

# **Survey of the trade flow in the fisheries sector in Asia**



**Analysis for the Norwegian Ministry of Fisheries and Coastal Affairs  
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The author is solely responsible for the accuracy of the contents and the views expressed in the report.

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## 1. Introduction, methodology, recommendations

This report is written for the Norwegian Ministry of fisheries and Coastal Affairs. It is written by Gunnar Album with support from Alistair Graham and Maren Esmark.

There has, to a certain extent been an exchange of information between the Norwegian Directorate of Fisheries and the consultant.

The Ministry of Fisheries and Coastal Affairs asked for a survey answering the following questions:

- To what extent cod and haddock from the Barents Sea is sent to Asia, especially China, for processing?
- Who are the central players in catching and transport of the fish and what are the transport routes?
- What percentage of the whitefish going to Asia is IUU fish?
- What companies in China are behind the bulk of processing and export?
- How do control and judicial in the recipient countries work to unveil IUU fish?

The findings in this report are based on a combination of official sources like trade statistics, companies' web sites, scientific reports etc, interviews with industry players, government officials, researchers, representatives of sales organisations and NGOs, in Norway, Russia, Hong Kong and China. As some of the information comes from unpublished sources not all findings are referenced.

As will be shown in chapter 2, the data on imports to China vary significantly from source to source. I have combined information from many different sources to reach an estimate of the volume of Barents Sea cod and haddock trade to China. Interpretation of database information has been aided by industry players.

It has also not been possible to identify everybody who is behind catch and transport of cod and haddock from the Barents Sea. Official records - Russian and Norwegian quota holders list - and Lloyd's vessel register will give you a list of the official controllers of vessels and

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quotas. It is, however, known that non-Russians control many of these vessels and/or their quotas.

There are also a number of traders registered in the British Virgin Islands and Seychelles buying and selling fish from the Barents Sea. The owners of some of these have been identified with the help of industry players, but many of them remain unknown.

### 1.1 Brief conclusions

Cod and haddock from the Barents Sea have been transported to China for processing since the late 1990ies. The volume of cod has increased from a few tonnes in the beginning to between 60 and 100 000 tonnes at present. The volume of cod seems to have been stable for the last three years.

The haddock imports have increased staidly and are still increasing. The total Chinese haddock import was 42 000 tonnes in 2007.

Both in the European side of the cod and haddock trade and in the Chinese import and processing of the fish, there are a multitude of companies involved. Our research, however, indicates that many of these companies are fronts and agents for a relatively limited number of big players. The now Hong Kong based Ocean Trawlers dominates the industry with an estimate of 25% of the landings from Russian vessels.

There has been a significant change in trade patterns and trade routes over the last two to three years. This might be ascribed to increased control cooperation between Norway and Russia, attention from media and NGOs, and the introduction of the Port State Control Regime in NEAFC. It also seems that the larger companies in the industry decided to get rid of the IUU fish in order to increase the fish prices and that this took place, and had effect, *before* the Port State Control Regime was in place May 1<sup>st</sup> 2007.

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Trade statistics do not show any significant reduction in the Chinese import of Atlantic cod and haddock. But trade statistics are unreliable. The main problem is that China does not operate with a separate HS code for Atlantic cod – the same HS code also covers Pacific cod, pollock, various reef cods and probably also other white fish species. Also on the European side, there are sources of inaccuracies, e.g. confusion on country of origin and country of departure. Cod and haddock landed and exported from Norway from Russian flagged vessels, but fished in Norwegian waters seem to be labelled variously as Norwegian or Russian of origin. If this fish is transported to e.g. the Netherlands and repacked, it will get an EU Health Certificate and be recorded on arrival in China as being of Dutch origin.

The processing industry in China is concentrated in Dalian and Qingdao. Also in China, Ocean Trawlers is the dominating company. Other stable, large processors are Unibond, Pacific Andes and Trident. There seems to have been many smaller players earlier, but most of these have given up with increasing cod prices.

There is still IUU fishing and illegal transport going on. During the month of October 2007, there were two documented transports of a total of 1500 tonnes of cod and haddock. From industry sources, also other transports of IUU fish are known. The fact that the route and method use to get this fish passed the control systems is worrying.

New EU regulations to prevent IUU fishing to be introduced in 2010 will require changes in some of the Chinese routines for traceability and labelling. They will also, and maybe more challenging, require the harvesting countries in (in this case) Europe to provide information and traceability that is not in place today.

### **1.2 Recommendations**

A key condition for exposing illegal fishing and illegal trade is to have good control and description of the legal trade. It is against the background of the legal trade that the illegal becomes visible. This report shows that more work has to be done to establish routines that can follow the legal trade continuously.

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There are control mechanisms and/or sources for tracking at all the points in the chain described; the fishing ground, the transshipment, the landing in port, the export and import and the re-export and re-import. To make these control mechanisms functional they need to be in compatible formats. There needs to be common definitions on the HS codes under which fish is categorised when imported or exported, and there needs to be clearer definitions of Country of Origin and Routing Country.

The NEAFC port state control regime is a major improvement, but has the weakness that fish transports that are not landings are not recorded. It also has the weakness that it is not open information.

With new EU regulations to deter IUU fishing coming into force from 2010 China as a processor will need paperwork from the supplier of the fish (in this case Barents Sea fishing nations) that it is legally caught. Norway should initiate cooperation with China to make NEAFC information and Chinese tracking methods through the CIQ or other bodies, compatible.

There is already an established academic cooperation between the University of Bergen and the Fisheries College in Tromsø and the Oceans University of Qingdao. A joint programme could be set up between the institutions analysing in more depth some of the general issues discussed in this report.

Our study indicates that the Iberian countries, Denmark and the UK has been and may still be a market for Barents Sea IUU cod. A further study of imports and landings of fish from the Barents Sea to these countries should be considered.

This report shows that there still are illegal landings of cod and haddock coming out of the Barents Sea. The theft of fish in the volumes estimated by the Directorate of Fisheries is among the most serious economic crimes in Norway. It may seem that investigating them requires more resources, especially expertise in economic crime, than what is used at the moment. Some of the players are described in this report. I have made the choice of which companies and vessels to describe based on a risk assessment. It is likely that an investigation into the traders requires closer cooperation between the Directorate of Fisheries and economic crime units of the police in Norway and in other countries.

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A substantial percentage of the fish from the Barents Sea is traded through companies registered in tax havens. Norwegian authorities should take steps to identify who is behind these companies. IUU fish means black money which may be used to get access to fishing rights or to avoid control mechanisms. The prevailing presence of tax haven companies may also be a management problem.

## 2. Chinese imports of cod and haddock

Data from various sources, both open and company internal sources have been used in this report. This chapter goes through them in a somewhat tedious way. The Ministry has requested advice as to how they can keep track of the development of the China-trade, both regarding participants in the trade and its volume. The problem with cod is that there does not exist any straight forward information on the trade in Atlantic cod between Europe and China.

To illustrate this fact I have compared the data from four different sources in figure 1. These figures are for Head-off and Gutted (HG), frozen cod. They vary with a factor of five for Russia. For the Netherlands, they vary from zero to almost 80 000 tonnes. To make the confusion complete, none of the figures for Norway from the same four sources, fit official SSB<sup>1</sup> figures.

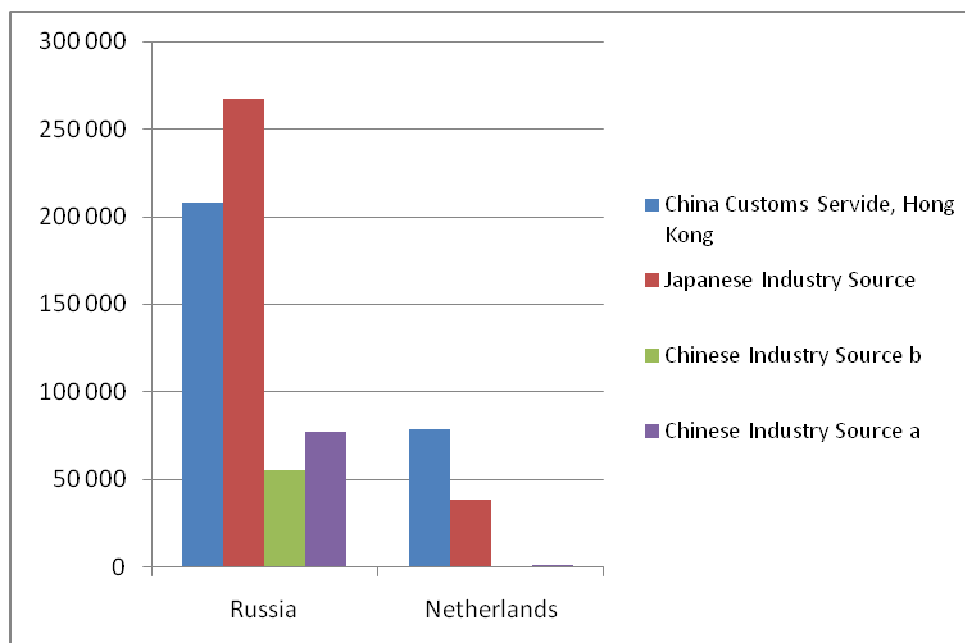


Figure 1: Data on cod imports to China from four different sources, Jan-Oct 2007.

There are two main reasons for the confusion: The main problem is the Customs Code (HS 03035200) under which frozen, HG cod is imported to China, may cover species of cod,

<sup>1</sup> Statistics Norway

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Alaska pollock and other white fish, like hoki and hake and some blue whiting, but not all of it.

The other big source of errors is the registration of exporting country. The country that issued the Health Certificate is the Country of Origin. If Russian fish is repacked in the Netherlands for further transport to China, it needs a new HC and will end up with CO: Netherlands in the Chinese statistics.

### **2.1 Sources - trade data**

Because of the problems mentioned above, I have used several different sources for trade data.

1. Customs General Administration of P.R.China in Beijing bought from CCS (China Customs Statistics) Information Centre, Hong Kong. 1999, 2000, 2001, 2003, 2004, 2005, 2006 and first 10 months 2007. Sorted on country of Origin and Country of Departure
2. Globefish groundfish report 2006, FAO. White fish filet imports to the EU.
3. AIPCE White fish study 2007. White fish filet imports to the EU.
4. A set of cod import figures month by month from a Japanese industry source.
5. Imports of cod to China first nine months 2007, sorted on country of origin. The cod processing company that has compiled this list for us has used unit prize to eliminate shipments of pollock, although they say that some high-priced MSC labelled pollock might still be included.
6. Register of 25 top cod and haddock importers 2006 and first 8 months 2007, sorted on importing company.
7. Imports of cod, haddock and pollock to Qingdao harbour, first half 2007; specified on each shipment-type with Country of Origin, importing company, volume and value.

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8. Shipment-by-shipment registers from Goodwill China Business Information Ltd for cod and haddock 2005-2007.

### 2.2 Cod

The records from CCS (China Customs Statistics) Information Centre, Hong Kong give the imports to China of Pacific and Atlantic cod, other cod species, Alaska pollock and other white-fish from 1999 to 2007.

According to these data, the total cod import (import under HS codes 03036000 and 03035200) into China increased from 1999 to a peak near 700 000 tonnes in 2005, and has been reduced since, to less than 500 000 tonnes total in 2007.

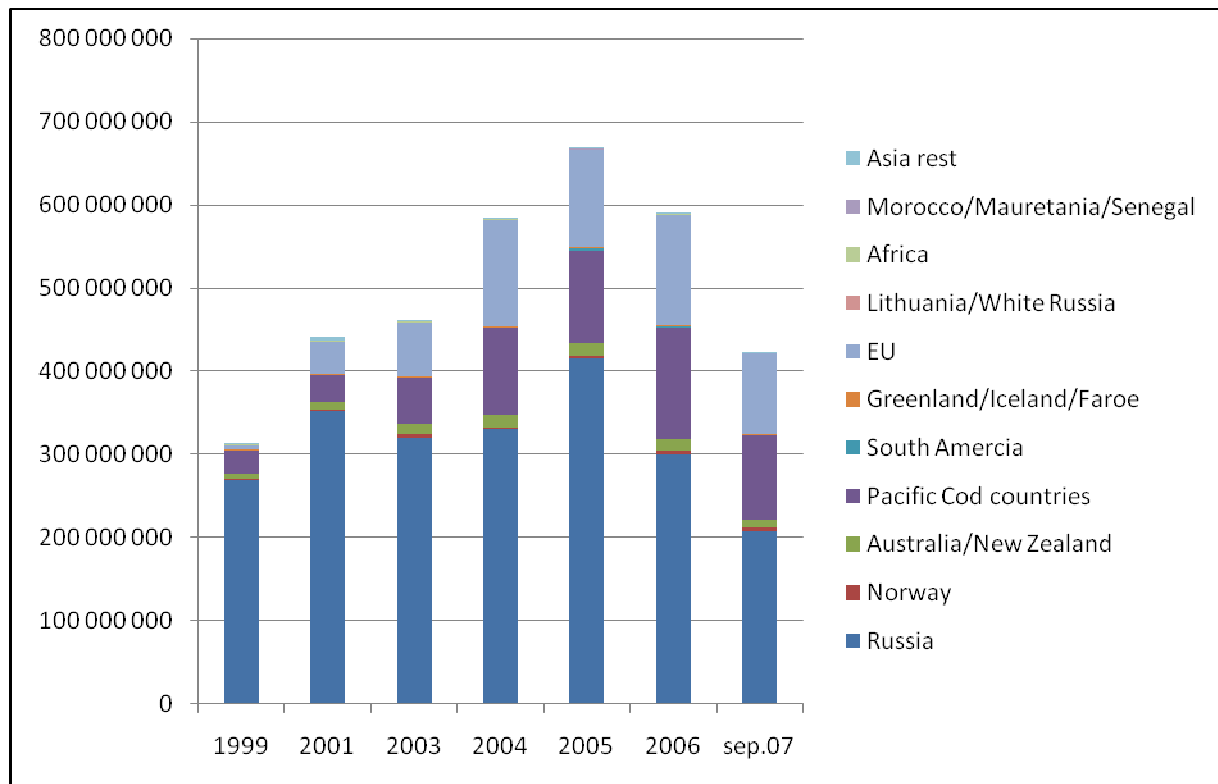


Figure 2: Total import of cod (HS 030352000/03036000) to China, sorted on Country of Departure. 1999 - 31.10. 2007  
Source: China Customs Statistics) Information Centre

If we look at the imports to China from typical transit countries for Barents Sea cod (Figure 3), the picture is different. These imports have been relatively stable for the last four years. The Netherlands is by far the biggest exporter of these. Of other developments, it can be mentioned that the import from the UK is drastically reduced, a conclusion that is supported by landing data (see table 20-21). Belgium appears with quite high export in some years



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(especially 2006) and none in others. The Directorate of Fisheries have no records of landings in Belgium from the Barents Sea.

