CASE STUDY

NORWAY LOBSTER IN THE EU

PRICE STRUCTURE IN THE SUPPLY CHAIN

FOCUS ON DENMARK, FRANCE AND IRELAND

MARCH 2019
WWW.EUMOFA.EU
Table of content

SUMMARY ................................................................................................................................................. 1

0 SCOPE AND CONTENT ............................................................................................................................ 2

0.1 Case study scope..................................................................................................................................... 2

0.2 State and content of the document ......................................................................................................... 2

1 DESCRIPTION OF THE PRODUCT(S) AND MARKET(S) ....................................................................... 3

1.1 Biological and commercial characteristics ............................................................................................. 3

1.2 World production of Norway lobster ....................................................................................................... 6

1.2.1 Evolution of catches ............................................................................................................................... 6

1.2.2 Evolution in the main producing Member States .................................................................................... 7

2 STRUCTURE OF THE EU MARKET ........................................................................................................... 8

2.1 Apparent market by Member State .......................................................................................................... 8

2.2 Trade of the main EU markets for Norway lobster .................................................................................... 9

2.2.1 Export from the UK: 12.532 t of product and EUR 129 million in 2017 ............................................... 10

2.2.2 Exports from IE: 4.752 t of product t and EUR 45 million in 2017 ..................................................... 11

2.2.3 Exports from DK: 3.866 t of product t and EUR 50 million in 2017 .................................................... 12

2.2.4 Exports from NL: 3.676 t of product t and EUR 36 million in 2017 .................................................... 13

2.2.5 Imports to IT: 8.716 t of product t and EUR 92 million in 2017 ......................................................... 14

2.2.6 Imports to FR: 5.903 t of product t and EUR 62 million in 2017 ......................................................... 15

2.2.7 Imports to ES: 5.034 t of product t and EUR 65 million in 2017 ......................................................... 16

3 THE DANISH MARKET ............................................................................................................................. 17

3.1 Structure of the supply chain for Norway lobster .................................................................................... 17

3.1.1 Balance supply ..................................................................................................................................... 17

3.1.2 Overview of the supply chain ................................................................................................................ 18

3.2 Characteristics of the Danish market and consumption ........................................................................ 18

3.3 Price transmission in the supply chain in Denmark .............................................................................. 19

3.3.1 Price of raw material ............................................................................................................................. 19

3.3.2 Price transmission: whole and tailed frozen Norway lobster exported to IT ..................................... 21

4 THE FRENCH MARKET ............................................................................................................................ 22

4.1 Structure of the supply chain for Norway lobster .................................................................................... 22
4.1.1 Balance supply ................................................................. 22
4.1.2 Overview of the supply chain ........................................... 23

4.2 Characteristics of the French market and consumption .............. 23

4.3 Price transmission in the supply chain in France ....................... 25
4.3.1 Price of raw material ....................................................... 25
4.3.2 Price transmission: live Norway lobster in large-scale retail in coastal areas-close to landing sites 27

5 THE IRISH MARKET ........................................................................ 28

5.1 Structure of the supply chain for Norway lobster ....................... 28
5.1.1 Balance supply ................................................................. 28
5.1.2 Overview of the supply chain ........................................... 29

5.2 Characteristics of the Irish market and consumption .................. 29

5.3 Price transmission in the supply chain in Ireland ....................... 30
5.3.1 Price of raw material ....................................................... 30
5.3.2 Price transmission: frozen whole Norway lobster exported to Italy ................................................. 32

6 ANNEXES .................................................................................. 33

6.1 Contacts ................................................................................. 33
REFERENCES..................................................................................... 33
Summary

- World production for Norway lobster reached 59.033 t in 2017, including 96% for the EU (56.829 t).
- The UK accounted for more than half of EU production in 2017 (56%), followed in volume by Ireland, Denmark and France. These four Member States (MS) accounted for 86% of EU catches of Norway lobster.
- Internal trade is important for Norway lobster:
  - the main exporters are the UK, Ireland, Denmark and the Netherlands;
  - the main importers are Italy, France and Spain.
- The main MS in terms of consumption are the UK, Italy, France, Spain, Ireland, Sweden and Denmark.
- Trade mainly comprises frozen Norway lobster, which accounted for 66% of UK exports and 87% of Irish exports in 2017.
- Norway lobster may be purchased live in some MS, such as in France. The consumption of live products mainly occurs in areas close to landing sites.
- Price transmission (2018):
  - Denmark: the analysis covers frozen Norway lobster (whole and tailed) exported to Italy. The first sale price is 7,20 EUR/kg, the export price is 11,75 EUR/kg and the price at import stage in Italy is 12,15 EUR/kg.
  - France: the analysis covers live Norway lobster retailed at the fresh fish counter of a large-scale retailer in a coastal area close to landing area for Norway lobster (Bay of Biscay). The first sale price is 11,93 EUR/kg and the consumer price is 14,92 EUR/kg.
  - Ireland: the analysis covers whole frozen Norway lobster (all sizes) exported to Italy. The first sale price is 8,41 EUR/kg, the export price is 10,18 EUR/kg and the price at import stage in Italy is 10,58 EUR/kg.
0 Scope and content

0.1 Case study scope

The rationale for the choice of Norway lobster to analyse price structure and distribution of value in the Danish, French and Irish value chains is described in the table below.

<table>
<thead>
<tr>
<th>Products</th>
<th>Origin</th>
<th>Characteristics</th>
<th>Market and price drivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway lobster</td>
<td>IE</td>
<td>Found live, fresh and frozen on the market</td>
<td>Size</td>
</tr>
<tr>
<td></td>
<td>DK</td>
<td>There is an important internal trade for Norway</td>
<td>State of preservation: live, fresh, frozen</td>
</tr>
<tr>
<td></td>
<td>FR</td>
<td>lobster.</td>
<td>Presentation: whole, tailed</td>
</tr>
</tbody>
</table>

Key elements of the analysis concerns:

- EU production
- EU trade
- Characteristics of the markets
- Price structure.

<table>
<thead>
<tr>
<th>Species - Products</th>
<th>Main MS (focus)</th>
<th>Other MS (overview)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway lobster (Nephrops</td>
<td>DK, FR, IE</td>
<td>UK, IT, NL, ES</td>
</tr>
<tr>
<td>norvegicus)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

0.2 State and content of the document

In conformity with the methodology developed within EUMOFA and published on the website (http://www.eumofa.eu/price-structure), this document includes:

- A description of the product;
- An analysis of production and market trends at EU level;
- An analysis of the price structure along the supply chain in Denmark, France and Ireland.
1 DESCRIPTION OF THE PRODUCT(s) AND MARKET(s)

1.1 Biological and commercial characteristics

Case study product

The case study focuses on Norway lobster.

Name: Norway lobster (Nephrops norvegicus) – producers: United Kingdom, Ireland, France, Denmark, Netherlands, Iceland and Sweden.

FAO 3-alpha code: NEP

Presentation: Fresh whole, frozen whole, either smoked or not, tailed.

