	Mar 2019	Mar 2020	Feb 2021	Mar 2021
NOK	9,659	11,51	10,4012	9,9955
JPY	124,45	118,9	128,83	129,91
USD	1,1235	1,0956	1,2121	1,1725

In March 2021, the euro depreciated against the Norwegian krone (3,9%), appreciated against the Japanese yen (0,8%), and US dollar (0,1%) relative to the previous month. For the past six months, the euro has fluctuated around 1,20 against the US dollar. Compared with March 2020, the euro has appreciated 9,3% against the Japanese yen, 7,0% against the US dollar, and depreciated 13,2% against the Norwegian krone.

Source: European Central Bank.

### Figure 55. TREND OF EURO EXCHANGE RATES



Source: European Central Bank.

### Table 30. HARMONISED INDEX OF CONSUMER PRICES IN THE EU (2015 = 100)

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This report has been compiled using EUMOFA data and the following sources:

**First sales:** Council of the European Union, FAO, EUR-lex, ICES, sealifebase.ca, researchgate.net, Universidad de Alicante.

Consumption: EUROPANEL, FAO.

**Case studies:** European Commission, ICES, EUR-lex, Eurostat, Britannica.com, HELCOM, BSAC, Baltic Eye – Stockholm University, Scienceadvances.org, Sealifebase.ca, DORIS.fr, guededespecies.org.

Global highlights: DG Mare - European Commission, FAO, European Parliament

**Macroeconomic context:** EUROSTAT, Chamber of Commerce of Forlì-Cesena, Italy: DPMA, France: ARVI, Spain: MABUX, European Central Bank.

The underlying first-sales data is in an annex available on the EUMOFA website. Analyses are made at aggregated (main commercial species) level and according to the EU Electronic recording and reporting system (ERS).

In the context of this Monthly Highlights, analyses are led in current prices and expressed in nominal values.

The **European Market Observatory for Fisheries and Aquaculture Products (EUMOFA)** was developed by the European Commission, representing one of the tools of the new Market Policy in the framework of the reform of the Common Fisheries Policy. [Regulation (EU) No 1379/2013 art. 42].

As a **market intelligence tool**, EUMOFA provides regular weekly prices, monthly market trends, and annual structural data along the supply chain.

The database is based on data provided and validated by Member States and European institutions. It is available in 24 languages.

The EUMOFA website is publicly available at the following address: <u>www.eumofa.eu</u>.

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