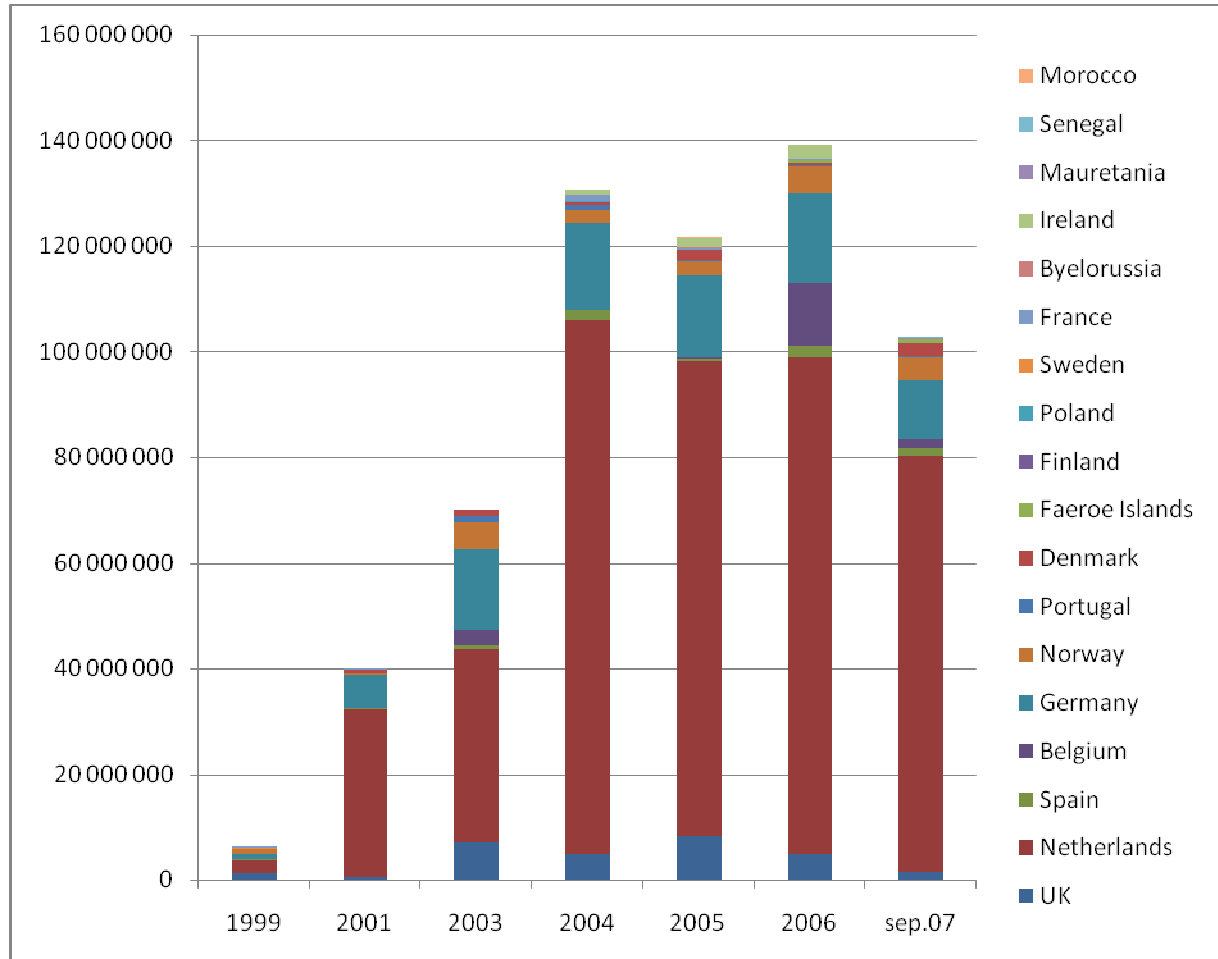


Figure 3: Total import of cod (HS 030352000/03036000) to China from potential transit countries, sorted on country of departure. 1999 - 31.10. 2007 Source: China Customs Statistics) Information Centre.

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In these figures we also see shipments from possible “alternative” transit countries outside the NEAFC Port State Control Regime, like Morocco and Mauritania. These countries are now cooperating more and more closely with European countries like Norway and with NEAFC.

If we compare the CCS figures with figures from a Japanese industry source, we see that they are quite coherent, given that the CCS data covers one more month than the data from Japan.

Comparing Japanese Industry source to China Customs data.					
Tonnes HG					
Origin	Japanese industry source		Jan-Oct 2007 China Customs statistics	Difference	Percentage difference
	Jan-Sept 2006	Jan-Sept 2007			
Japan	17 154	20 663	22 379	1 715	8%
Korea	8 961	7 093	8 752	1 650	19%
North Korea	3 925	896	895		0%
Russia	306 206	266 917	293 243	26 326	9%
USA	28 255	21 953	23 428	1 450	6%
Netherlands	49 207	38 752	40 038	1 286	3%
Germany	4 869	6 422	6 422		0%
Norway	8 261	8 937	9 591	645	7%
New Zealand	6 962	8 472	9 503	1 031	11%
Argentina	204	345	344		0%
<b>Total</b>	<b>434 004</b>	<b>380 450</b>	<b>414 597</b>	<b>34 147</b>	<b>8 %</b>

Table 1: Cod import to China. January through September 2006/2007. HG weight.

### 2.2.1 What is included in “cod” 鳕

I have not been able to identify all species that are imported to China under the HS code 03035200 冻鳕鱼((大西洋鳕鱼、太平洋鳕鱼、格陵兰鳕鱼), 鱼肝及鱼卵除外 which is translated “frozen cod”.

The character for cod, 鳕 is also found in pollock 狭鳕 “*narrow cod*”, in Blue Whiting 蓝鳕 “*blue cod*” and in Hake 无须鳕 “*un-bearded cod*”. “*New Zealand un-bearded cod*” 新西兰无须鳕 makes Hoki. All of these “cod” seems to be imported under the same HS code; cod imports from New Zealand are probably hoki and cod imports from Chile are probably hake.

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Haddock 黑线鳕 is “*black line cod*”, but does not come under the same HS code.

### 2.2.2 Separating Alaska Pollock from Cod in import statistics

Of all the species imported under the HS-code for cod, Alaska pollock is the one with the highest volume. Some figures of Alaska pollock trade is shown here as a reference to the cod import data. The first is the imports of pollock through Qingdao harbour for the first half of 2006.

<b>Chinese Pollock import first 6 months 2007. Kg.</b>	
<b>Country of Origin. Selected Countries</b>	<b>Volume</b>
Russia	115 969 944
Netherlands	5 148 318
USA	2 460 827
Japan	1 883 454
Norway	697 904
UK	1 444 474
Iceland	968 983
Faeroe	1 569 058
<b>Sub total selected countries</b>	<b>130 511 445</b>
<b>Total all countries</b>	<b>140 925 767</b>

Table 2: Pollock import to China first 6 months 2007. (all pollock species, not only Alaska pollock.) Source 7.

These are all pollock imports, including Atlantic pollock. The imports from Russia are 115 000 tonnes – equivalent of 230 000 tonnes annually. This is Qingdao Harbour only. Dalian is a big pollock Harbour too, and more important for pollock than for cod and haddock.

<b>EU imports of Alaska Pollock filets. HG weight equivalents. Tonnes</b>				
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
China	217 093	213 513	216 857	297 115
Russia	87 405	53 155	34 824	60 457
USA	112 578	181 684	179 804	151 894
<b>total</b>	<b>417 077</b>	<b>448 352</b>	<b>431 485</b>	<b>509 467</b>

Table 3: Alaska Pollock filet imports to the EU (25). Weights in HG equivalents. Sources AIPCE White Fish Study

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The two sources agree quite well; the Chinese import of pollock is just below 300 000 tonnes per annum for the last two years if we assume that most of the American pollock market is met by American produced pollock. The CCS data gives the 2006 Russian export of cod to China to 396 000 tonnes. As much as  $\frac{3}{4}$  of this may be pollock.

### 2.2.3 Detailed data from industry sources

In addition to the data from the Japanese industry source, I have had access to three sets of data from companies in the Chinese processing business. These are better specified on species than the CCS data, but I do not have long time series of such detailed information. The different sources are referred to by their number given above (chapter 2.1.1).

The data from source 5 is given in table 4. It is generated from harbour information. The processing company that set up this list has used unit prize to eliminate shipments of pollock, although they say that some high-priced MSC labelled pollock might still be included. This is not a fool-proof method; as can be seen in chapter 4, some shipments of cod from Norway is reported into China at a unit price of 1000 US\$/MT, which is a quarter of the going rate. There has been no attempt to sort out Pacific cod, so the list should contain both cod species.

This data is sorted by country of origin, not country of departure, which means it should be based on the country that issued the Health Certificate. One point worth noticing is that when price is used to sort out “non-cod”, the imports from the Netherlands are only 1 800 tonnes, compared to 40 000 according to the China Customs Statistics. This might indicate that a significant part of the volume from the Netherlands is blue whiting. The rest of the potential transshipment countries (UK, Germany, Spain Portugal) are registered with relatively small exports.

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<b>Cod import to China January –September 2007</b>		
<b>Unit is kg HG</b>		
<b>Country of origin</b>	<b>China Industry source 1 Jan –Sept 2007</b>	<b>China Customs Statistics Jan – Oct 2007 HS 03035200</b>
Russia	73 314 984	293 243 220
<i>USA</i>	<i>12 564 157</i>	<i>23 428 456</i>
Norway	6 036 843	9 591 414
Netherlands	1 783 803	40 037 776
<i>Korea (rep)</i>	<i>1 720 200</i>	<i>8 751 894</i>
<i>New Zealand</i>	<i>1 690 493</i>	<i>9 503 513</i>
<i>Japan</i>	<i>1 134 440</i>	<i>22 378 825</i>
Germany	755 311	6 421 652
<i>Korea DPR</i>	<i>724 579</i>	<i>895 654</i>
<i>Greenland</i>	<i>694 103</i>	<i>1 316 090</i>
Denmark	527 818	1 847 774
UK	385 054	506 059
Spain	371 752	503 405
Portugal	178 814	236 252
Faeroe Islands	146 887	148 633
<i>Uruguay</i>	<i>54 801</i>	<i>290 543</i>
<i>Iceland</i>	<i>26 602</i>	<i>42 774</i>
<i>Togo</i>	<i>25 613</i>	<i>25 613</i>
<i>Canada</i>	<i>21 244</i>	<i>2 674 378</i>
Ireland	15 736	15 736
<i>Australia</i>	<i>7 225</i>	<i>7 225</i>
<b>total</b>	<b>102 180 459</b>	<b>421 866 886</b>
<b>Total Barents Sea countries</b>	<b>83 517 002</b>	

Table 4: Imports of cod to China Industry Source 5 and China Customs Statistics, 2007

Excluding non-Barents Sea cod nations (in italics in the table), we get an import of 83 500 MT for 8 months – 125 000 tonnes annually. I have excluded Greenland and Iceland, assuming that the import from them is from their own fishery, although some of it may be Barents Sea cod from Icelandic vessels. I have also excluded South Korea at this point, although there might be cod going from Europe to Busan to be re-exported to China. These 125 000 tonnes include Atlantic and Pacific cod.

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The next set of data, (Source 6) lists the top 25 importers of cod and haddock for 2006 and the first 8 months of 2007. (attachment 6). The list is given as imports under HS 03037200 (Haddock) and HS 03036000/03035200.

<b>25 biggest imp each species/year.</b>				
<b>Units in kg HG</b>				
	<b>Haddock 2006</b>	<b>Haddock 2007 (8 months)</b>	<b>Cod 2006</b>	<b>Cod 2007 (8 months)</b>
Top 25 importers	34 921 604	26 508 006	94 141 731	68 140 291
total import	37 196 397	27 889 387	127 811 543	89 890 952
<b>adjusted for 12 months</b>	<b>37 196 397</b>	<b>41 834 081</b>	<b>127 811 543</b>	<b>134 836 428</b>

*Table 5: Cod and haddock import to China 2006 and 2007 (8 months). Source 6*

It is a curious fact that these figures do not seem to contain Alaska pollock. They are supposed to be based on the HS codes only, but are only a seventh of the total volume given in the CCS data set. For haddock, the total is identical to the CCS figures. The only plausible explanation is that the figures come from a combination of CIQ and customs sources.

### 2.2.4 Atlantic and Pacific cod

One remaining problem is to sort out the Atlantic cod from the Pacific cod. Total Pacific cod landings are reported by the FAO to be between 330 and 400 thousand tonnes for the past seven years. The USA reports their landings to be between 210 and 260 000 tonnes in the same period, out of which about 30 000 tonnes live weight equivalent, is exported to China/Hong Kong and Taiwan.