Commercial criteria:

Table 1: Freshness categories for Norway lobster

<table>
<thead>
<tr>
<th></th>
<th>Extra</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shell</td>
<td>Pale pink or pink to orange-red</td>
<td>Pale pink or pink to orange-red; no black spots</td>
<td>Slight discoloration; some black spots and greyish colour, particularly on shell and between tail segments</td>
</tr>
<tr>
<td>Eye and gills</td>
<td>Shiny black eyes; pink gills</td>
<td>Eyes dull and grey/black; gills greyish</td>
<td>Gills dark grey or some greenish colour on dorsal surface of shell</td>
</tr>
<tr>
<td>Smell</td>
<td>Characteristic mild shellfish smell</td>
<td>Loss of characteristic shellfish smell. No ammonia smell</td>
<td>Slightly sour</td>
</tr>
<tr>
<td>Flesh (tail)</td>
<td>Translucent and blue in colour tending towards white</td>
<td>No longer translucent but not discoloured</td>
<td>Opaque and dull in appearance</td>
</tr>
</tbody>
</table>

Table 2: Commercial sizes for Norway lobster

<table>
<thead>
<tr>
<th>Size</th>
<th>Number of fish/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Norway lobster</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>20 and less</td>
</tr>
<tr>
<td>2</td>
<td>21 to 30</td>
</tr>
<tr>
<td>3</td>
<td>31 to 40</td>
</tr>
<tr>
<td>4</td>
<td>Over 40</td>
</tr>
<tr>
<td>Tails</td>
<td></td>
</tr>
<tr>
<td>1 (tails)</td>
<td>60 and less</td>
</tr>
<tr>
<td>2 (tails)</td>
<td>61 to 120</td>
</tr>
<tr>
<td>3 (tails)</td>
<td>121 to 180</td>
</tr>
<tr>
<td>4 (tails)</td>
<td>Over 180</td>
</tr>
</tbody>
</table>

Based on Council Regulation (EC) No 2406/96 of 26 November 1996 laying down common marketing standards for certain fishery products
Related codes in the product nomenclature (COMEXT)

Four codes from Combined Nomenclature (CN codes) cover Norway lobster over the period surveyed. The codes provide distinction between frozen and fresh. Over the period 2012-2016, further details were provided through complementary specific codes to identify smoked Norway lobster. Distinction between whole and tailed Norway lobster is not possible with CN codes and codes for frozen products may cover both presentations. This limits the possibility to provide a detailed balance supply by MS in live weight equivalent.

The codes covering Norway lobster are listed below:

- **Fresh Norway lobster**:
  - Until 2011: 03 06 29 30: Norway lobsters "Nephrops norvegicus", whether in shell or not, live, fresh, chilled, dried, salted or in brine, incl. Norway lobsters in shell, cooked by steaming or by boiling in water;
  - Between 2012 and 2016: 03 06 25 10: Norway lobsters "Nephrops norvegicus", smoked, even in shell, even cooked but not otherwise prepared (excl. frozen);
  - Between 2012 and 2016: 03 06 25 90 Norway lobsters "Nephrops norvegicus", whether in shell or not, live, fresh, chilled, dried, salted or in brine, incl. Norway lobsters in shell, cooked by steaming or by boiling in water;
  - Since 2017: 03 06 34 00 Norway lobsters (Nephrops norvegicus), live, fresh or chilled.

- **Frozen Norway lobster**:
  - Until 2011: 03 06 19 30 : Frozen Norway lobsters "Nephrops norvegicus", whether in shell or not, incl. Norway lobsters in shell, cooked by steaming or by boiling in water;
  - Between 2012 and 2016: 03 06 15 10: Frozen Norway lobsters "Nephrops norvegicus", smoked, even in shell, even cooked but not otherwise prepared;
  - Between 2012 and 2016: 03 06 15 90: Frozen Norway lobsters "Nephrops norvegicus", whether in shell or not, incl. Norway lobsters in shell, cooked by steaming or by boiling in water;
  - Since 2017: 03 06 15 00 Norway lobsters “Nephrops norvegicus”, frozen.
Biological parameters

The Norway lobster of the genus *Nephrops* is an arthropod in the order Decapoda.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>Between 6 and 17°C.</td>
</tr>
<tr>
<td>Habitat</td>
<td>Norway lobster lives on muddy bottoms in which it digs its burrows. The species can be found at depths ranging from 20 to 800 meters.</td>
</tr>
<tr>
<td>Diet</td>
<td>It is nocturnal. Feed is mainly composed of crustaceans, worms, molluscs and echinoderms.</td>
</tr>
<tr>
<td>Grow-out and size</td>
<td>Unlike all other crustaceans, Norway lobster has a discontinuous growth related to its periodic moult. Male and female would moult several times a year according to current knowledge on the species. After sexual maturity, the moult rate decreases. The total body length of adult animals varies between 8 and 24 cm, usually it is between 10 and 20 cm.</td>
</tr>
<tr>
<td>Distribution</td>
<td>Norway lobster can be found in the Eastern Atlantic region: from Iceland, the Faeroes and north-western Norway (Lofoten Islands), south to the Atlantic coast of Morocco. It can also be found in the western and central basins of the Mediterranean. Norway lobster is however absent from the eastern Mediterranean (east of 25°E) and from the Baltic Sea, the Bosphorus and the Black Sea.</td>
</tr>
<tr>
<td>Fishing gears</td>
<td>The main fishing gears used are trawls, and more rarely pots and traps (in particular from UK fisheries). The species is fished mostly in spring and summer.</td>
</tr>
</tbody>
</table>

Source: FAO, Ifremer

---


2 IFREMER (2003), Langoustine (Nephrops norvegicus) Stock de la mer Celtique (Divisions VIIg,h du CIEM), available at: https://wwwz.ifremer.fr/poche/content/download/29786/411203/file/fiche%20detaillee%20lorient_langoustine_mc_2003.pdf
1.2 World production of Norway lobster

1.2.1 Evolution of catches

World production reached 59.033 tonnes in 2016 (-19% since 2008). EU Member States accounted for at least 93% of the world catches between 2008 and 2016 (56.829 t in 2016, -17% since 2008). The main EU producers are the UK, IE, DK and FR (see details in the following section). Catches by non-EU countries accounted for 2.204 t in 2016 (-41% since 2008). The main non-EU producer is Iceland which accounted for 63% of the non-EU catches in 2016 (1.397 t caught in 2016 by Iceland).

Table 3: World production of Norway lobster (in tonnes) 2008-2016

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>World catches (t)</td>
<td>72.503</td>
<td>72.164</td>
<td>66.451</td>
<td>60.981</td>
<td>59.662</td>
<td>51.807</td>
<td>55.163</td>
<td>49.401</td>
<td>59.033</td>
<td>-19%</td>
</tr>
<tr>
<td>EU 28*</td>
<td>68.785</td>
<td>67.826</td>
<td>62.260</td>
<td>57.128</td>
<td>55.738</td>
<td>49.380</td>
<td>52.499</td>
<td>47.203</td>
<td>56.829</td>
<td>-17%</td>
</tr>
<tr>
<td>Non-EU 28</td>
<td>3.718</td>
<td>4.338</td>
<td>4.191</td>
<td>3.853</td>
<td>3.924</td>
<td>2.427</td>
<td>2.664</td>
<td>2.198</td>
<td>2.204</td>
<td>-41%</td>
</tr>
<tr>
<td>% EU / total</td>
<td>95%</td>
<td>94%</td>
<td>94%</td>
<td>94%</td>
<td>93%</td>
<td>95%</td>
<td>95%</td>
<td>96%</td>
<td>96%</td>
<td>/</td>
</tr>
</tbody>
</table>

* In this document, we consider EU-28 for the whole period, however, it was EU-27 between 2007 and 2013 (Croatia having joined the EU in 2013).

Source: FAO

Figure 1: World production of Norway lobster (in tonnes) 2007-2016

Source: FAO
1.2.2 Evolution in the main producing Member States

According to Eurostat data, the main EU producer of Norway lobster is the UK with more than half of EU catches (30,663 t in 2017). The next MS are Ireland (8,063 t); Denmark (4,299 t); and France (3,891 t). These four MS account for 86% of EU catches of Norway lobster. The volume caught decreased at EU level between 2008 and 2015, while an increasing trend has been observed since 2015. However, the level of catches in 2017 is 22% lower than in 2008, with catches decreasing in almost every MS (in particular -30% in the UK). The exception is DK where the catches in 2017 were at the same level as in 2008. The relative importance of the UK has tended to decrease: the UK accounted for 66% of the total EU catches in 2016 and for 56% in 2017. The EU quota for Norway lobster was 82,461 t in 2008, decreasing until 2014 to reach 61,981 t. It has then grown since 2015: the EU quota was 80,008 in 2017 and 82,271 in 2018. The annual quota for EU fleet is not reached by EU fleet; however, catch trends are similar to quota trends (decrease between 2008 and 2013-2014 and increase since 2014-2015).