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<b>US Cod Exports</b>							
	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<b>2007- YTD</b>
<i>Groundfish COD NSPF Fillet Frozen</i>							
<u>Canada</u>	790	430	350	605	415	435	225
<u>China / Hong Kong / Taipei</u>	795	320	485	655	665	1 520	235
<u>Japan</u>	4 335	920	1 230	135	330	2 030	5
<u>SKorea</u>	380	420	305	100	25	-	70
<u>Asia</u>	90	25	35	160	60	110	80
<u>Europe</u>	1 750	2 750	2 110	405	425	1 260	4 260
<u>Russia</u>	25	40	1	5	-	25	35
<u>Others</u>	280	350	339	410	355	285	15
<b>TOTAL</b>	<b>8 445</b>	<b>5 255</b>	<b>4 855</b>	<b>2 475</b>	<b>2 275</b>	<b>5 665</b>	<b>4 925</b>
<i>Groundfish COD NSPF Frozen</i>							
	<u>2 001</u>	<u>2 002</u>	<u>2 003</u>	<u>2 004</u>	<u>2 005</u>	<u>2 006</u>	<b>2007- YTD</b>
<u>Canada</u>	8 345	10 850	9 840	9 055	4 365	2 090	895
<u>China / Hong Kong / Taipei</u>	3 155	4 835	10 205	16 290	15 525	20 725	10 135
<u>Japan</u>	29 120	23 800	20 960	25 580	20 085	14 960	5 310
<u>SKorea</u>	4 345	6 100	8 270	6 520	7 080	6 770	11 980
<u>Asia</u>	175	155	115	600	2 290	1 560	160
<u>Europe</u>	15 405	12 470	16 220	25 725	33 490	34 040	23 235
<u>Others</u>	925	335	110	175	225	115	5
<b>TOTAL</b>	<b>61 470</b>	<b>58 545</b>	<b>65 720</b>	<b>83 945</b>	<b>83 060</b>	<b>80 260</b>	<b>51 720</b>
*MT							
*Source: NMFS							

Table 6: US exports of cod 2001-2007. Figures in tonnes.

The different data discussed above, indicate a total import of around 130 000 tonnes of cod and other species under the same HS code except pollock and blue whiting annually for 2006 and 2007. These figures are for HG frozen cod and should be multiplied with 1,5 to get live weight.

The figures in source 7 are specified on exporting country and importing company. The data comes from the Qingdao port authority, and is sorted on haddock, pollock and cod. Based on their knowledge of the importing companies, our source has sorted the imports in Atlantic, Pacific and “Atlantic and Pacific” (uncertain). The data do not cover Huangdao Island, which is an industrial area with fish processing plants. (see chapter 4.9)

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	Volume (kg)				Adjusted for 12 months
	AC	PC	AC/PC	total	
Russia	12 887 923	16 962 882	6 919 707	36 770 512	73 541 024
Norway	1 144 640			1 144 640	2 289 280
Netherlands	568 360			568 360	1 136 720
UK	315 875			315 875	631 750
White Russia	74 101			74 101	148 202
Portugal	80 024			80 024	160 048
Denmark	166 113			166 113	332 226
Faeroe	97 146			97 146	194 292
France	41 063			41 063	82 126
Greenland	199 154			199 154	398 308
Japan		389 655		389 655	779 310
New Zealand			38 000	38 000	76 000
Togo			25 613	25 613	51 226
Uruguay			51 412	51 412	102 824
USA		5 407 385		5 407 385	10 814 770
<b>Total</b>	<b>15 574 399</b>	<b>22 759 922</b>	<b>7 034 732</b>	<b>45 369 053</b>	<b>90 738 106</b>

Table 7: Imports of cod to China, sorted on Country of Origin. First half 2007

Assuming that transports to Qingdao are relatively evenly spread over the year, this would indicate a total import of cod (these figures should give cod – and cod only) of 90 000 tonnes HG for 2007. Out of which at least 31 000 tonnes would be Atlantic cod and 45 000 tonnes Pacific cod. Splitting the uncertain column at the same ratio as the identified fish (about 42% Atlantic cod) gives a total of about 38 000 tonnes of HG Atlantic cod of Russian origin imported to China in 2007 – and about 52 000 tonnes of Pacific cod.

I am not in a position to tell whether the cod registered imported from Portugal, Faeroes, France, UK etc is transhipped and repacked Russian fish or of it is of the origin of the exporting country. I assume that the import from White Russia (Belarus) is Russian Barents Sea cod. (in Customs sources this shipment is registered as Russian) . Togo and Uruguay appears as exporters of cod in several sources. Cod from Togo might be fish which is transhipped on one of several Togo-flagged, black listed fish carriers operating in the North Atlantic. Several industry sources say that they will not touch cod out of Uruguay as it is IUU



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fish. The traders say that the owners of the IUU fish look for a place to land the fish outside the EU/Norway/Russia are (NEAFC, thus) and end up in e.g. Uruguay.

The figures here suggests an import for 2007 totally of about 38 000 tonnes of HG Barents Sea cod and about 51 000 tonnes of Pacific Cod from Russia and the US. The customs data (source 8) has about 10% of what we assume to be cod landings imported through Dalian Customs, the rest through Qingdao.

<b>Imports of frozen HG cod to China 2007. Our estimates. Tonnes HG</b>			
Atlantic Cod		Pacific Cod	
Russia	32 700	Russia	41 000
Norway	2 300	USA	10 000
Repacked Russian Atlantic Cod	3 000		
<b>Total</b>	<b>38 000</b>		<b>51 000</b>

*Table 8: Imports of frozen HG cod to China 2007. Estimates*

The figures from Qingdao harbour are very low compared to all other data. Possible reasons will be discussed in chapter 2.3.1.

### 2.2.1 EU imports of cod filets

The table below, which shows the import of cod filets to the EU from China, Norway and Russia, for the period 2003-2005, shows a total cod filet import equivalent to 154 000 tonnes of HG cod in 2005 and 158 000 in 2006. The import from China is 90 000 and 100 000 respectively.

<b>Filets of cod in HG equivalents. Tonnes Import to EU 25</b>				
	2003	2004	2005	2006
China	52 844	63 590	91 943	101 932
Russia	30 229	21 009	30 554	29 201
Norway	33 347	32 413	31 572	27 057
	<b>116 420</b>	<b>117 012</b>	<b>154 069</b>	<b>158 191</b>

*Table 9: Cod filet import to the EU 2003-2005. Weights in tonnes of HG equivalents. Source: AIPCE White Fish Study, Brussels, September 2007*

It should be mentioned that other statistics contradict this figure. The Groundfish report from Globefish/FAO 2006, gives significantly lower figures. The FAO does not have figures for China further back than 2004.

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Filets of cod in HG equivalents. tonnes Import to EU 25		
	2004	2005
China	46000	65714
Russia	15000	21857
Norway	27714	29286
total	88714	116857

**Table 10: Cod filet import to the EU 2004-2005. Weights in tonnes of HG equivalents. Source: Globefish Commodity update: Groundfish. FAO 2006.**

### 2.2.2 Analysis of shipment by shipment data

The following is based on individual shipment data from the Chinese Customs Authorities. It is sorted on the HS codes and thus covers all the cods including pollock.

In table 10, the cod of Russian origin is sorted by routing country. I have left out fish that comes through Russia assuming most of it will be Alaska pollock, since there is no direct route from the Kola Peninsula to China. Cod landed directly in China on a Russian ship, will be registered with Russia as both Country of Origin and Routing Country.

According to these figures, trade of Russian cod via routing countries on the Atlantic is increasing steadily from 2005 through 2007.

Transports through the Netherlands are increasing, whereas the UK and Germany have reduced their role as routing countries. There is Russian fish going through both Canada and Iceland in 2006 and 2007. This should be studied more closely, since there is no logistic reason for these routes.

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<b>Chinese imports of Barents Sea cod</b>			
<b>Cod of Russian origin, sorted by routing country</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Belgium	240 030	490 238	467 433
Canada		25 601	125 172
Chile	23 588		
Denmark	1 515 146	120	409 410
Germany	8 454 443	4 216 863	3 893 597
Morocco	172 408		
Hong Kong		80 342	133 462
Iceland		4 654	123 453
Korea Rep		416 078	253 926
Netherlands	18 859 232	30 294 671	37 555 018
New Zealand			579 280
Norway	886 521	1 140 287	782 407
Puerto Rico	19 839		
Portugal	26 617		94 120
Senegal			178 211
Singapore			22 500
Spain	30 660	1 195 096	840 082
The Faroe Islands		250 481	960 598
United Kingdom	6 796 196	4 038 513	1 044 969
United States	280 034	40 578	47 982
Uruguay	78 588		22 000
<b>total</b>	<b>37 383 302</b>	<b>42 193 522</b>	<b>47 533 620</b>
CO Netherlands	53 499 026	58 762 609	40 144 129
<b><i>Total CO Netherland + CO Russia routed through other countries</i></b>	<b>90 742 695</b>	<b>100 956 131</b>	<b>87 677 749</b>
CO Norway	4 148 493	10 115 139	10 558 807
<b>Total Russia routed through Atlantic countries+NL+Norway</b>	<b>94 891 188</b>	<b>111 071 270</b>	<b>98 236 556</b>

Table 11: Chinese cod imports. CO: Atlantic Russia, Netherlands and Norway

This table gives cod imports in three steps:

1. Cod-fish of Russian origin routed through other countries (excluding all cod going directly from Russia to China)
2. Cod-fish of Dutch Origin
3. Cod-fish of Norwegian Origin

## Trade flow in the Asian seafood business

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If all this is Atlantic cod, it fits quite well the European import of cod filets from China – equivalent of 90 000 tonnes of HG cod in 2005 and 100 000 in 2006.

There are several sources of error also in these figures. Firstly, I know from industry sources that there is Atlantic cod from Russia routed through European harbours that are registered as imported to China with Russia as routing country. I do not know why and not how much. Secondly, the import from the Netherlands is registered in other sources with very low value (about US\$ 600 per tonne). This indicates that most of the Dutch volume may be blue whiting.

### 2.3 Import data versus IUU estimates

According to the Norwegian Directorate of Fisheries, the overfishing of cod in the Barents Sea is reduced from 80 000 tonnes round weight in 2006 to 40 000 in 2007. The landings were, according to the Directorate, distributed as in table 12.

<b>Landings of Russian cod 2007</b>				
<b>HG weight</b>				
	<b>Third Country</b>	<b>Russia</b>	<b>Norway</b>	<b>Total</b>
<b>transport vessel</b>	63 381	25 892	0	89 273
<b>fishing vessel</b>	3 194	1 991	56 907	62 091
<b>total</b>	<b>66 575</b>	<b>27 883</b>	<b>56 907</b>	<b>151 364</b>

Table 12: Landings of Russian cod 2007. Source Directorate of Fisheries

Of the 66 500 tonnes landed in 3<sup>rd</sup> countries, 45 500 tonnes HG was landed in the Netherlands in 2007, according to the Directorate of Fisheries. The Chinese import figures show a total of 37 500 tonnes of Russian origin, routed through the Netherlands. We also know that some of the Dutch 40 000 tonnes of cod (see table 11) is actually Russian cod repacked in the Netherlands. We also know that cod is sorted in the Netherlands, big fish go to Iberia, small fish (under 2 kg) go to China.

The estimate of 45 500 tonnes of HG fish into the Netherlands seems to be low compared to the import statistics in China.

### 2.3.1 Summing up cod imports

It is not possible to give a precise figure of the Chinese imports of Barents Sea cod. My estimate is based on the following:

Qingdao harbour data suggests a total Atlantic cod import of between 40 000 and 50 000 tonnes, based on the assumption that between 80 and 90% of cod imports pass through Qingdao harbour. The reason may be that the import over Huangdao harbour, which is near Qingdao and part of Qingdao customs point, but not included in the Qingdao harbour landings is quite high.

Other industry sources indicate slightly higher volumes. If the split estimated by industry sources between Atlantic and Pacific cod in Qingdao harbour is correct, trade data suggests an import of between 50 and 55 000 tonnes.

Analysis of shipment by shipment data, where 47 000 tonnes come out of Russia through other countries, 10 000 tonnes come out of Norway and we assume that some of the Dutch fish is repacked Russian cod, indicates a slightly higher volume; around 60 000 to 65 000 tonnes.

From industry sources we know that most of the Atlantic cod is re-exported to Europe. The estimate of 65 000 tonnes fits with the FAO figures of cod filet imports to the European Union. The AIPCE white fish study gives a much higher figure – a European cod filet import from China equivalent to 100 000 tonnes of HG cod.

One significant point is that none of the data above indicate a reduction in the availability of Barents Sea cod to Chinese processors. This may be because the IUU landings documented by the Directorate of Fisheries never went to China in any big volume, but was consumed in Europe. Or it may be that the significant reduction in IUU fishing indicated by Directorate of Fisheries estimates never took place. It may also be that China is simply increasing its percentage of cod processing - legal or illegal.

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### 2.4 Haddock

The data for haddock should be more accurate than the cod data as there are not many other haddock species around the world. I have been informed however, that Patagonian Toothfish is imported to China as “haddock from Malaysia.” In the figures from 1999, the haddock from Australia and Malaysia, shipped through Hong Kong, might be just that.