Table 4: Evolution of catches of Norway lobster by MS between 2008 and 2017 (tonnes)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>43,520</td>
<td>42,900</td>
<td>38,652</td>
<td>34,539</td>
<td>32,708</td>
<td>28,481</td>
<td>30,487</td>
<td>25,911</td>
<td>31,486</td>
<td>30,663</td>
<td>56,0%</td>
<td>-30%</td>
</tr>
<tr>
<td>IE</td>
<td>9,226</td>
<td>7,155</td>
<td>7,758</td>
<td>7,883</td>
<td>10,389</td>
<td>8,435</td>
<td>9,081</td>
<td>8,378</td>
<td>9,364</td>
<td>8,063</td>
<td>14,7%</td>
<td>-13%</td>
</tr>
<tr>
<td>DK</td>
<td>4,291</td>
<td>4,466</td>
<td>4,341</td>
<td>3,776</td>
<td>3,700</td>
<td>3,033</td>
<td>3,468</td>
<td>2,781</td>
<td>4,189</td>
<td>4,299</td>
<td>7,9%</td>
<td>+0%</td>
</tr>
<tr>
<td>FR</td>
<td>4,500</td>
<td>5,603</td>
<td>4,785</td>
<td>4,609</td>
<td>2,981</td>
<td>3,137</td>
<td>3,280</td>
<td>4,012</td>
<td>4,682</td>
<td>3,891</td>
<td>7,1%</td>
<td>-14%</td>
</tr>
<tr>
<td>IT</td>
<td>3,551</td>
<td>3,719</td>
<td>3,350</td>
<td>2,698</td>
<td>2,051</td>
<td>2,002</td>
<td>1,489</td>
<td>1,355</td>
<td>1,294</td>
<td>1,707</td>
<td>3,1%</td>
<td>-52%</td>
</tr>
<tr>
<td>NL</td>
<td>737</td>
<td>882</td>
<td>701</td>
<td>1,012</td>
<td>1,024</td>
<td>910</td>
<td>1,154</td>
<td>1,160</td>
<td>1,464</td>
<td>1,487</td>
<td>2,7%</td>
<td>+102%</td>
</tr>
<tr>
<td>SE</td>
<td>1,538</td>
<td>1,339</td>
<td>1,253</td>
<td>1,360</td>
<td>1,134</td>
<td>1,270</td>
<td>1,136</td>
<td>1,370</td>
<td>1,422</td>
<td>1,116</td>
<td>2,6%</td>
<td>-8%</td>
</tr>
<tr>
<td>BE</td>
<td>212</td>
<td>282</td>
<td>306</td>
<td>306</td>
<td>382</td>
<td>317</td>
<td>503</td>
<td>625</td>
<td>884</td>
<td>1,116</td>
<td>2,0%</td>
<td>+427%</td>
</tr>
<tr>
<td>DE</td>
<td>286</td>
<td>426</td>
<td>403</td>
<td>568</td>
<td>396</td>
<td>429</td>
<td>418</td>
<td>436</td>
<td>862</td>
<td>926</td>
<td>1,7%</td>
<td>+224%</td>
</tr>
<tr>
<td>ES</td>
<td>1,094</td>
<td>1,356</td>
<td>1,174</td>
<td>1,152</td>
<td>1,192</td>
<td>722</td>
<td>574</td>
<td>610</td>
<td>545</td>
<td>556</td>
<td>1,0%</td>
<td>-49%</td>
</tr>
<tr>
<td>PT</td>
<td>247</td>
<td>164</td>
<td>152</td>
<td>134</td>
<td>182</td>
<td>187</td>
<td>177</td>
<td>188</td>
<td>227</td>
<td>253</td>
<td>0,5%</td>
<td>+0%</td>
</tr>
<tr>
<td>HR</td>
<td>201</td>
<td>371</td>
<td>328</td>
<td>284</td>
<td>260</td>
<td>300</td>
<td>344</td>
<td>304</td>
<td>237</td>
<td>200</td>
<td>0,4%</td>
<td>-1%</td>
</tr>
<tr>
<td>GR</td>
<td>478</td>
<td>491</td>
<td>398</td>
<td>375</td>
<td>304</td>
<td>299</td>
<td>233</td>
<td>270</td>
<td>200</td>
<td>172</td>
<td>0,3%</td>
<td>-64%</td>
</tr>
<tr>
<td>EU 28</td>
<td>69,879</td>
<td>69,153</td>
<td>63,428</td>
<td>58,284</td>
<td>56,929</td>
<td>49,376</td>
<td>52,491</td>
<td>47,204</td>
<td>56,831</td>
<td>54,751</td>
<td>100%</td>
<td>-22%</td>
</tr>
</tbody>
</table>

Source: Eurostat

Figure 2: Evolution of catches of Norway lobster in the EU 28 by MS between 2008 and 2017 (tonnes)
2 STRUCTURE OF THE EU MARKET

2.1 Apparent market by Member State

The calculation of the apparent market for Norway lobster faces the issue of the different presentations of products under the same CN codes: the same code may cover tailed or whole products. For instance, the conversion coefficient to calculate the live weight equivalent of frozen Norway lobster in 2017 (CN code: 03 06 15 10) is 2.4 based on EUMOFA\(^3\) (1 kg of product under code 03 06 15 10 is estimated to be equivalent to 2.4 kg of live Norway lobster). These conversion coefficients are based on estimates of the share of product for tailed or whole Norway lobster. However, this share differs for each trade flow and detailed information is not available. In the context of this study, the calculation of the apparent consumption by Member State is conducted with each of the methods (in tonnes of product and in tonnes of live weight equivalent based on conversion coefficients). The results of the apparent consumption calculation are different with the two method and provide a minimum and a maximum for the apparent consumption.

The apparent market for Norway lobster at EU level ranges from 55.149 t to 55.608 t at EU level in 2017. Catches reached 54.751 t in 2017, the extra-EU import reached 2.292 t of products and the extra-EU export 1.893 t of products. The main MS regarding catches and trade of Norway lobster are:

- **UK**: one of the main EU markets for Norway lobster, apparent market ranges from 10.544 to 20.216 t in 2017, this MS is the first EU producer and first EU exporter of Norway lobster.
- **IT**: one of the main EU markets for Norway lobster, consumption ranges from 10.221 to 20.770 t in 2017. National production is limited and consumption is based on imports.
- **FR**: the apparent market ranges from 9.539 t to 13.740 t, the consumption is based both on national production and imports. French exports remain low (173 t of products in 2017).
- **ES**: the apparent market ranges between 5.204 and 10.873 t, national production is low and consumption is based on imports.
- **IE**: Ireland is a large producer and exporter, apparent consumption ranges from 676 to 4.880 t. Based on data collected in Ireland from producers and retailers, the consumption of Norway lobster is low in Ireland, this product is almost not retailed by large scale retailers.
- **SE**: the apparent market ranges from 1.437 to 1.477 t, trade is limited (less than 130 t of products imported or exported in 2017) and national consumption relies on catches from SE (1.422 t in 2017).
- **DK**: national consumption is estimated to be 946 t at maximum, the calculation of national consumption is even negative if we would consider that frozen Norway lobster exported is tailed (it is estimated that 1 kg of tailed Norway lobster account for 2.4 kg).
- **BE**: national consumption ranges from 912 to 988 t. Consumption relies on national catches, exports reached 501 t of products in 2017.
- **HR**: national consumption ranges from 699 to 1.441 t, consumption is based on imports (588 t of product in 2017).
- **NL**: the volume caught is 1.487 t, the volume of products imported is 937 t and the volume of products exported is 3.681. There are discrepancies with this data as the calculation of the apparent consumption appears to be negative, imports to Netherlands may be underestimated in the statistics or exports from Netherlands may be overestimated in the statistics.
- **Other MS**: national consumption in other MS does not exceed 313 t.