<b>Haddock import to China. Sorted on country of origin</b>						
Source: CCS						
Volume in kg						
	1999	2001	2003	2005	2006	2007
Japan		119 856				
Korea Rep		826 020	328 760		17 642	
Norway		358 167	1 688 006	5 860 041	8 464 257	10 520 113
Russia		4 155 883	12 343 721	16 512 740	25 587 974	28 470 059
United States		43 331		75 167	343 362	1 407
New Zealand		396 400				
Malaysia	16 376					
Canada	501 176	66 780	5	7	23 126	229
Belgium			7 620		12 129	
Denmark			141 442	336 184		47 741
U.K.			573 211	560 524	441 975	276 198
Germany			18 540	893 004	762 444	126 345
Netherlands			124 660	1 393 284	960 658	2 189 538
Iceland			24 960	187 632	339 233	928 441
Australia	102 271					
Portugal				100 701	49 340	215 752
Dominican Rep				3 164		
South Africa					71 971	
Faeroe Islands					12 680	11 691
Uruguay					1 132	
Spain					108 474	196 939
<b>total</b>	<b>619 823</b>	<b>5 966 437</b>	<b>15 250 925</b>	<b>25 922 448</b>	<b>37 196 397</b>	<b>42 984 473</b>

Table 13: Haddock Imports to China, Country of Origin, 1999-2007. Source 1 (2007 from source 8)

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<b>Haddock import to China. Sorted on country of departure</b>						
<b>Source: China Customs Statistics, Hong Kong</b>						
<b>kg</b>						
	<b>1999</b>	<b>2001</b>	<b>2003</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Japan		74 856				
Korea Rep		1 643 630	328 760	135 418	17 642	
Denmark		53 338	141 442	436 190		265 785
U.K.		45 176	573 211	1 701 876	2 884 212	732 668
Germany		1 248 964	18 540	3 491 431	6 463 046	6 644 089
Netherlands		785 867	124 660	7 017 912	15 738 421	25 178 581
Norway		308 085	1 688 006	3 950 167	3 934 752	3 626 787
Russia		1 371 926	12 343 721	8 537 625	6 425 918	5 038 253
Canada	501 176	66 780	5	287 554	23 126	206
United States		20 275			26 500	45 244
New Zealand		347 540				
Hong Kong	118 647			7		
Belgium			7 620		782 658	349 046
Iceland			24 960	172 318	254 124	224 534
Morocco				48 150		
Dominican Rep				3 164		
Portugal				83 924		110 962
Spain				56 712	572 895	321 049
South Africa					71 971	
Uruguay					1 132	
Senegal						2 730
Faroe Islands						268 560
<b>total</b>	<b>619 823</b>	<b>5 966 437</b>	<b>15 250 925</b>	<b>25 922 448</b>	<b>37 196 397</b>	<b>42 984 473</b>

**Table 14: Haddock Imports to China, Country of Departure. 1999-Oct 2007. Source 1 (2007 from source 8)**

Also in the data for haddock, we see that the UK export to China has been reduced significantly over the last couple of years, whereas the German exports are increasing as are the Dutch. An increase should also be expected since the haddock quotas have been increased.

The data from CCS fits the information over the 25 biggest importers for haddock (source 6). We also see that almost 70% of the haddock imports are of Russian origin, but only 17% has Russia as country of departure. About 50% of the total haddock imports to China seem to be transhipped Russian haddock, thus. But, as with cod, it should be remembered that if the fish is repacked and needs a new Health Certificate, the country of origin will be given as the

## Trade flow in the Asian seafood business

issuer of that HC. Some of the imports from the Netherlands, Germany, UK and other transfer countries may also be of Russian origin.

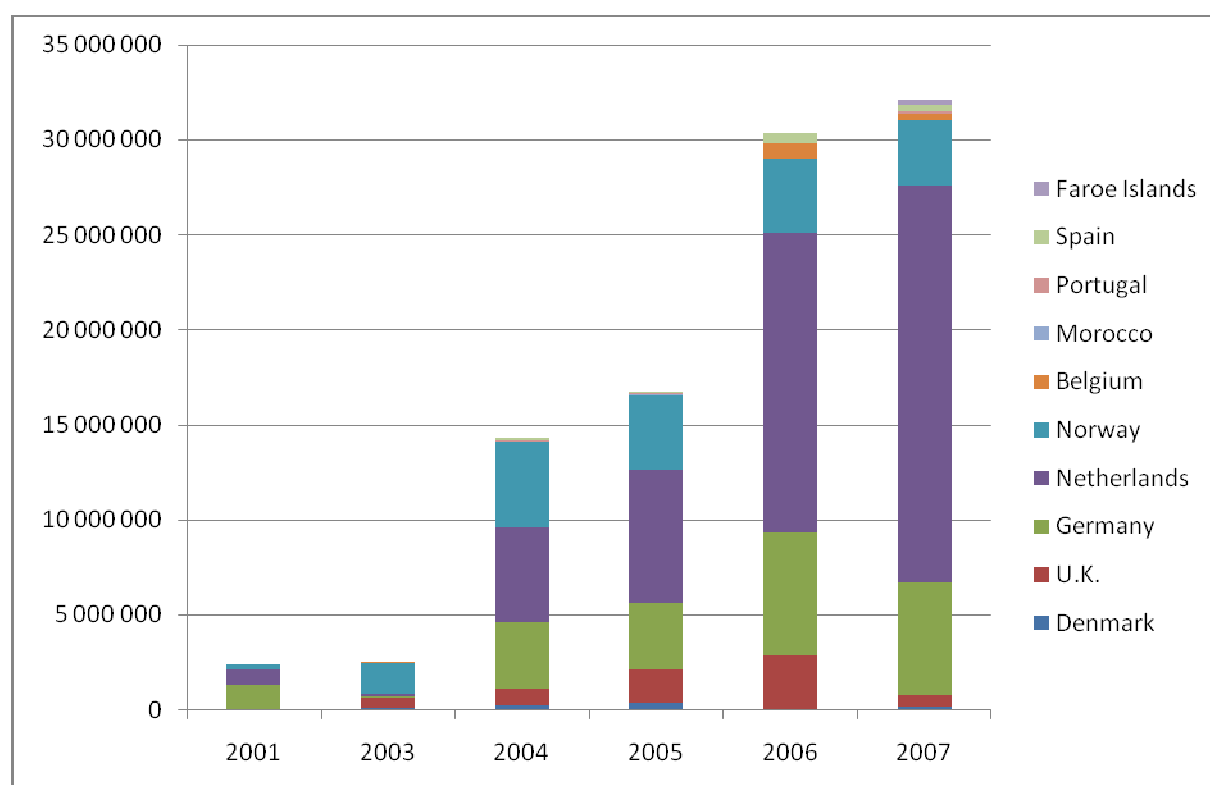


Figure 4: Haddock imports to China from potential transit countries 2001 - Oct 2007 Source CCS

Industry sources in China say that the haddock market is quite different from cod. Firstly, many processors avoid it because it is a “*difficult fish*” - mainly referring to the “*problem of yellowing*”. Secondly, it is a cheaper fish than cod and more of it enters the domestic Chinese market.

Filets of haddock imports to EU 25. HG weight equivalent				
	2003	2004	2005	2006
China	7 921	8 226	9 044	14 169
Russia	3 631	3 259	4 809	6 714
Norway	11 489	11 544	10 709	11 333
<b>total</b>	<b>23 041</b>	<b>23 030</b>	<b>24 561</b>	<b>32 215</b>

Table 15: Haddock filet import to the EU 2003-2005. Weights in tonnes HG equivalents. Source: AIPCE White Fish Study, Brussels, September 2006



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As seen in figure 4 and 5, the haddock imports to China are steadily increasing. The CCS import statistics, the import by the 25 biggest companies (attachment 6) are coherent. Compared to cod, the return of haddock to the EU is quite low. Of a Chinese import of about 35 000 tonnes of HG in 2006, only filets to the equivalent of 15 000 tonnes of HG were imported to the EU (table 13). One reason may be that haddock is used in China, among other places by McDonalds.

<b>Imports of Haddock through Qingdao Harbour. First half 2007</b>			
	<b>volume (kg)</b>	<b>value (US\$)</b>	<b>unit price US\$/MT</b>
RUSSIA	5 488 875	16 036 937	2 922
NORWAY	1 691 348	3 705 804	2 191
FAEROE	11 691	38 580	3 300
ICELAND	36 686	110 606	3 015
PORTUGAL	137 025	314 451	2 295
WHITE RUSSIA (Belarus)	25 068	20 054	800
<b>Total</b>	<b>7 390 693</b>	<b>20 226 432</b>	<b>2 737</b>

Table 16: Import of Haddock through Qingdao harbour first half 2007

Industry source 6 fits the CCS data quite well. But the imports through Qingdao harbour do not at all fit the import data from customs through the same harbour for the same period. Throughout the work on this report, I have heard people talk about the possibility that cod is camouflaged as haddock.

<b>Comparing two sources on imports through Qingdao Harbour. First half 2007</b>		
	<b>Qingdao harbour records</b>	<b>Chinese customs records</b>
RUSSIA	5 488 875	10 595 542
NORWAY	1 691 348	5 585 023
FAEROE	11 691	11 691
ICELAND	36 686	184 236
PORTUGAL	137 025	137 025
WHITE RUSSIA (Belarus)	25 068	
SPAIN		28 048
UK		20 696
GERMANY		47 637
NETHERLANDS		448 204
<b>Total</b>	<b>7 390 693</b>	<b>17 058 102</b>

Table 17: Cod imports through Qingdao Harbour. Comparing two sources.

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The records for the Ocean Trawler companies do not fit either, as the company itself informed us in an e-mail:

*“Our own record shows that during Jan 1 to June 30, we (OTA+SSL) have imported 7869 MT of A. Cod and 4860 MT of Haddock. Total of 12729 MT of both Cod and Haddock. From the custom record, (from Qingdao harbour) OTA/SSL has imported 9334MT of A. Cod and 3281 MT of Haddock. Total is 12615 MT. If we look at both Cod and Haddock, the figure is correct. When we import Cod and Haddock, we imported them under different HS Code. We cannot understand why the deviation but at the end, our total import is very close.”*

There is, thus a chance and a possibility (and in some cases a reality) that cod can be misreported as haddock or the other way around.

### **2.5 Discussion and conclusions**

It is difficult on the basis of the above to say anything confirmative about possible reductions in the overall import of Barents Sea white fish to China as a result of reduced IUU catches or about changes in the trade routes.

- Different sources for trade statistics contradict each other. If Norway – or NEAFC – wants to have a source of information to continuously monitor the trade in Barents Sea fish to China, a system of registration of imports and exports and an agreement for sharing that information must be negotiated with China.
- Industry sources systematically say that the IUU catches in the Barents Sea have been reduced. They also say that the reduction has come gradually – and not only as a result of the last couple of years’ increase in control activities. The worst years, according to some, were 2000 to 2003. The same sources are also unison in the opinion that the bulk of the IUU fish stopped in Europe all the time – and was not re-exported to China. The trade data supports such a theory: Even if IUU landings have been reduced, the trade with China is stable or increasing for cod and clearly increasing for haddock.
- The Netherlands have steadily increased its share of the trade – the UK and Germany seem to have reduced theirs.

- There are some transports of fish that should be investigated further, like Russian fish entering China through Canada and Iceland.

### **3. Buyers and Trade Routes**

To describe all players involved in the fishing and trading of Barents Sea whitefish is an insurmountable task. This chapter will describe some of the groups/networks of fishing and transport vessels and their activities possible connections between them, focussing on some of the bigger players and some of the structures which have been involved in IUU fishing or suspected thereof.

#### **3.1 Buyers of Russian Barents Sea cod**

Although there are many companies and many traders, there seems to be a relatively small group of companies buying the bulk of the cod from the Barents Sea.

Between the fishing vessels and the buyer there are different kinds of traders. Some of these are companies that are part of a bigger group (like Nederlandse Vishandelsmaatschappij and other Ocean Trawler trading companies), others are one man set-ups who are soliciting shipments rather than buying and selling fish.

In the Barents Sea cod and haddock trade there is a quite substantial number of companies that are difficult to identify and where their beneficial owners are hidden. If such companies trade in illegal fish – it is extremely hard to trace them.

One example may be the companies buying the fish from the now blacklisted Mumrinskiy. In 2007, the Mumrinsky landed fish in Eemshaven and Kangamiut bought most of it. In 2008, the buyer of the fish from Mumrinsky is a company called Kessor Plus Ltd. No information seems to be available on this company. There are several others. Among the new traders in 2008 are the British Virgin Island registered, Netherlands based companies like: Zeevis Distribute Nederland BV and Diepgevroren Visoverslag Amsterdam BV.

### 3.2 Trade Routes

The cod and haddock from the Barents Sea follow many different routes. In the following I will attempt to explain the main routes and to draw attention to possible alternative routes as a consequence of improved control in harbours that earlier may have been landing point for IUU fish.

1. Fish is landed at one of the bonded cold stores along the Norwegian coast and transported to European harbours; The map below is from Samskip of Iceland. There are also other providers of this local European transport, e.g. Hammerfest

Kysttransport (Arne Wæraas). This fish will either be sealed and have Norway as country of origin, and a Norwegian Health Certificate or it may be labelled as of Russian Origin. It is also clear from the map that there are



routes that may take fish to and from the Baltic and the Black Sea. It may also be repacked in the Netherlands and have an EC Health Certificate

2. Transshipment at e.g. Bjørnøya and landing in European harbours for consumption/processing or for further transport to China. Rotterdam-Qingdao is a 40 day trip. One example is given below.

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Vessel	GUNVOR MAERSK
Voyage Number	0807
Rotterdam	10 - 11 Mar
Bremerhaven	12 - 13 Mar
Zeebrugge	-
Port Tangier Mediterranee	-
Algeciras	17 - 18 Mar
Suez Canal	22 - 23 Mar
Tanjung Pelepas	02 - 03 Apr
Singapore	-
Yantian	06 - 06 Apr
Hong Kong	07 - 07 Apr
Shanghai	-
Xiamen	08 - 08 Apr
Ningbo	09 - 10 Apr
Busan	12 - 13 Apr
Kwangyang	13 - 14 Apr
Dalian	15 - 16 Apr
Xingang	16 - 17 Apr
Qingdao	18 - 18 Apr

Table 18: Schedule Rotterdam – Qingdao. Maersk

3. Greenland → Faeroe Islands → China. This fish should be seen in the statistics as CO: Greenland and have a Greenland Health Certificate.
4. Murmansk or other North-west Russian Ports → St Petersburg by truck or train, St. Petersburg → Netherlands → China.