---

\(^3\) EUMOFA Metadata, Annex 7 - Conversion factors by CN-8 codes from 2000 to 2019, available at: [https://www.eumofa.eu/documents/20178/24419/Metadata+2+DM+Annex+7+CF+per+CN8+%252707-%252714.pdf/7e98ac0c-a8cc-4223-9114-af64ab670532](https://www.eumofa.eu/documents/20178/24419/Metadata+2+DM+Annex+7+CF+per+CN8+%252707-%252714.pdf/7e98ac0c-a8cc-4223-9114-af64ab670532)
The following table provides the calculation of apparent consumption by MS. The details for imports and exports are provided in tonnes of products, the calculation of apparent consumption is provided in terms of tonnes of products and live weight equivalent (with conversion coefficients). The two methods provide different results, in particular in MS where imports and exports are high. For instance, apparent consumption in the UK is 20.216 t. We consider that imported and exported frozen Norway lobsters are whole products and 10.544 t if we calculate the live weight equivalent based on conversion coefficients (based on assumption related to the share of whole and tailed Norway lobster for each CN code). Thus, based on these calculations, apparent consumption in the UK ranges from 10.544 t (minimum) to 20.216 t (maximum) in 2017.

Table 5: Apparent market for Norway lobster at EU level and in the main MS in 2017 (tonnes of products)

<table>
<thead>
<tr>
<th></th>
<th>Catches</th>
<th>Volume of product (t)</th>
<th>Live weight equivalent (t)</th>
<th>Apparent consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Import</td>
<td>Export</td>
<td>Apparent consumption</td>
</tr>
<tr>
<td>UK</td>
<td>30.663</td>
<td>2.084</td>
<td>12.532</td>
<td>20.216</td>
</tr>
<tr>
<td>IT</td>
<td>1.707</td>
<td>8.728</td>
<td>214</td>
<td>10.221</td>
</tr>
<tr>
<td>FR</td>
<td>3.891</td>
<td>5.903</td>
<td>173</td>
<td>9.621</td>
</tr>
<tr>
<td>ES</td>
<td>556</td>
<td>5.034</td>
<td>385</td>
<td>5.204</td>
</tr>
<tr>
<td>IE</td>
<td>8.063</td>
<td>1.569</td>
<td>4.752</td>
<td>4.880</td>
</tr>
<tr>
<td>SE</td>
<td>1.422</td>
<td>124</td>
<td>109</td>
<td>1.437</td>
</tr>
<tr>
<td>DK*</td>
<td>4.299</td>
<td>513</td>
<td>3.866</td>
<td>946</td>
</tr>
<tr>
<td>BE</td>
<td>1.116</td>
<td>297</td>
<td>501</td>
<td>912</td>
</tr>
<tr>
<td>HR</td>
<td>200</td>
<td>588</td>
<td>90</td>
<td>699</td>
</tr>
<tr>
<td>DE</td>
<td>926</td>
<td>81</td>
<td>790</td>
<td>217</td>
</tr>
<tr>
<td>PT</td>
<td>248</td>
<td>110</td>
<td>156</td>
<td>201</td>
</tr>
<tr>
<td>GR</td>
<td>172</td>
<td>20</td>
<td>7</td>
<td>185</td>
</tr>
<tr>
<td>SI</td>
<td>0</td>
<td>168</td>
<td>39</td>
<td>129</td>
</tr>
<tr>
<td>NL*</td>
<td>1.487</td>
<td>937</td>
<td>3.681</td>
<td>-1.257</td>
</tr>
<tr>
<td>Total</td>
<td>54.751</td>
<td>2.292</td>
<td>1.893</td>
<td>55.149</td>
</tr>
</tbody>
</table>

* Discrepancies of data: apparent consumption is negative, imports may be underestimated or exports overestimated in the official statistics.
Source: based on Eurostat

2.2 Trade of the main EU markets for Norway lobster

Main trade flows for Norway lobster (representing at least 3.500 t and EUR 45 million) are detailed in the following table.

Table 6: Main trade flows for Norway lobster in the EU in 2017

<table>
<thead>
<tr>
<th></th>
<th>Volume (t of products)</th>
<th>Value (EUR million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>12.532</td>
<td>129</td>
</tr>
<tr>
<td>IE</td>
<td>4.752</td>
<td>45</td>
</tr>
<tr>
<td>DK</td>
<td>3.866</td>
<td>50</td>
</tr>
<tr>
<td>NL</td>
<td>3.676</td>
<td>36</td>
</tr>
<tr>
<td>Imports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT</td>
<td>8.716</td>
<td>92</td>
</tr>
<tr>
<td>FR</td>
<td>5.903</td>
<td>62</td>
</tr>
<tr>
<td>ES</td>
<td>5.034</td>
<td>65</td>
</tr>
</tbody>
</table>

Source: Based on EUROSTAT - COMEXT data

Details for each of these trade flows are provided in the present section.
2.2.1 Export from the UK: 12.532 t of product and EUR 129 million in 2017

The UK is the leading EU exporter of Norway lobster. Exports reached 12.532 t and EUR 129 million in 2017; far below the situation in 2008 with 21.349 t (-41% between 2008 and 2017) and EUR 155 million (-17%). This decrease is related to the collapse of frozen products exports since 2008 (-51% in volume) while fresh products export have remained relatively stable (-6%). Thus, fresh products accounted for 21% of the volume exported in 2008 versus 34% in 2017.

The export price is higher for fresh products compared to frozen products each year. Over the period 2008-2017, the average price ranges from 7.99 EUR/kg to 12.07 EUR/kg for fresh products (respectively in 2009 and 2017) and between 5.53 EUR/kg and 9.50 EUR/kg for frozen products (respectively in 2009 and 2016).

Three destinations account for more than three quarters of the exports (78%): FR (30%), ES (25%) and IT (23%). The volumes exported in each of these MS decreased between 2008 and 2017, in particular in IT with a 51% decrease (5.880 t exported in 2008 vs 2.853 t in 2017). Exports to France also decreased in volume but increased in value (+29% to reach EUR 43 million in 2017), this is due to a decrease of frozen exports, an increase of fresh exports and an increase of the export price for fresh products.

Figure 3: Overview of the Norway lobster exports from the UK between 2008 and 2017

Source: Based on EUROSTAT - COMEXT data
2.2.2 Exports from IE: 4.752 t of product t and EUR 45 million in 2017

Irish exports of Norway lobster increased by 58% in value and 4% in volume between 2008 and 2017, to reach 4.752 t and EUR 45 million in 2017.

This increase is due to a large development of exports to Italy: from 1.113 t and EUR 7 million in 2008 to 2.199 t and EUR 25 million in 2017. Italy is the main market with 46% of volume and 56% of value. The export price has increased significantly over the period (9.54 EUR/kg in 2017, +52% since 2008) and is particularly high for Italy compared to other destinations (11.59 EUR/kg in 2017 versus 6.62 EUR/kg in 2008, +75% since 2008).