### 3.2.1 Distribution

It is hard to give definite figures on the distribution of landings between different harbours. Information available from companies, harbours, customs, and other authorities does not cover all landings and all harbours. The following should be seen as indications only. The figures are given in HG equivalent (most of the fish is Headless and Guttled, but the filet landings are calculated as their HG equivalent)

In 2005 Eemshaven was the main forwarding port for landings from the Russian Barents Sea fleet with about 20 000 tonnes, Grimsby second and Velsen third. In 2007 Velsen had more

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than tripled the landings and by September 2008 it is already higher than the total for 2007. Eemshaven is reduced to a quarter of 2005 levels and Grimsby and Bremerhaven have almost disappeared as ports for transhipped cod and haddock.

Top five cod harbours 2005 HG weights		
Port	cod	haddock
Eemshaven	21 00	3 400
Grimsby	14 70	2 400
Velsen	10 000	1 600
Bremerhaven	7 000	1 500
Kirkenes	5 900	1 300

Table 19: Top five harbours 2005-2007 Source: Directorate of Fisheries

Top five cod harbours 2007 HG weights		
Port	cod	haddock
Velsen	34 100	11 800
Kirkenes	18 000	6 400
Tromsø	8 900	3 000
Båtsfjord	8 700	2 700
Hammerfest	8 600	2 600

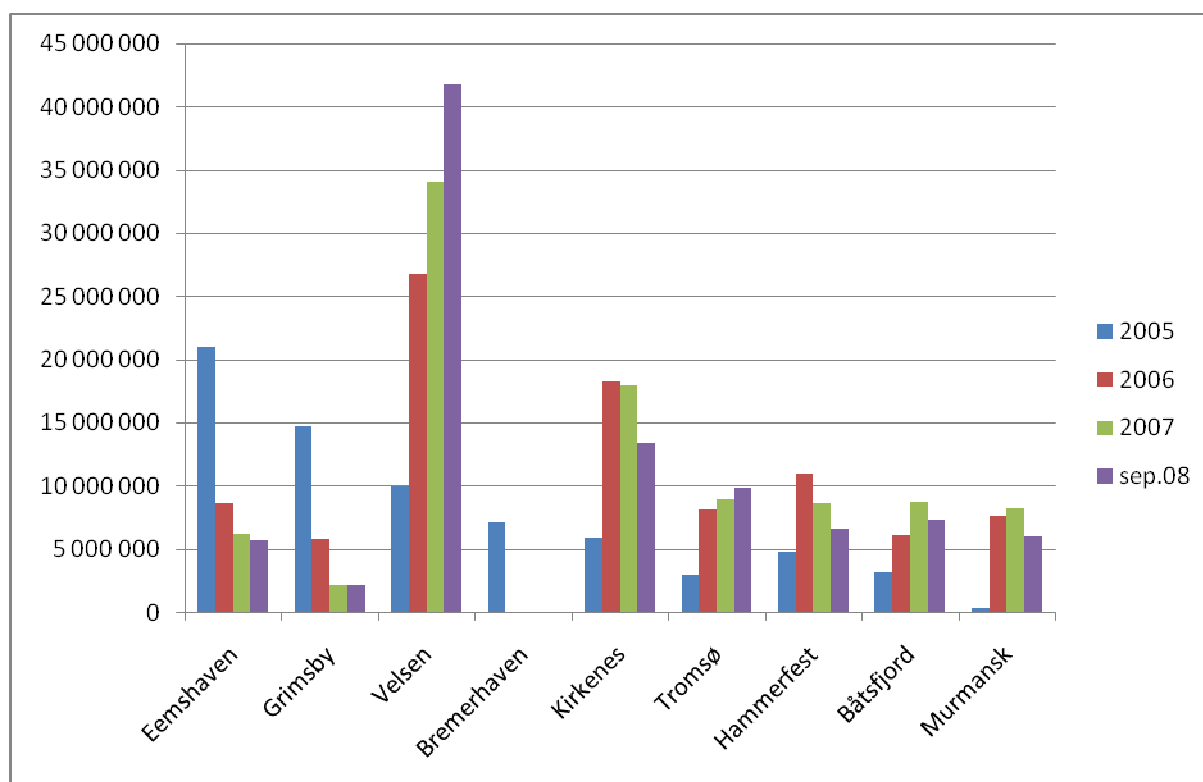


Figure 5: Development in landings of cod in different harbours. HG weights. Source: Directorate of fisheries.

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Information on Spain and Portugal is sketchy for 2007 (but should be available with NEAFC). With that in mind, it seems that there has been a shift from 2005 to 2007 towards Norway and Netherlands away from Germany and the UK and possibly Iberia. Be aware that the figures given for Russia here (and Arkhangelsk and Murmansk above) are from companies reporting on landings destined for re-export mainly. The total figures for Russia are, of course much higher, but official figures are not published.

Landings of cod. HG weights. Percentage of total landings registered								
	2005		2006		2007		sep.08	
Netherlands	32 304	25 %	36 068	28 %	45 375	40 %	47 687	48 %
Norway	21 337	17 %	55 413	44 %	55 207	48 %	44 960	45 %
Russia	228	0 %	6 353	5 %	5 867	5 %	4 448	4 %
UK	18 611	15 %	7 722	6 %	2 537	2 %	2 081	2 %
Spain/Portugal	933	1 %	3 947	3 %	104	0 %	491	0 %
Germany	7 145	6 %	0	0 %	0	0 %	0	0 %

Table 20: Landings from Russian vessels. 2005 – Sept 2008. Directorate of Fisheries

### 3.2.2 Comparing landings to export

Below is an overview of Russian cod landed in the Netherlands, Norway and the UK, and Russian cod imported to China through the same countries. The figures should be seen as illustration only. Russian cod changes from Russian to Dutch origin when repacked in the Netherlands and there are cases where Russian cod that has been through the Netherlands, is recorded as coming directly from Russia when entering China.

These inaccuracies notwithstanding, the Chinese import of cod from the Netherlands may seem high compared to the landings registered there.

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	2005		2006		2007	
	landings	imports to China	landings	imports to China	landings	imports to China
Netherlands	32 304	18 859	36 068	30 295	45 375	37 555
<i>NL incl NL as CO*</i>		72 358		89 057		77 699
Norway	21 337	887	55 413	1 140	55 207	782
UK	18 611	6 796	7 722	4 039	2 537	1 045

**Table 21: Landings compared to import to China. 2005-2006. Sources Directorate of Fisheries and Chinese Customs. Cod coming imported to China with Russia or the Netherlands as Country of Origin and the Netherlands as Routing Country. HG weights.**

### 3.2.3 IUU Landings

The changes in landing pattern described in the chapter above, may, of course give rise to speculations on IUU-landings. Grimsby and Eemshaven have been suspected of being “white-washing” harbours and their share of the landings seems to have been drastically reduced. So has Bremerhaven’s. And this has happened in the year when the Port State Control Regime came into place. The data does not answer, though, where all the IUU fish of 2005 did go. Since the data here is for the first 10 months of 2007 only, the landings of cod are about the same in the two years, and the landings of haddock considerably higher.

When it comes to illegal landings several industry sources are in agreement that Thorshavn was a main port for illegal landings in the early days (approximately 1998-2002) – i.e. whole vessels of unreported fish being taken to Thorshavn and from there to Spain, Portugal and China. There also seems to be agreement that Bremerhaven, Eemshaven and Grimsby were important harbours for IUU fish in the period after that and up to 2005-2006.

In 2008, traders are warning me that there is “*too much fish coming from Murmansk to the Netherlands by boat*”. Also people in the Dutch cold-store business find the volume high.

### 3.2.4 Russian sources on IUU-trade

The trade routes for IUU-fish are likely to have changed with the introduction of a port state control regime in NEAFC. It is also likely to be different with different types of IUU fish. According to Russian sources, illegal fishing occurs (or at least occurred) within all kinds of companies and this fish is landed, and traded in different ways, depending on what



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kind of company is involved. The following are based on transcripts from conversations with these sources.

The sources divide the fishing companies/operations in three general groups:

- Legal, well connected companies, normally big companies with enough quota to support their fleet and infrastructure may be involved in IUU fishing occasionally or on the initiative of the master or when the vessel is leased to others. Norwegian authorities have suspected that such vessels have sold illegal landings in combination with regular landings in European harbours. In the past, it may have been difficult or near impossible for the end user of such fish to determine its legality.

Big fishing companies seem now to be interested in ousting illegal catch from the markets to keep the prices high. It looks like big companies started “clearing the ground”. On several occasions during the last year big cargos of illegal catch were seized by the police. Obviously, such operations would have been impossible without information from interested competitors.

- Semi-legal, medium size companies without enough quota to support their fleet, which normally consists of old inefficient boats. These might be coastal fishing companies, fishing farms. The boats are either leased out, or never go to the sea. In the first case, the quota holders go to sea and try to fish as much as possible if the controls are not in place. In the other case, the quota is fished by other companies on the basis of special agreements and then it is the boat operator who is responsible for the performance of the boat. Illegal catch, if any, is transhipped at sea to international destinations. The production is marked before transhipment or onboard transport vessel as a product of some third company (existing or not). One example of this is the fish landed in Qingdao in October 2007 (see chapter 3.5.3)
- Illegal companies or individuals which are operating solely at their own risk, use small or unregistered boats based in the places along the coast wherever the mooring and landing are possible and port control is missing. The fish normally is landed in Russia, frozen in mobile refrigerators and legalized through a number of transactions between

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fly-by-night companies. The fish is normally delivered from the coast to mainland by trucks. The transit of cargo is bribed on the checkpoints of traffic police.

### 3.2.5 New routes out of Russia

With the port state control regime, illegal catches may have to find new routes. According to the same sources, there are at least three land-based routes from Russia to the international markets:

1. To St. Petersburg by train or truck and further to Europe or China.
2. Over land to Norway (delivered by truck, hard to identify the origin as the trader normally is not a fishing company).
3. To St. Petersburg by train, by sea to Denmark. From Denmark to Europe or China.
4. To St. Petersburg by train/truck, boat to the Black Sea. Repacking and transport to Egypt or other container port on one of the Europe-China container ship routes.

I have been given various estimates of the land trade between North-West Russia and St. Petersburg – between 10 000 and 20 000 tonnes annually may be an educated guess.

There is also the possibility of sea-transport directly from trans-shipment in the Barents Sea to a port outside the NEAFC control area. Such ports are Dakhla, many Mediterranean harbours, the Black Sea, or all the way to e.g. China or another Asian port.

Dakhla is a fishing harbour with the necessary facilities and is the base of several companies involved in fishing on Moroccan quotas. The political situation in occupied West Sahara is tense and information is hard to obtain. If you have a good fish carrier and you want to get out of the NEAFC area and have little risk of control, Dakhla is a good place. Two Norwegian traders in Russian cod have told us that Dakhla has been used as a landing harbour. There are also harbours with good facilities further down the West-African coast with a large fish trade, mainly in pelagics. Mauritania is registered with consignments of cod in 2005.

The thawing of the Arctic may open the Northern Sea Route to regular traffic between Europe and the Pacific in the summer – and thereby also for IUU fish. With today's control regime

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that means that IUU fish would have to be taken directly to Asia without being transferred to a container vessel in a European Port. Shipping along the Northern Sea Route would be easy to monitor and cooperation with Russia should ensure that this does not become a major problem.

The cost of transporting fish in a small fish carrier compared to a refrigerated container is very high. Landing papers and movement intelligence from Lloyd's MIU indicate that the reefer Smolninskiy went all the way from the Barents Sea to Qingdao landing cod there in October 2007. The fish was landed at the Eimskip bonded warehouse and was never registered with NEAFC or Russian authorities. The fish must therefore be regarded as IUU fish. As of yet this is the only known direct transport to China from the fishing grounds in the Barents Sea.

### 3.2.6 Traders on the European side

Landing data show a quite large number of companies buying and trading white fish from the Barents Sea. It is a mix between well known seafood producers and traders and what seems to be one-man companies, companies that do not really exist (are not registered anywhere) and cover established players cover companies for various purposes.

### 4. Cod and Haddock processing in China

This chapter is based on a combination of sources. The main quantitative source is the customs data for 2005, 2006 and 2007. This however is not enough; partly because it in some cases is difficult to decide what fish has been imported, and partly because many of the groups import under other names than their more well known ones. The customs data have been complimented with interviews with seafood companies at the Seafood Expo in Dalian, November 2007, a list of cod imports to China for the first half of 2007 (Source 7) and other sources.

As far as I can see, most of the cod and haddock processing in China is performed for a customer, usually in Europe. This customer may also own or run the plant in China, like Ocean Trawlers or they may buy the fish in Europe and let a Chinese processor cut the filets and send them back, like Pacific Andes does. They would be reluctant to buy fish from a trader who did not plan to take back the finished product, especially for an expensive fish like cod.

In the table 23 below, describing Chinese imports of Russian cod, I have excluded cod of Russian origin routed through Russia. The reason is that from interviews I know that most of it is Pacific cod and pollock. There may be some Atlantic cod that is lost in the figures though, mainly because of misreporting of routing country.

The haddock figures in table 24, should be accurate, though. We see that Ocean Trawlers through their importer Shandong Jinyi Textile have increased their share of cod from 4 to 17% and have kept their share of the haddock at about 20%.