The next destinations for Irish exports are ES (22% of volume in 2017); the UK (21%) and FR (10%). Other destinations only account for 1% of the volume exported. The exported volumes to each of these destinations decreased between 2008 and 2017 (-17% to -29% to each of these destinations), this allowed the development of exports to IT. However, the value of exports to ES increased due to an increase in price: EUR 9 million in 2017 (+18% since 2008) with average price of 9.02 EUR/kg (+43%). The export price increased for all destinations, based on an Irish producer interview, this is linked to the development of on-board freezing which improves product quality compared to Norway lobster frozen on land.

Most of the exports are frozen: 87% of the volume in 2017 (between 3.307 and 5.271 t each year between 2008 and 2017). Fresh products exports range from 260 to 1.013 t (13% of the volume in 2017).

Figure 4: Overview of the Norway lobster exports from IE between 2008 and 2017

Source: Based on EUROSTAT - COMEXT data
2.2.3 Exports from DK: 3.866 t of product t and EUR 50 million in 2017

Over the period 2008-2017, exports have decreased by 22% in volume and 14% in value (-9% in volume for frozen products and -44% for fresh products). Exports peaked in 2010 at 5.140 t and EUR 57 million and decreased for both fresh and frozen during the following couple of years. While exports for frozen products is growing since 2013, exports for fresh products continuously decreased.

Exports from Denmark are mainly frozen (2.803 t, 72% of total). The average price ranges from 9,98 EUR/kg to 14,99 EUR/kg (respectively 2009 and 2016). Fresh products only account for 28% of the total (1.064 t). The price ranges from between 9,72 EUR/kg to 13,86 EUR/kg (respectively 2009 and 2011).

Almost half of exports go to IT (46%), followed by FR (22%), ES and NL (9% each). Other destinations account for 14% of total. Fresh products are mainly exported to Italy and France. The decrease in fresh Norway lobster exports is mainly linked to a decrease in the Italian market. While Danish exports to Italy decreased between 2008 and 2017, Irish exports to the same destination increased. Almost each year over this period, the average price for Irish product imported to Italy was lower than the average price for Danish products imported to Italy (with two exceptions: 2014 and 2015).

Figure 5: Overview of the Norway lobster exports from DK between 2008 and 2017

Source: Based on EUROSTAT - COMEXT data
2.2.4 Exports from NL: 3.676 t of product t and EUR 36 million in 2017

The Netherlands only exports frozen lobster. In 2017, Norway lobster exports reached 3.676 t and EUR 36 million (-6% in volume and +71% in value between 2008 and 2017), the average price was 9,73 EUR/kg in 2017 and 5,38 EUR/kg in 2008. There are two periods between 2008 and 2017:

- Decrease between 2008 and 2013: -55% in volume and -32% in value with a low point of EUR 14 million and 1.735 t in 2013.
- Increase since 2013: exports have been growing since 2013 (+112% in volume and +151% in value).

Three destinations account for 78% of the exported volume in 2017: IT (40%); ES (25%); and FR (13%). Other destinations account for 22% of total export volume.

Figure 6: Overview of the Norway lobster exports from NL between 2008 and 2017

Source: Based on EUROSTAT - COMEXT data
2.2.5 Imports to IT: 8.716 t of product and EUR 92 million in 2017

Imports to IT reached 8.716 t (-18% since 2008) and EUR 92 million in 2017 (-3% since 2008). Most of the imports are frozen products (89% in 2017) while fresh products accounted for 11% of the volume of imports. Price for frozen products imported was 10,53 EUR/kg in 2017 and 10,79 EUR/kg for fresh products.

The main origins of imports are Ireland (31% of volume), followed by Denmark (25%), the UK (24%) and the Netherlands (15%). Other countries only account for 5% of the total volume imported in 2017. Over the last decade (2008-2017 period), imports from the UK and DK have decreased (respectively -2.087 t and -1.103 t) and have been replaced, to some extent, by Irish imports (+1.303 t). The import price of UK Norway lobster to Italy was 8,99 EUR/kg in 2017, 11,66 EUR/kg from Ireland and 13,35 EUR/kg in Denmark.

Figure 7: Overview of the Norway lobster imports to IT between 2008 and 2017
2.2.6 Imports to FR: 5.903 t of product t and EUR 62 million in 2017

Imports to FR reached 5.903 t (-23% since 2008) and EUR 92 million in 2017 (-0.4% since 2008). The average import price increased by 29% over the period 2008-2017 (8.13 EUR/kg in 2008 and 10.46 EUR/kg in 2018), this explains the stability of the imported value compared to the decrease of volume.

The imports are balanced between frozen (53% of volume) and fresh products (47%). However, the import of fresh Norway lobster has decreased strongly since 2008 (-39%) while imports of frozen products remained relatively stable (+1%).

In 2017, imports mainly came from the UK (60% of volume), followed by DK, (14%), NL (11%) and IE (10%), with other origins accounting for 5% of volume. Imports from the UK and IE faced strong decrease in volume since 2008 (respectively -32% and -23%), although the decrease in value is more moderate (respectively -9% and -7%).

Figure 8: Overview of the Norway lobster imports to FR between 2008 and 2017

Source: Based on EUROSTAT - COMEXT data
2.2.7 Imports to ES: 5.034 t of product t and EUR 65 million in 2017

Imports to ES reached 5.034 t (-46% since 2008) and EUR 65 million in 2017 (-30% since 2008). The decrease is in particular due to fresh products, which saw a 2.948 t decrease over the period (-82%), while frozen product imports decreased by 1.334 t (-23%).

In 2017, fresh products accounted for 13% of the total volume imported versus 39% in 2008. Over the period, the price for fresh products grew strongly and reached 14.97 EUR/kg in 2017 while the price for frozen Norway lobster was 11.33 EUR/kg. Half of imports came from the UK in 2017 (51% in volume); 19% from IE; 14% from NL; 4% from DK and 12% from other origins. The imports from the UK have decreased strongly since 2008 (-2.566 t and -EUR 21 million).

Figure 9: Overview of the Norway lobster imports to ES between 2008 and 2017
3 The Danish market

3.1 Structure of the supply chain for Norway lobster

3.1.1 Balance supply

Danish production (4.299 t of catches in 2017) is highly export-oriented (90% of national catches are exported) and the level of import is limited (513 t of products). Exports are mainly frozen products, exported to Italy (see previous section).

National consumption remains limited, calculated to be 946 t maximum (assuming that all exports are whole Norway lobster). National consumption may be lower as there may be some export of tailed Norway lobster. However, no information is available on the breakdown between tailed and whole.

Figure 10 – Supply chain in DK (data from 2017)

For national supply and national market, a minimum (based on tonnes of products) and a maximum (based on live weight equivalent) are calculated.

Source: based on EUROSTAT
3.1.2 Overview of the supply chain

Norway lobster is fished by trawlers. A few companies (six companies identified in the context of this study) are specialized in the freezing, packaging and export of Norway lobster, a number of companies also handle Norway lobster with more limited volumes.

The three main areas for first sale in Denmark are located in the northern part of the country: Hirtshals, Skagen and Østerby; these three areas accounted for 55% of Norway lobster first sales in Denmark in 2017.

Table 7: % of volume at first sale for Norway lobster in Denmark in 2017

<table>
<thead>
<tr>
<th>% of first sales in 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hirtshals 23%</td>
</tr>
<tr>
<td>Skagen 17%</td>
</tr>
<tr>
<td>Østerby 15%</td>
</tr>
<tr>
<td>Hvide Sande 6%</td>
</tr>
<tr>
<td>Gilleleje 6%</td>
</tr>
<tr>
<td>Hanstholm 6%</td>
</tr>
<tr>
<td>Other 27%</td>
</tr>
</tbody>
</table>

Source: EUMOFA

3.2 Characteristics of the Danish market and consumption

The national consumption of Norway lobster is limited as most of the production is exported (mainly frozen).