## Trade flow in the Asian seafood business

<b>Top Chinese Cod importers 2005-2007</b>			
HS code Cod, CO Russia routed through Atlantic Country or CO Cod fishing Atlantic Country			
	2005	2006	2007
Shandong Jinyi Textile Co Ltd	4 565 661	10 140 507	17 668 275
Shandong Orient Ocean Technologies Stock Co Ltd	3 974 097	6 621 704	8 196 015
(tom)	0	334 266	6 889 942
Rushan Huagreat Aquatic Products Co Ltd	4 236 068	3 661 808	6 018 368
Longkou Sanming Seafood Co Ltd	0	2 942 474	6 012 864
Qingdao Sanyang Aquatic Product Co Ltd	1 410 204	3 006 120	5 122 299
Rongcheng Taixiang Aquatic Food Products Co Ltd	3 256 416	2 773 548	4 967 843
Rongcheng Hai Dou Food Co Ltd	4 186 887	2 583 283	4 933 485
Weihai Weidongri Comprehensive Food Co Ltd	2 271 711	3 698 203	4 562 721
Qingdao Da Xi Yang Yong Jia Food Co Ltd	0	3 703 707	3 799 197
Qing Dao Combined Hua Tong Trade Co Ltd	1 878 256	1 752 981	3 170 821
Laizhou Fangyuan Food Co Ltd	681 585	1 410 186	3 090 655
Rongcheng Jiarong Foods Co Ltd	2 010 445	2 686 230	2 548 095
Rongcheng Nan Guang Food Co td	1 052 828	1 706 362	2 451 340
Yan Tai Lian Fa Fishery Co Ltd	2 267 140	2 877 905	2 418 935
Rong Cheng City Mu Ze Food Co Ltd	207 954	868 967	2 277 502
Qingdao Qilin Food Co Ltd	3 073 578	4 147 156	1 510 462
Dalian Kowa Foodstuffs Co Ltd	0	0	1 498 048
Qing Dao Zhu Di Fishery Co Ltd	0	224 280	1 227 996
Dalian Zhudao Foodstuffs Co Ltd	3 561 058	941 270	1 177 744
Qingdao Guoxing Food Co Ltd	13 851 266	8 420 232	0
Qingdao Zhengjin Grop Imp &Exp Co Ltd	8 260 502	8 260 502	123 354
Qingdao Zhengjin Haiqing Aquatic Products Co Ltd	1 646 820	5 585 531	42 022
Qingdao Unibond-Zhengjin Aquatics Products Co Ltd	3 380 971	5 319 155	0
Qing Dao Da Xi Yang Yong Xin Food Co Ltd	3 977 223	3 186 232	785 496
Yan Tai An Xin Food Co Ltd	2 708 937	2 913 225	0
Qingdao Yashijia Food Co Ltd	2 237 181	2 751 416	36 400
Qingdao Zhongjia Food Co Ltd	8 965 257	2 598 637	0
Qingdao Fusheng Food Co Ltd	1 089 525	299109	532 870

Table 22: Top importers of cod routed through Northern Europe 2005, 2006 and 2007. Source China Customs Data.

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Chinese haddock imports by company 2005-2007			
Company	2005	2006	2007
Shandong Jinyi Textile Co.Ltd	6 725 683	7 624 015	8 231 478
Shandong Orient Ocean Technologies Stock Co Ltd	955 988	1 980 292	4 622 208
Rushan City Huanyu Food Co Ltd	2 104 943	3 956 288	3 787 476
Qing Dao Combined Hua Tong Trade Co Ltd	1 906 200	2 094 376	3 652 099
Yan Tai Lian Fa Fishery Co Ltd	250 492	1 620 944	2 250 620
NA	0	65 590	2 067 794
Qingdao Jin Beifood Co Ltd	379 235	2 830 189	1 592 272
Qingdao Hua Kai Aquatic Product Co Ltd	182 010	339 973	1 559 733
Qingdao Sanyang Aquatic Product Co Ltd	1 191 196	2 238 443	1 400 028
Yantai Shui Xing Food Co Ltd	0	0	1 340 267
Qingdao Zhongken Import & Export Company	0	850 970	1 150 675
Qing Dao Da Xi Yang Yong Xin Food Co Ltd	643 631	1 249 340	1 022 706
Qingdao Longyuan Aquatic Products Co Ltd	0	1 531 422	975 884
Dalian Xu He Lian Food Co Ltd	438 025	1 044 703	966 128
Da Lian Xin Hai Yang Food Co Ltd	1 952 401	1 779 924	714 531
Qing Dao Lian Yang Food Processing Co Ltd	0	0	669 698
Dalian Ocean Fishery Imp & Exp Corp	50 820	451 070	608 808
Qingdao Da Xi Yang Yong Jia Food Co Ltd	0	404657	587 483
Qingdao Yijia Imp & Exp Co Ltd	0	411306	552 587
Ri Zhao Rong Xing Food Co Ltd	0	0	508 409
Laizhou Fangyuan Food Co Ltd	349 289	648 692	471 321
Qingdao Fusheng Food Co Ltd	2 956 505	565604	0
Liaoning Machine Import & Export Co Ltd	778 738	199812	0
China Food Co	763 154	0	0
Shandong Meiheer Int'l Trading Co Ltd	581 715	339 973	0
Qing Dao Chang Rong Food Co Ltd	482 536	223299	0
Rushan Huagreat Aquatic Products Co Ltd	425 633	0	0
Yan Tai Yu Yuan Fishery Co Ltd	373 446	0	0
Qing Dao Hong Fu Ying Shui food Co Ltd	0	628 306	260 504
Qing Dao Run Yu Food Co Ltd	0	601 112	426 492
Qingdao Zhengjin Grop Imp &Exp Co Ltd	0	603 110	290 531

Table 23: Chinese haddock imports by company 2005-2007 Source China Customs Data.

As mentioned earlier, some companies are foreign owned and controlled and may own the fish from the fishing ground, through processing and all the way to the country of consumption.

### 4.1.1 Import categories

#### Processing with Imported Materials

The manufacturer will purchase the materials directly from overseas with foreign currency; the manufacturer will use those materials for production and finally export the end product to overseas. In this case, the manufacturer should usually pay the imported tax at first, and there will be a tax rebate if the end product they produced is exported to overseas.

#### Entrepot trade by bonded area

It means the product is imported into or exported through a customs warehouse inside the specific bonded area in China at first. The importer or exporter does not need to pay the customs duty within one year when the goods is store in the warehouse. Usually, the importer and exporter in this case is just the trader, and they will arrange the final buyer or seller to "import" or "export" the goods from the customs warehouse and the final buyer and seller will pay the customs duty.

#### Customs warehousing Trade

It means the product is imported into or exported through a customs warehouse in China. The activities is quite similar to the "enterpot trade by bonded area" with the major difference is Customs warehouse in this case means the individual warehouse outside the bonded area.

#### Processing and Assembling

The manufacturer will import, but not purchase, the materials from overseas, the manufacturer will use those materials for production and finally export the end product to overseas. In this case, the manufacturer need not to pay the imported tax, but the customs would claim the imported tax when they prove or believe that the manufacturer do not use all the imported materials for producing goods and exporting to overseas.

#### Border Trade

This is the trading activities near the border of China and other countries; they are usually trading in small amount.

### Ordinary Trade

This refers to general trading that the importer or exporter will pay the imported tax in full.

### Other

This refers to trading activities that the importer or exporter do not have the import and export license, but they are approved by the customs to import and export the product temporary or case by case.

#### 4.1.2 Bonded warehouse

One development worth noticing is the increase in the use of bonded warehouse. The Qing Dao Combined Hua Tong Trade Co Ltd is the Eimskip bonded warehouse that accepted the obviously illegal landing of the cod and haddock from the Smolninsky. It has increased its import from 1800 to 3 200 tonnes from 2005 to 2007. There are of course also other bonded cold stores, both in Qingdao and other places. The fish that enters China into these facilities are registered in the customs papers as “Entrepôt Trade by Bonded Area” or “Customs Warehousing Trade”. If the warehouse is inside a bonded area, it is Entrepot Trade, if not it is Customs Warehousing Trade. In both cases, the importer is allowed one year’s duty free storage in the warehouse. The total landings of Atlantic cod into these were about 10 000 tonnes in 2007. For haddock it was 6 500 tonnes, up from 2 200 in 2005. The share is also rising – from less than 10% in 2005 to 15% in 2007.

#### 4.2 Ocean Trawlers

Ocean Trawlers is by far the largest buyer of cod and haddock from the Barents Sea. The company was built up on bareboat charter agreements in the late 1990’s. The company was originally based in Drøbak, Norway, and moved to Hong Kong in 2003. The holding company, MPM Invest AS was re-established in Moss later the same year. It is owned by Vitali Petrovich Orlov, Magnus Roth and Tiffin Holding Aps. In May 2008, Gunnar Mannsfield took over the post of CEO from Thomas Zachrisson.



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Ocean Trawlers was built up as a bare-boat company in the late/mid 1990'ies. According to the company itself, they buy 50 000 tonnes of HG cod yearly. The original Ocean Trawler bare boats are among those with the highest quotas in the Barents Sea (table 15).

Some of the original bare boat vessels are still registered as operated by MPM according to the Lloyd's register. (Amerloq, Izumrud, Kapitan Gromtsev, Korund, and Rubin) Ocean Trawlers controls or has a close relationship<sup>2</sup> with Karelian Shipping, which owns and runs two refrigerated cargo ships, the PETROZAVODSK and the BELOMORYE.

Vessels linked to Ocean Trawlers.		
Vessel	OWNER	Management/operator
<b>MPM managed/operated vessels</b>		
AMERLOQ (Solborg)	GAVAN-SOLOVKI	MPM AS
IZUMRUD (Ole Saetermyr )	SOGRA	MPM AS
KAPITAN GROMTSEV (Bjørnøy)	RYBPORMINVEST	MPM AS
KORUND (Topas)	MURMANSK TRAWL FLEET CO	MPM AS/ MURMANSK TRAWL FLEET
RUBIN (Aliza Glacial)	RYBPROMINVEST	MPM AS
TOPAZ A (John Longva) total loss 09	MURMANSK TRAWL FLEET CO	MPM AS/ MURMANSK TRAWL FLEET
<b>Ex MPM Managed/operated vessels and OT linked vessels based on landing data</b>		
AQUAMARINE( Orcades Viking III) <sup>3</sup>	KARAT-1	KARAT 1(MPM till June 2007)
GEORGIYEVSK	Karat 1	Karat 1
AZURIT	World Ocean (Ocean Project Azurit 2001-2008)	World Ocean (MPM 2001-2008)
MALAKHIT (Alida Glacial) total loss	KARAT-1	MPM AS/KARAT-1
SAIDA (Nonhamar)	KRK CO LTD	KRK CO LTD (MPM 2002-2007)
VITYAZ (Okaynyay)	NORD PILIGRIM	NORD PILIGRIM
OBELYAY	NORD PILIGRIM	NORD PILIGRIM
LEONID NOVOSPASSKIY (Not cod )	NORD PILIGRIM	NORD PILIGRIM
NES	NENETSKIY RYBAKSOYUZ	NENETSKIY
ZAPOLARYE	MURMANSK TRAWL FLEET CO	MURMANSK TRAWL FLEET
KAPITAN DURACHENKO	Alternativa	Alternativa
SAPPHIR 2 (Labrador)	WHITE ARCTIC MARINE RESOURCES	WHITE ARCTIC MARINE RESOURCES (Ervik Marine Services 1998-99, OT/MPM 1999-2006)
NORILSK Krasnolesye	ANDEG FISHING COLLECTIVE	ANDEG FISHING COLLECTIVE
NOVATOR	MURMANSK TRAWL FLEET CO	MURMANSK TRAWL FLEET

**Table 24: Vessels linked to Ocean Trawlers. Based on a combination of personal communication with OT, information from other industry sources and Directorate of Fisheries.**

<sup>2</sup> Ocean Trawlers is given as operator of the vessel Petrozavodsk in landing papers from Velsen

<sup>3</sup> The Aquamarine has no cod/haddock quota. She is fishing herring and blue whiting.

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Ocean Trawlers has several trading subsidiaries/related companies:

Anglia Trading is their main procurement company for HG fish. Most purchases are booked directly into Ocean Trawlers International, but handled by Anglia.

Bay Trading is “related” to Ocean Trawlers. It is, according to Ocean Trawlers used mainly for purchases of IQF fillets from factories in Murmansk and H/G from non - associated fishing companies. But we also see incidents where OT buys the cod and Bay the haddock from the same shipment.

Ocean Resources Int. is an old trading company in the OT group. It has not been active for the last couple of years and is under closing.

Ocean Supply Ltd, Hong Kong is a service company in the OT group and is supporting the fishing vessels mainly with technical issues, buying repairs and equipment. No fish trading activities in this company. The company is registered as buying fish landed in Velsen.

Nederlandse Vishandelsmaatschappij (NVM) is a fish trading subsidiary of OT.

### 4.2.1 Volume

Ocean Trawlers say that they buy 50 000 tonnes of HG cod in the Barents Sea per year and that half of this is transported to China for filleting.

They are also processing fish at three factories in Murmansk and they have factory vessels, producing filets on board. In 2005 they landed fish in many European harbours, mainly in Velsen and Eemshaven in the Netherlands, but also in Swinoujście, Poland, where their partner Espersen has a factory, in Grimsby and in the Faeroe Islands. In 2005 at least 24 different transport vessels were used. Some of the transporters seem to be dedicated to a few routes, like the Petrogradskiy and the Petrozavodsk, landing fish for Ocean Trawlers and others in Grimsby in 2005 and having changed it to Velsen in 2007.

### 4.2.2 Processing in China

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Ocean Trawlers imports into China go through the Hiking group. According to OT, Hiking is also importing for other processors. In some sources, the imports are registered under “Hiking Group Shandong Gaintex Co Ltd” (source 7) and in some sources as “Shandong Jinyi Textile Co Ltd” (source 6). Some processing is Ocean Trawlers owned and some of it is processed by SSL (Scandinavian Seafood Ltd) a joint venture with Espersen. Some of the SSL fish is imported through Qingdao Xiyuan Frozen Food Co Ltd; they imported 304 tonnes of cod from Norway and Russia in 2007.

### 4.2.3 Imports

Below is an overview of imports of cod registered in China Customs Statistics on Shandong Jinyi Textile Co Ltd, which is the main Ocean Trawlers fish import vehicle. These figures are not sorted on price or country, and may contain pollock.

Shandong Jinyi Textile Co Ltd		Cod	2005
Country of Origin			volume
Chile			<b>27 487</b>
Denmark			<b>69 529</b>
Germany			<b>195 858</b>
Netherlands			<b>50 013</b>
Norway			<b>1 528</b>
Russia			<b>29 130 534</b>
Uruguay			<b>364 956</b>
<b>Total</b>			<b>29 839 905</b>

**Table 25: Ocean Trawlers cod import 2005 Source China Customs Data.**

Shandong Jinyi Textile Co Ltd		Cod	2006
Country of Origin	Routing Country		volume
Russia			<b>21 245 132</b>
<b>Total</b>			<b>21 245 132</b>

**Table 26: Ocean Trawlers cod import 2006 Source China Customs Data.**

Shandong Jinyi Textile Co Ltd		Cod	2007
Country of Origin	Routing Country		volume
Denmark	Denmark		<b>47 569</b>
Greenland	Germany		<b>168 596</b>
Netherlands	Netherlands		<b>607 467</b>
Norway			<b>647 863</b>
Russia			<b>26 495 955</b>

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Spain	Spain	<b>220 082</b>
The Faroe Islands	Netherlands	<b>97 146</b>
Total		<b>28 284 678</b>

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Table 27: Ocean Trawlers cod import 2007 Source China Customs Data.

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Shandong Jinyi Textile Co Ltd Haddock 2005		
Country of Origin	volume	
Iceland		24 024
Norway		<b>315 184</b>
Russia		<b>6 386 475</b>
Total		<b>6 725 683</b>

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Table 28: Ocean Trawlers haddock import 2005 Source China Customs Data.

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Shandong Jinyi Textile Co Ltd. Haddock 2006		
Country of Origin	volume	
Norway		<b>415 162</b>
Russia		<b>7 208 853</b>
Total		<b>7 624 015</b>

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Table 29: Ocean Trawlers haddock import 2006 Source China Customs Data.

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Shandong Jinyi Textile Co.Ltd Haddock 2007		
Country of Origin	volume	
Netherlands		<b>576 823</b>
Norway		<b>25 874</b>
Russia		<b>7 426 286</b>
Spain		<b>168 891</b>
Total		<b>8 197 874</b>

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Table 30: Ocean Trawlers haddock import 2007 Source China Customs Data.

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### 4.2.4 Processing factories

Ocean Trawlers is processing cod and haddock at five different sites in China:

- Gain Seafoods has two workshops and is built for OT.
- Yiyuan Cold storage with one workshop. This is a joint venture with Espersen
- Shimeian. Licang District, Qingdao. One workshop
- Chang Yong. Two workshops from 2006
- Sanhe in Rushan. One workshop

The processing factories are not owned by Ocean Trawlers, but are run on long term agreements. At Gain Seafood, it is Gain, which is a part of the Hiking group that owns the factory. They also employ the workers and are responsible for the running of the factory. Ocean Trawlers pay a certain amount per tonne of processed fish. It is not clear whether the other factories have the same arrangement.

OT is leasing process capacity at Hiking Group processing plants:



Figure 6: Part of Hiking Group Structure – importers for Ocean Trawlers

### 4.3 Pacific Andes

Hong Kong based Pacific Andes is one of the biggest seafood producers in the world, with an annual production of 350 000 tonnes in 2006 and 471 000 tonnes in 2007. It would go too far to describe the entire structure of the Pacific Andes Groups here, but I will give a brief outline of the Chinese side.

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<b>Pacific Andes processing plants in China</b>			
<b>Plant</b>	<b>Opened</b>	<b>Products</b>	<b>EU Plant Number</b>
<b>Xinxing Foodstuff (Qingdao) Co, Ltd.</b>	OCT, 2000	Mainly pink and chum salmon. Alaska Pollock, redfish	3700/02649
<b>Aqua Foodstuff (Qingdao) Co, Ltd.</b>	OCT, 1998	Pollock, Flounder	3700/02659
<b>Pacificandes Foodstuff (Liuting) Co, Ltd.</b>	OCT, 2005	Apo, Salted Apo, P. Cod, Saithe, GHL	3700/02951
<b>Qingdao Canning &amp; Foodstuff Co, Ltd</b>	MAY, 1993	Apo, Red fish, Orange roughy	N/A
<b>Hongdao</b>	2008?		

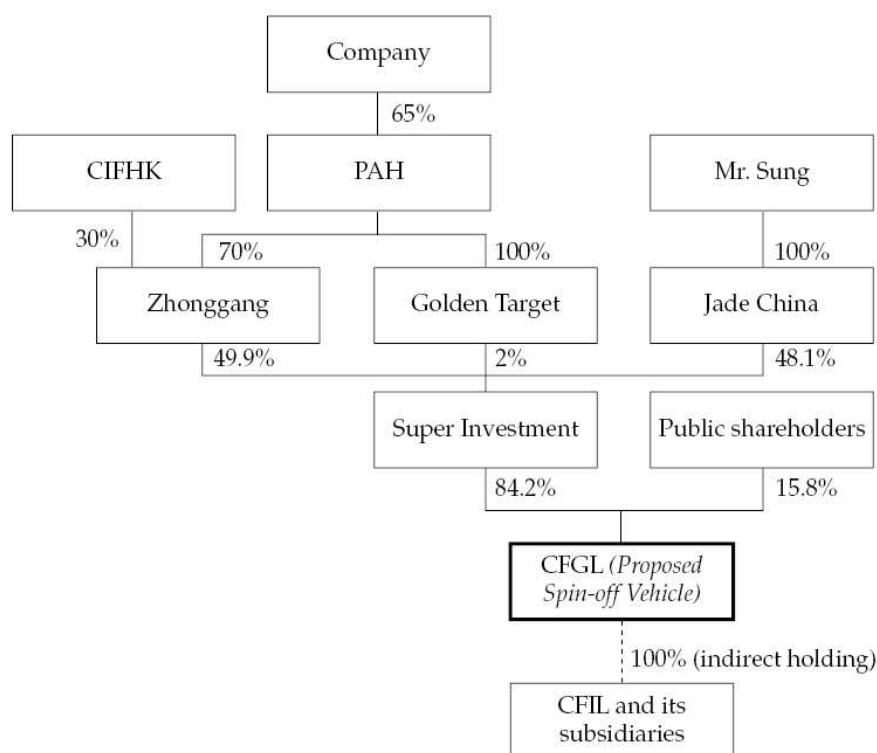
**Table 31: Pacific Andes processing plants**

Pacific Andes has been processing fish in China for 15 years. They started building up large scale processing when the Soviet Union collapsed and Russian pollock and other fish became available for international investors and processors. They built up a structure of filleting factories based, among other sources, on pollock from the Resource Group International (Røkke) controlled Russian pollock vessels. In 2007, Pacific Andes imported around 50 000 tonnes of pollock for processing in China (source 7)

In 2004 Pacific Andes got control over the former state controlled Chinese “China Fisheries International Limited” (CFIL). On 12 July 2004, Zhonggang, a 70% owned subsidiary of PAH, acquired 49.9% of the issued share capital of CFIL and at that time Jade China was the other shareholder which beneficially owned the balance of 50.1% of the entire issued share capital of CFIL.

Golden Target, a wholly owned subsidiary of PAH, further acquired 2% of the issued share capital of CFIL from Jade China. As a result of these acquisitions, PAH indirectly owned 51.9% of the entire issued share capital of CFIL and CFIL became an indirect subsidiary of PAH and PAIH on 31 December 2004. PAH has subsequently undergone a group restructuring exercise in relation to its shareholdings in CFIL whereby CFIL became an indirect wholly owned subsidiary of CFGL.

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**Table 32: Pacific Andes China company structure. “Company” is Pacific Andes Holding International. CIFHK is China International Fisheries Hong Kong.**

The company has specialised subsidiaries for different parts of the seafood business. PAH is purely supply chain management – it only buys and distributes the products. It supplies 20% of China’s seafood import. Pacific Andes is said to be growing at a rate of 50% per annum and their new processing plant at Hoandao has a processing capacity of 60 000 MT.

According to the company, they buy about 4 000 tonnes of Atlantic cod annually. They buy their cod from various suppliers, amongst them Kangamiut, and at Norwegian auctions. They do not buy haddock.

Pacific Andes purchases of Atlantic cod 2006 and 2007			
	Port of discharge	2006	2007
<b>Norway</b>		<b>1987,5</b>	<b>2416,4</b>
	Aalesund	939,9	224,9
	Andenes	26	
	Båtsfjord	90,9	290,4

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	Hammerfest	45,8	47
	Honningsvåg		19,7
	Kirkenes	574,6	811,3
	Senjahopen	122,6	
	Måløy		9
	Tromsø	187,7	1014,1
<b>Netherlands</b>		<b>932,8</b>	<b>1766,5</b>
	Eemshaven	701,9	1312,9
	Ijmuiden		77,1
	Velsen	230,9	376,5
<b>England</b>		<b>296</b>	<b>307,1</b>
	Grimsby	296	307,1
<b>Faeroe Islands</b>			<b>102</b>
	Kollarfjordur		102
<b>Demark</b>		<b>0</b>	<b>76,5</b>
	Hirtshals		76,5
<b>Russia</b>		<b>491,5</b>	<b>0</b>
	Murmansk	491,5	
<b>total</b>		<b>3707,8</b>	<b>4668,5</b>

Table 33: Pacific Andes purchases of Barents Sea cod. Landing distribution. Source: Pacific Andes

### 4.3.1 Brands

Pacific Andes produces and packs for several brands in the US and Europe, among them Matlaw's, (National Fish and Seafood, Gloucester US) Ocean Deli, Fisherboy, Sea Queen, Harbour and Farmfresh.



### 4.4 Unibond and Young's Bluecrest and Findus

Unibond is one of the bigger processors of cod in China. According to the company (interview), they process 10 000 tonnes of HG cod a year at three plants – of which 8 000 tonnes is Atlantic cod<sup>4</sup>. The Qingdao Harbour import list for the first half of 2007 (source 7), shows a total of just about 4 000 tonnes import to Unibond, of which 3100 is Atlantic cod, imported from Norway, Russia, the UK and Portugal. They also process about 500 tonnes of Haddock and 6 000 tonnes of pollock. (Source 7). Unibond has two processing factories in Qingdao.

- Qingdao Unibond Premium Seafood Processing Ltd, Jinling Industrial Park,
- Qingdao UZP Foods Processing Ltd.

In addition they have processed at one of Zhengjin's plants, also in Qingdao. Zhengjin is Unibond's main partner in China. Zhengjin is a consortium with many branches.

Unibond provides fish for, among others, Young's in the UK and Findus – both are part of the Foodvest group together with The Seafood Company in the UK. In the Foodvest Group purchasing and supply chain are part of the group functions and thus common for all of the above companies. Also the Nordic Group says they use Unibond as their Chinese processor.

Unibond is importing their fish into China under three names Qingdao Da Xi Yang Yong Jia Food Co Ltd, Qing Dao Da Xi Yang Yong Xin Food Co Ltd and Qingdao Unibond-Zhengjin Aquatics Products Co Ltd. The latter stopped importing in 2006. If Unibond's own information that they import 8000 tonnes of Atlantic cod annually, the company must have one more importer not included in the tables below.

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<sup>4</sup> Personal communication, November 2007

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<b>Imports of Cod to Unibond plants in China 2005, 2006 and 2007</b>			
	<b>2005</b>	<b>2006</b>	<b>2007</b>
<b>Qingdao Unibond-Zhengjin Aquatics Products Co Ltd</b>	5 393 990	5 319 155	
<b>Qing Dao Da Xi Yang Yong Xin Food Co Ltd</b>	3 977 223	3 184 672	785 496
<b>Qingdao Da Xi Yang Yong Jia Food Co Ltd</b>		3 703 707	3 799 197
<b>Total</b>	<b>9 371 213</b>	<b>12 209 540</b>	<b>4 586 700</b>

Table 34: Unibond cod imports 2005, 2006 and 2007 Source China Customs Data.

Import figures show imports in 2005 of large volumes of cod from Ireland routed through the Netherlands (1 700 tonnes) and in 2006 from Lithuania routed through Germany, (820 tones), from Germany routed through Belgium (209 tonnes) and from Ireland routed through the Netherlands (112 tonnes). They also imported 50 tonnes from Guinea routed through Spain. Young's Seafood has been contacted on several occasions and asked for a description of these shipments, but has not answered. The Irish and Lithuanian fish is of low value, about 450 US\$ per tonne, and may very well be blue whiting.

<b>Imports of Haddock to Unibond plants in China 2005, 2006 and 2007</b>			
	<b>2005</b>	<b>2006</b>	<b>2007</b>
<b>Qingdao Unibond-Zhengjin Aquatics Products Co Ltd</b>	9 072		
<b>Qing Dao Da Xi Yang Yong Xin Food Co Ltd</b>	643 631	1 249 340	1 022 706
<b>Qingdao Da Xi Yang Yong Jia Food Co Ltd</b>		404 657	587 483
<b>Total</b>	<b>652 703</b>	<b>1 653 997</b>	<b>1 610 189</b>

Table 35: Unibond haddock imports 2005, 2006 and 2007 Source China Customs Data.

### 4.5 Sirena – China Starfish - Qingdao Guoxing Food Co Ltd

China Starfish, Guoxing in mandarin, used to be one of the biggest importers of cod from Europe. Their imports have dropped from 14 000 tonnes in 2005 to nothing in 2007.

<b>Country of Origin</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
<b>Netherlands</b>	10 171 342	4 806 442	
<b>France</b>	2 101 292	2 501 856	
<b>UK</b>	1 527 832	1 111 934	
<b>Germany</b>	237 896		
<b>Norway</b>	50 600		
<b>Total</b>	<b>14 089 162</b>	<b>8 420 232</b>	

Table 36: China Starfish/Qingdao Guoxing cod imports 2005-2007 Source China Customs Data.

## Trade flow in the Asian seafood business

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China Starfish produces for Sirena, according to other companies in the business.