Some references of Norway lobster have been identified through a web survey of online shops in Denmark (February 2019). Norway lobster is sold by large-scale retailers (only one product reference identified in large-scale retailer online shops) or by specialised websites for seafood products. The price ranges from 34,97 EUR/kg to 71,01 EUR/kg. There is no direct link between the price and the presentation (whole/tailed) or state of preservation (fresh/frozen). Thus, the channel of sales plays on important role for the consumer price, the highest price (71,01 EUR/kg) being for a large-scale retailer. The following table provides the details of Norway lobster products identified at retail stage in Denmark.

Table 8: Details on Norway lobster retailed on the Danish market

<table>
<thead>
<tr>
<th>Preservation</th>
<th>Presentation</th>
<th>Price at consumer stage (EUR/kg)</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frozen</td>
<td>Tailed</td>
<td>34,97</td>
<td>260 DKK/kg</td>
</tr>
<tr>
<td>Fresh</td>
<td>Whole</td>
<td>35,51</td>
<td>12-15 pieces / kg 265 DKK/kg</td>
</tr>
<tr>
<td>Frozen</td>
<td>Tailed</td>
<td>66,83</td>
<td>53,46 EUR for 800 g, 24-30 pieces / 800 g, 399 DKK)</td>
</tr>
<tr>
<td>Frozen</td>
<td>Whole</td>
<td>71,01</td>
<td>0,3 kg package, 25-80 g / piece 530 DKK/kg</td>
</tr>
</tbody>
</table>

1 DKK = 0,134 EUR

Source: EUMOFA survey on Danish online shops (February 2019)

As a comparison, the web survey shows that the price for shrimp in a large-scale retailer website ranges from 20,03 EUR/kg to 46,42 EUR/kg (149,50 DKK/kg and 347,22 DKK/kg). Based on these prices, Norway lobster is positioned on a higher price range than shrimp on the Danish market.
3.3 Price transmission in the supply chain in Denmark

3.3.1 Price of raw material

First sale price

Average yearly price ranges from 6.26 to 10.12 EUR/kg (respectively 2009 and 2011). The average price for 2017 was 8.07 EUR/kg (compared to 9.18 EUR/kg in 2016). There are some peaks in December (for instance 15.94 EUR/kg in December 2015 and 13.17 EUR/kg in December 2016) due to stronger demand at Christmas and New Year, when production is low.

Figure 11: Evolution of yearly price of Norway lobster in Denmark at first sale between 2008 and 2017 (EUR/kg)

Source: EUMOFA

Figure 12: Evolution of monthly price of Norway lobster in Denmark at first sale between 2007 and 2018 (EUR/kg)

Source: EUMOFA
**Export price to Italy**

Most of the volume of exports from DK to IT is frozen Norway lobster (77% in 2017). The export price for frozen Norway lobster ranges from 10,07 EUR/kg and 15,21 EUR/kg (respectively in 2009 and 2016). The price in 2017 is 13,92 EUR/kg for frozen product and 11,95 EUR/kg for fresh product. This export price covers both whole and tailed Norway lobster.

Based on qualitative interviews, prices have tended to fall since 2017, due to an increase in volume in the market.

**Figure 13: Evolution of yearly price of Norway lobster exported from Denmark to Italy between 2008 and 2017 (EUR/kg)**

![Figure 13: Evolution of yearly price of Norway lobster exported from Denmark to Italy between 2008 and 2017 (EUR/kg)](source: EUROSTAT - COMEXT)
3.3.2 Price transmission: whole and tailed frozen Norway lobster exported to IT

The price transmission covers frozen Norway lobster exported from Denmark to Italy (this is the main flow of exports from Denmark). This price transmission analysis is based on statistics (EUMOFA, EUROSTAT-COMEXT) and information gathered in other MS. The first sale price is based on EUMOFA data for 2018 (November 2017-October 2018) and the export price is based on Eurostat-Comext data (November 2017-October 2018). Packaging costs, transport costs and loss of weight is extrapolated from data collected in Ireland (price transmission covers the export of frozen Norway lobster from Ireland to Italy). “Other costs and margin” are assessed based on first sale prices and export prices. These other costs appear to be important (3,77 EUR/kg) as they most likely cover both the costs related to whole Norway lobster sales and the costs related to tailed Norway lobster processing and sales (processing costs, loss of raw material). Loss of weight is estimated to be 6% (based on interviews with Irish exporter), this is related to a loss of water along the supply chain.

Table 9: Price transmission for Norway lobster in large-scale retail in Denmark

<table>
<thead>
<tr>
<th>Price and costs (EUR/kg)</th>
<th>% final price</th>
</tr>
</thead>
<tbody>
<tr>
<td>First sale price</td>
<td>7,20</td>
</tr>
<tr>
<td>Packaging / labelling</td>
<td>0,40</td>
</tr>
<tr>
<td>Other costs and margin (processing, loss of raw material for tails, labour costs, net margin, etc.)</td>
<td>3,45</td>
</tr>
<tr>
<td>Loss of weight (6%)</td>
<td>0,71</td>
</tr>
<tr>
<td>Export price</td>
<td>11,75</td>
</tr>
<tr>
<td>Transport to Italy</td>
<td>0,40</td>
</tr>
<tr>
<td>Price at import stage in Italy</td>
<td>12,15</td>
</tr>
</tbody>
</table>

Source: EUMOFA

Figure 14: Price transmission for Norway lobster exported from Denmark to Italy in large-scale retail

Source: EUMOFA
4 The French market

4.1 Structure of the supply chain for Norway lobster

4.1.1 Balance supply

The French supply is based both on national catches and imports. National production is mainly sold live in the coastal area where Norway lobster is landed (the northern part of the Bay of Biscay). Imported products are both fresh and frozen and sold across the whole MS. Exports remain limited (173 t of products in 2017).

National market ranges from 9.621 t lwe (assuming that imported and exported products are whole products) to 13.865 t lwe, based on conversion coefficients for each CN code, with assumptions of the share of product whole or tailed for each code. (Based on FranceAgriMer / Kantar Worldpanel data, household consumption is 3 210 t in 2017).

For national supply and national market, a minimum (based on tonnes of products) and a maximum (based on live weight equivalent) are calculated.

Source: based on EUROSTAT
4.1.2 Overview of the supply chain

Norway lobster is mainly landed live in France. Live Norway lobster is landed by coastal vessels operating in the Bay of Biscay (trawlers). Other French vessels operated in Irish and UK waters and land fresh Norway lobster (not live). Fresh Norway lobster not live is called “iced Norway lobster” (“langoustine glacée”). Norway lobster may also be imported live from the UK.

Norway lobster is mainly landed in the ports facing the Bay of Biscay (Atlantic coast), the main landing sites being in Brittany (Le Guilvinec, Lorient and Concarneau). Norway Lobster is also landed in the Pays de la Loire Region.

4.2 Characteristics of the French market and consumption

According to FranceAgriMer data (based on Kantar Worldpanel), household consumption was 3.210 t in 2017. The total value of consumption is EUR 49,6 million in 2017 (+12% since 2012). About two thirds (65.9%) of the volume are purchased from large-scale retailers; 17.2% from fishmongers and 14.5% from marketplaces. The average price for consumer is 15.5 EUR/kg in 2017, this covers all presentations of Norway lobster (live, fresh, frozen) and all sizes.

Table 10: Household consumption of fresh Norway lobster in France in 2017

<table>
<thead>
<tr>
<th></th>
<th>% volume</th>
<th>% value</th>
<th>Price (EUR/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large-scale retail</td>
<td>65.9</td>
<td>60.3</td>
<td>14.2</td>
</tr>
<tr>
<td>Fishmonger</td>
<td>17.2</td>
<td>16.0</td>
<td>17.0</td>
</tr>
<tr>
<td>Marketplace</td>
<td>14.5</td>
<td>21.6</td>
<td>19.4</td>
</tr>
<tr>
<td>Other</td>
<td>2.4</td>
<td>2.1</td>
<td>/</td>
</tr>
</tbody>
</table>

Source: FranceAgriMer based on Kantar Worldpanel

Consumption peaks between March and July (during the peak of production) and December (Christmas and New Year periods). The largest share of the consumption takes place in western France, close to the landing areas.

Product from coastal vessels is landed live. The product is mainly marketed in the coastal areas:

- Large-scale retailers close to Lorient and Le Guilvinec (the southern part of Brittany) directly purchase the Norway lobster at auction and may provide the live product 1 or 2 hours after first sale at the fresh fish counter of a shop. Live Norway lobster is a traditional and popular product which increases the attractiveness of the shop.
- Local wholesalers ("mareyeur") purchase the product and sell it to restaurants and fishmongers in the area. Only a few wholesalers have developed the capability to sell live Norway lobster further than 30 km from the landing site.
- Fishmongers in outdoor market places may purchase Norway lobster directly to auction and retail it within the day, after a few hours’ drive.

The preservation of the live state of the Norway lobster is a key issue for the development of the market for French Norway lobster. Some investments were made over the last decade in coastal trawlers with on-board tanks in order to keep the product in the best state as long as possible.
Further research has been conducted by producer organisation Les Pêcheurs de Bretagne (project VIVANT)\(^4\) in order to improve the storage and transport of Norway lobster on land. The objective is to keep the crustacean live for 48 hours (instead of 24 hours at present). This would allow the sale and marketing of the product beyond the coastal area.

A market study on Norway lobster in France has been conducted in 2013 in the context of the project “Concertation Grande Vasière” (CGV) for AGLIA\(^5\) by RICEP\(^6\) and ViaAqua\(^7\). This market study confirmed the different consumption patterns of Norway lobster depending on the region. In the areas close to the landing sites, Norway lobster is purchased live (the product must be retailed about 24 hours after landing to stay live) and is considered traditional, whereas distribution is scarcer in other areas and the purchase of live Norway lobster is almost impossible because of logistical reasons (the crustaceans only live for about 24 hours after landing).

The main conclusion from AGLIA’s study on consumer behaviour regarding Norway lobster are:

- The image for live Norway lobster is higher than for fresh, cooked and frozen products;
- In terms of image, Norway lobster is perceived as being between large crustaceans (such as lobster) and shrimp;
- Norway lobster is mainly purchased whole and fresh, at the fish counter;
- Preparation by consumers is simple and, most of the time, quick;
- When frozen products are purchased, these are crude whole Norway lobster and tailed products.

There are large differences between consumption patterns in the western part of France and other areas (source: AGLIA’s survey):

- Penetration rate for fresh Norway lobster is 20% in Western areas vs 5% in other areas;
- In the western part of France, Norway lobster is considered as traditional and convivial, without being considered as high range product; in other areas, it may be considered as a festive product;
- In the western parts of the country, there is a larger demand for Norway lobster from the Bay of Biscay (considered as fresher) than from other areas, the origin has less importance in other areas;
- Substitution with other species is limited in western parts, while in other areas, Norway lobster may be replaced by fresh shrimp.


\(^5\) AGLIA: Association du Grand Littoral Atlantique

\(^6\) RICEP: Réseau d’informations et de Conseil en Economie des Pêches

4.3 Price transmission in the supply chain in France

4.3.1 Price of raw material

First sale price

First sale price in France has increased over the last decade, from 9.37 EUR/kg in 2008 to 11.10 EUR/kg in 2017. There are large seasonal differences in price, with the lowest prices being in May and June, when volumes landed are high; and the highest prices in December when volumes landed are low and demand increases due to Christmas and New Year. For instance, recently, the highest price was in December 2017 at 20.82 EUR/kg and the lowest was in May 2018 at 10.22 EUR/kg (source: EUMOFA).

The price depends on the volume landed. The volume landed depends on total allowed catches, seasonality of the crustaceans, meteorological conditions and other factors which are difficult to anticipate by stakeholders (for instance, the extent to which the Norway lobster goes out of the burrow) and which is summarised as the “catchability” of the crustaceans.

Figure 16: Evolution of yearly price of Norway lobster in France at first sale between 2007 and 2018 (EUR/kg)

Source: EUMOFA

Figure 17: Evolution of monthly price of Norway lobster in France at first sale between 2008 and 2018 (EUR/kg)

Source: EUMOFA
There are large differences in price at first sale depending on the size and the state of the crustaceans (live or not). For instance, in Le Guilvinec auction (Brittany), the average price in 2017 for the highest size of live Norway lobster was 22,40 EUR/kg (size 1: 20 crustaceans and less / kg), 16,30 EUR/kg for live product at size 2 (21 to 30 crustaceans / kg) and 9,79 EUR/kg for live product at size 4 (over 40 crustaceans / kg). The price for Norway lobster not live was lower: 8,13 EUR/kg for size 2 (two times lower than for live Norway lobster of the same size category).

**Figure 18: Price of the different categories of Norway Lobster at first sale in le Guilvinec auction in 2017**

| Norway lobster - size 1 - live | 22,39 |
| Norway lobster - size 2 - live | 16,30 |
| Norway lobster - size 4 - live | 9,79 |
| Norway lobster - size 2 - category A | 8,13 |

Source: Le Guilvinec auction

**Price at retail stage**

The price at retail stage is 15,5 EUR/kg in 2017 (+7% since 2008). This includes both French and imported Norway lobster, all sizes and all presentation and preservation states (live, fresh, frozen, whole, tailed).

**Table 11: Retail stage prices (2008-2017)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Price (EUR/kg)</td>
<td>14,4</td>
<td>13,2</td>
<td>14,2</td>
<td>14,3</td>
<td>15,5</td>
<td>16,1</td>
<td>16,5</td>
<td>16,0</td>
<td>15,9</td>
<td>15,5</td>
</tr>
</tbody>
</table>

Source: FranceAgriMer / Kantar Worldpanel
4.3.2 Price transmission: live Norway lobster in large-scale retail in coastal areas-close to landing sites

The price transmission stands for Norway lobster landed in Lorient (located in Brittany, one of the main landing sites for Norway lobster in France) and retailed live at the fish counter of a large-scale retailer in the area of Lorient. Norway lobster is purchased at the auction directly by the shop, transported by the agent from the shop and retailed a few hours after landing. The margin for the retailer is limited, the objective being to propose a highly fresh product at an affordable price in order to attract clients. The price reference at first sale is the average price in 2018 for fishermen from producer organisation Les Pêcheurs de Bretagne (which is the main producer organisation in the area) for small Norway lobster which is the main size category landed (size 4: over 40 crustaceans / kg), landed live. The difference of price between first sale and retail price for consumer is stable at around 3 EUR/kg.

Table 12: Price transmission (EUR/kg) for live Norway lobster in large-scale retail in France (2018)

<table>
<thead>
<tr>
<th>Price and costs (EUR/kg)</th>
<th>% final price</th>
</tr>
</thead>
<tbody>
<tr>
<td>First sale price</td>
<td>11.93</td>
</tr>
<tr>
<td>Auction tax</td>
<td>0.72</td>
</tr>
<tr>
<td>Transport to shop</td>
<td>0.20</td>
</tr>
<tr>
<td>Other costs and margin for retailer</td>
<td>1.30</td>
</tr>
<tr>
<td>Retailer price (excl. VAT)</td>
<td>14.15</td>
</tr>
<tr>
<td>VAT (5,5%)</td>
<td>0.78</td>
</tr>
<tr>
<td>Retailer price (incl. VAT)</td>
<td>14.92</td>
</tr>
</tbody>
</table>

Source: EUMOFA

Figure 19: Price transmission (EUR/kg) for live Norway lobster in France in large-scale retail (2018)

Source: EUMOFA
5 The Irish market

5.1 Structure of the supply chain for Norway lobster

5.1.1 Balance supply

Norway Lobster may also be called “Dublin Bay Prawn” in Ireland. The Irish supply is mainly based on national catches, and to a lesser extent on imports from the UK.

National market ranges from 676 t lwe (assuming that imported and exported products are whole products) to 4,880 t lwe (based on conversion coefficients for each CN code, with assumptions of the share of product whole or tailed for each code). Based on qualitative interviews with stakeholders (including a large-scale retailer), the consumption of Norway lobster in Ireland is low. The product is hardly sold in large scale retail and is only sold in some fishmongers’ shops and restaurants. However, very limited data is available on national consumption.

The product is mainly exported, mainly frozen whole products exported to Italy.

Figure 20: Supply chain in Ireland (data from 2017)

For national supply and national market, a minimum (based on tonnes of products) and a maximum (based on live weight equivalent) are calculated.

Source: based on EUROSTAT
5.1.2 Overview of the supply chain

Norway lobster is caught in the Irish Sea and in the Porcupine area by trawlers which stay at sea for 8 to 14 days. Norway lobster from the Porcupine area achieves a higher price due to its larger size and higher flesh content. Some importers may specifically ask for Norway lobster from the Porcupine areas.

Norway lobster is frozen on-board or frozen on land. Investments in on-board freezers have been conducted over the last decade and allow a better quality of the product (quality is improved when the delay between the catch and the freezing is reduced). Product is also packed on board and sodium metabisulphite is added in order to avoid menalosis (the black color on the product) during storage.

Some of the products may be tailed on board, mainly the smallest and damaged crustaceans. They are also frozen on board and may be exported to the UK for the production of scampi (breaded products). Scampi may be reimported to Ireland. However, no detailed data are available as scampi may also cover prawn based products.

5.2 Characteristics of the Irish market and consumption

There are very limited data on the internal market for Norway lobster. Consumption is low, occurring in restaurants and households (products purchased in specialised shops and not in large-scale retail). BIM / Kantar data indicate that household consumption was 72 t of live weight equivalent in 2017, mainly frozen and breaded (however, the accuracy of statistics is low for such small market).

Most of the product is exported, therefore the market depends, among other factors, on the economic situation in the country of destination (mainly Italy).
5.3 Price transmission in the supply chain in Ireland

5.3.1 Price of raw material

First sale price

The first sale price in IE increased over the last decade (7.78 EUR/kg in 2016 vs 5.57 EUR/kg in 2008, source EUMOFA). Based on BIM/SFPA data, the price increased in 2017 to reach 8.15 EUR/kg. This increase may be related, among other factors, to the development of on-board freezing since 2008. Between 2008 and 2016, the minimum price is 3.37 EUR/kg in September 2009 and the maximum is 9.14 EUR/kg in December 2015.

Figure 21: Evolution of yearly price of Norway lobster in Ireland at first sale between 2008 and 2016 (EUR/kg)

Source: EUMOFA

Figure 22: Evolution of weekly price of Norway lobster in Ireland at first sale between 2007 and 2016 (EUR/kg)

Source: EUMOFA
Prices at first sale vary in function of size, freshness categories, presentation (whole, tailed) and preservation method (fresh, frozen). The following figure provides data on first sale price in Ireland in 2017 from BIM and SFPA for the main product categories in terms of volume. For fresh whole Norway lobster, the first sale price ranges from 5,20 EUR/kg for category A product, size 2, to 12,30 EUR/kg for category Extra product, size 1. The average price for fresh whole Norway lobster was 8,46 EUR/kg in 2017, compared to 7,93 EUR/kg for frozen whole Norway lobster (no details by category for frozen products). The prices for tailed product ranges from 5,52 EUR/kg to 6,33 EUR/kg.

**Figure 23: First sale price of Norway lobster in Ireland by category (2017)**

Export price from IE to IT

Almost all Norway lobster exported from IE to IT are frozen (between 97% and 100%). The price of frozen product has increased since 2009 (5,89 EUR/kg) and peaked at 11,91 EUR/kg in 2016. It has been almost stable in 2017 (11,59EUR/kg). This increase of price may be linked to the development of on-board freezing which improved the quality of product (compared to freezing on land a few days after the catch).

**Figure 24: Evolution of yearly price of frozen Norway lobster exported from Ireland to Italy between 2008 and 2017 (EUR/kg)**

Source: EUROSTAT - COMEXT
5.3.2 Price transmission: frozen whole Norway lobster exported to Italy

The price transmission analysis covers whole frozen Norway lobster exported to Italy in 2018. The analysis is based on stakeholders’ interviews, cross-checked with available statistics (EUMOFA and EUROSTAT-COMEXT). This covers an average of all sizes of Norway lobster. The price at import stage in Italy is 10,58 EUR/kg. Based on interviews, the price at import stage in Italy ranges from 4,00 – 4,50 EUR/kg for smallest Norway lobsters to over 30 EUR/kg for largest ones.

Table 13: Price transmission (EUR/kg) for frozen whole Norway lobster exported from Ireland to Italy (2018)

<table>
<thead>
<tr>
<th>Price and costs (EUR/kg)</th>
<th>% final price</th>
</tr>
</thead>
<tbody>
<tr>
<td>First sale price</td>
<td>8,41</td>
</tr>
<tr>
<td>Packaging / labelling</td>
<td>0,40</td>
</tr>
<tr>
<td>Wholesale costs</td>
<td>0,51</td>
</tr>
<tr>
<td>Selling agent in IT</td>
<td>0,25</td>
</tr>
<tr>
<td>Loss of weight (6%)</td>
<td>0,61</td>
</tr>
<tr>
<td><strong>Ex-wholesaler price</strong></td>
<td><strong>10,18</strong></td>
</tr>
<tr>
<td>Transport to Italy</td>
<td>0,40</td>
</tr>
<tr>
<td><strong>Price at import stage in Italy</strong></td>
<td><strong>10,58</strong></td>
</tr>
</tbody>
</table>

Source: EUMOFA

Figure 25: Price transmission (EUR/kg) for frozen whole Norway lobster exported from Ireland to Italy (2018)

Source: EUMOFA
6 ANNEXES

6.1 Contacts

The following contacts have been made in the context of the study:

- **Denmark**
  - Danmark Fiskeriforening producer organisation
  - Danish Seafood Association.

- **France**
  - Pêcheurs de Bretagne producer organisation
  - Wholesalers (“mareyeurs”) in Lorient and Loctudy
  - Large-scale retailer located in the coastal area.

- **Ireland**
  - Fishing company – exporter of Norway lobster
  - BIM - Ireland's Seafood Development Agency
  - Large-scale retailer – national office.

References


EUMOFA Metadata, Annex 7 - Conversion factors by CN-8 codes from 2000 to 2019, available at: https://www.eumofa.eu/documents/20178/24415/Metadata+2+-+DM+-+Annex+7+CF+per+CN8_%252707-%252714.pdf/7e98ac0c-a8cc-4223-9114-af64ab670532

IFREMER (2003), Langoustine (Nephrops norvegicus) Stock de la mer Celtique (Divisions VIIg,h du CIEM), available at: https://www.ifremer.fr/poche/content/download/29786/411203/file/fiche%20detailllee%20lorient_langoustine_mc_2003.pdf