Sirena/China Starfish have not confirmed this. It is not clear whether China Starfish produces for other companies as well. They have three processing plants: Two in Qingdao and one in Yantai - China National Fisheries Corporation branch in Yantai<sup>5</sup>.

Sirena is a large Danish company which also has a branch in Norway. The company controls through long terms agreements and part ownership a group of Greenland and Canada registered factory trawlers.<sup>6</sup>

Sirena Norway AS is owned 85% by Sirena Salmon in Denmark and 15 % by Steinar Magne Bakka. Bakka was part of Dovod Norge As. One of the board members of Dovod was Kristian Eidesvik of, among other companies Caiano and Sjøvik.<sup>7</sup> Caiano sold its fleet of refrigerated cargo vessels to Green Reefers in 2007.<sup>8</sup>

### 4.5.1 Sjøvik – Karelia

Sjøvik controls the Karelia II, the former Norwegian vessel Hopen and one of the bigger quota owners in the Russian fleet. Karelia II lands most of its fish in Kristiansund, but do also do transshipments, lately to the Viyaevo for landing in Murmansk.

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<sup>5</sup> <http://cymfcapp.en.china.cn/>

<sup>6</sup> [www.sirena.dk](http://www.sirena.dk)

<sup>7</sup> [www.bizweb.no](http://www.bizweb.no)

<sup>8</sup> [www.sea-web.com](http://www.sea-web.com)

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### 4.6 Nowaco

Nowaco is a Danish fish trading firm which has expanded steadily and rapidly over the last 10 years or so. They claim to be one of the biggest importers of Chinese processed food in Europe. According to their web-page, they have three processing factories in China.<sup>9</sup>

They import their cod and haddock under the name of Qingdao Qilin Food Co Ltd. Ocean Trawlers claim to supply the raw material for Nowaco, and it is not clear to me whether the Qilin imports are fish purchased by Ocean Trawlers in Europe and sold to Nowaco or whether this is separate. Nowaco are now importing more and more of their cod from Greenland and less from Russia.

Qingdao Qilin Food Co Ltd. Cod imports 2005	
Country or Origin	Volume
Norway	26 084
Russia	3 047 494
<b>Total</b>	<b>3 073 578</b>

Table 37: Nowaco/Qingdao Qilin cod imports 2005 Source China Customs Data.

Qingdao Qilin Food Co Ltd. Cod imports 2006	
Country of Origin	Volume
Greenland	226 639
Netherlands	50 328
Norway	83 273
Russia	3 786 916
<b>Total</b>	<b>4 147 156</b>

Table 38: Nowaco/Qingdao Qilin cod imports 2006 . Source China Customs Data.

Qingdao Qilin Food Co Ltd. Cod imports 2007	
Country of Origin	Volume
Greenland	572 137
Norway	54 163
Russia	858 188
United Kingdom	25 974
<b>Total</b>	<b>1 510 462</b>

Table 39: Nowaco/Qingdao Qilin cod imports 2007. Source China Customs Data.

<sup>9</sup> www.nowaco.com

### 4.7 Nordic Group

The Trondheim based Nordic Group is supplying the American market with North-Atlantic fish –cod, haddock farmed salmon and European Lakefish. Terje Korsnes is chairman of the board. The other members of the board are Kjell Olaf Larsen, Sigurd Larsen. Yngve Myhre, and Morten Hyldborg Jensen. Richard Stien is the CEO. Nordic Group is owned by Transatlantic Partners (69%) and Verdane Capital V B K/S (11%). Transatlantic Partners is owned by Korsnes' investment company, Transatlantic Invest AS. In March 2006, Aker entered an agreement with Korsnes and Stien to sell them their shares in Nordic Group.

Nordic Group markets i.a.cod and haddock in the US under the brand “Fjord Fresh” and “Blue Fjord” – twice frozen “product of China.”



Figure 7: Blue Fjord; Twice-frozen product of China  
Source Terje Korsnes:  
<http://www.seafood.no/page?id=226>

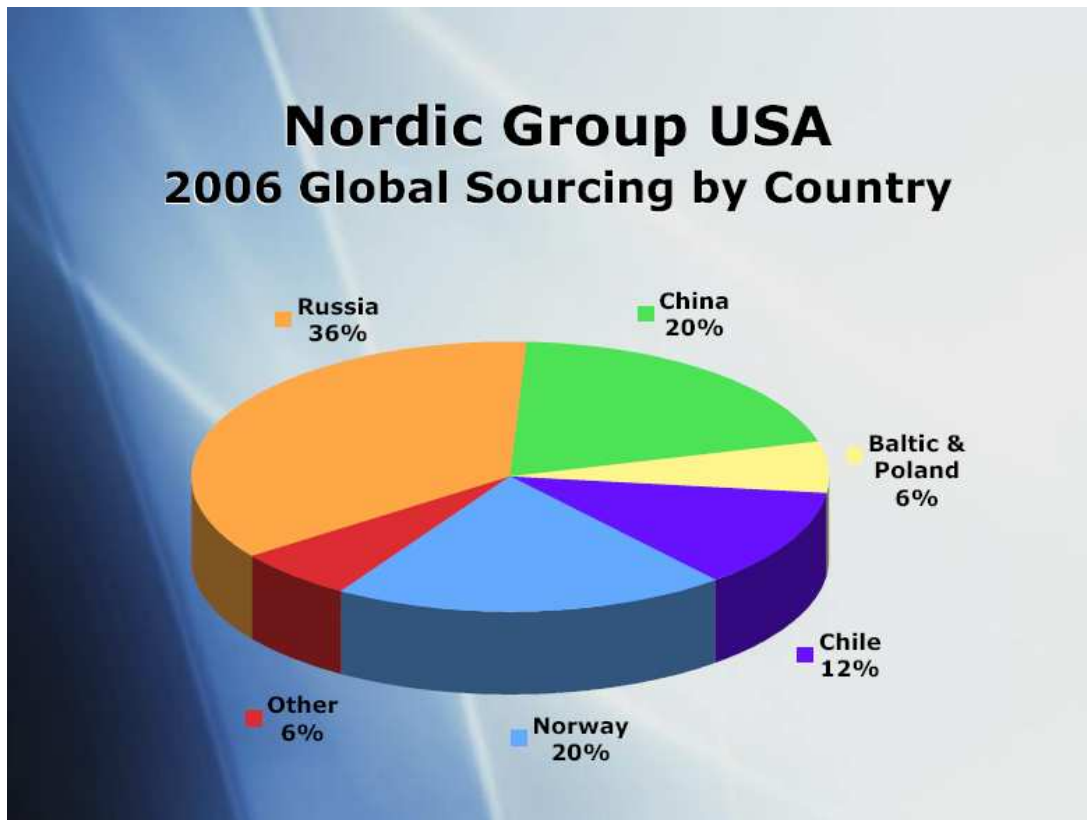


Figure 8“Nordic Group Sourcing”. Source Terje Korsnes: <http://www.seafood.no/page?id=226>

### 4.8 Taixiang Group

Taixiang group is located in Rongcheng, in China’s Shandong Province. The group began in 1994 and presently employs nearly 4,000. It operates several enterprises, including Rongcheng Taizhen Food Co., Rongcheng Aiyuan Food Co., and Rongcheng Taiguang Import and Export Co. The parent company of the group is Taixiang Aquatic Food Co. Ltd.<sup>10</sup>

The company has increased their imports of Atlantic cod and imported 5 000 tonnes of HG cod in 2007. The cod imports from 2007 were as seen below. The New Zealand import is most probably Hoki and some or all of the Dutch cod may be blue whiting. Most of the company’s imports are of the “Processing with Imported Materials” category - they buy the fish, process it and sell it again.

<sup>10</sup> Intrafish, February 2008

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Rongcheng Taixiang Aquatic Food Products Co Ltd. Cod 2007	
Country of Origin	Volume
<b>Netherlands</b>	<b>3 577 537</b>
	599 575
	2 977 962
<b>New Zealand</b>	<b>531 714</b>
<b>Russia</b>	<b>858 592</b>
<b>Total</b>	<b>4 967 843</b>

Table 40: Rongcheng Taixiang Aquatic cod imports 2007. Source China Customs Data.

### 4.9 Huangdao Island and Sanyang Aquatic

The Huangdao is a development area across the Jiaozhou Bay from Qingdao and Eimskip seems to be one of the major developers. More or less at the same time as the landing of Smolninskiy, on Oct, 6th, 2007, Eimskip signed a contract with the Huangdao government. The Icelandic president, Mr Olafur Ragnar Grimson and the Acting Governor of Shandong Province, Mr. Jiang Daming were present at the ceremony. According to the agreement, Eimskip will heavily invest about \$1 billion in Huangdao Area (where logistics and warehousing business is mainly developed) in the future. Meanwhile, Eimskip also signed Letter of Intent with Shandong Luyi Container Transportation Co., Ltd to acquire her 60% shares.<sup>11</sup> Although the area is not yet much developed there are enough facilities to unload the Smolninskiy.

There are three processing companies with address Huangdao. The biggest is Qingdao Sanyang Aquatic. They have more than doubled their cod import from year to year. In 2005 they imported 1 500 tonnes, in 2006 3 000 tonnes and in 2007 they imported 5 100 tonnes of cod from Chile, Denmark, Germany, Greenland, Netherlands, Norway, Spain and Russia in 2007. The Russian fish was routed through the Netherlands and Spain. They also import quite substantial volumes of haddock –1 200 tonnes in 2005, 2 200 in 2006 and 1 400 in 2007.

<sup>11</sup> <http://www.eimskipcoldstore.com/eimskipnin.aspx?id=12&type=1>

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<b>Qingdao Sanyang Aquatic Product Co Ltd</b>	<b>5 122 299</b>
Chile	24 990
Denmark	457 291
Germany	267 227
Greenland (through Denmark)	838 241
Netherlands	842 644
New Zealand (Hoki)	1 862 845
Norway (through the Netherlands)	104 535
Russia (through the Netherlands and Spain)	571 733
Spain (through Belgium and Spain)	152 793
<b>Total</b>	<b>5 122 299</b>

Table 41: Sanyang Aquatic cod imports 2007. Source China Customs Data.

The Qingdao Sanyang runs three processing factories; Huangdao processing factory, Qingdao refrigeration factory and Huanghai refrigeration factory. The company is not found in the list of imports through Qingdao Harbour first half of 2007 (source 7), which strengthens the supposition that they import through Huangdao.

The other two companies, Qingdao Weite and Qingdao Futicco are not registered with cod nor haddock imports.

### 4.10 Qingdao Hainuo Foodstuff Co Ltd

Qingdao Hainuo Foodstuff Co. is a Sino-Japanese joint venture founded in 1999. The company produces mainly saltfish based on pollock and cod. Most of the cod is Pacific cod, but do also import Atlantic cod, mainly from Norway – about 250 tonnes per year. Their cod imports through Qingdao Harbour (source 7) is higher than the official customs record figures. The company does not import haddock.



### 4.11 Unit prices

The importance of unit price in sorting out the different species of cod fish in the import statistics merits a short chapter on the issue. The Qingdao harbour figures give volume and value for the different imports. The value of cod exported from Norway can serve as a comparison; it was US\$ 4 162/MT for the same period according to export statistics from Norway Statistics (SSB).

Of the imports through Qingdao harbour, 11 of 82 are registered with a unit price above US\$ 4000/MT and 30 above US\$ 3000/MT. The average is US\$ 2 105/MT. On average the Atlantic cod prices are higher than that of Pacific cod, but the variety of unit prices e.g. cod from Norway at 1000 or 1500 US\$/kg is about a quarter of the real price.

Some companies are vertically integrated and buy fish from themselves. They are in a position to decide where (in which tax regime, for example) they want to make their profits.

The pollock shipments registered in the Qingdao harbour, show unit prices from 10 000 US\$ per tonne for fish from France, to 500 for fish from the Faroe Islands. Pollock from Norway is imported at 3 000 US per tonne as does pollock from other Atlantic countries. These shipments would be within the range ascribed to cod if sorting imports on unit price. Essentially, the unit prices revealed in the Qingdao harbour files show that unit price is not a very accurate parameter for identifying fish species.

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<b>Company</b>	<b>volume (kg)</b>	<b>value (US\$)</b>	<b>unit price (US\$/MT)</b>	<b>%</b>
Qingdao Hongfu for Blue Ice + Bloomsbury	720 757	789 856	1 096	1,6 %
Trident	11 212 559	14 227 718	1 269	24,7 %
China I&E Corp. Of State Farms – for Icelandic and Joe Qiao (mainly EU market)	408 676	1 939 506	4 746	0,9 %
Longyuan – for EU market	438 527	1 957 966	4 465	1,0 %
Nowaco	1 715 728	729 654	425	3,8 %
Ocean Trawlers Asia	9 333 669	30 325 499	3 249	20,6 %
Yantai M&K - for Saltfish.	73 854	273 260	3 700	0,2 %
Pacific Andes	3 252 543	9 251 359	2 844	7,2 %
Qingdao Hainuo Foodstuffs - Simon Sui - for Saltfish	4 901 344	7 113 372	1 451	10,8 %
Unibond	4 191 935	7 370 771	1 758	9,2 %
Qingdao Tianyuan / Jing International for USA market	76 247	76 247	1 000	0,2 %
Zhengjin	400 281	855 987	2 138	0,9 %
Haifeng	1 106 683	4 102 314	3 707	2,4 %
Qingdao Huaqin	81 728	337 107	4 125	0,2 %
Chang International	257 085	528 759	2 057	0,6 %
New Continental Seafood	569 607	2 785 491	4 890	1,3 %
China Starfish - Sirena	398 573	1 436 239	3 603	0,9 %
unknown	6 229 257	11 410 745	1 832	13,7 %
<b>total</b>	<b>45 369 053</b>	<b>95 511 850</b>	<b>2 105</b>	<b>100,0 %</b>

Table 42: Cod imports to China Jan-June 2007. Sorted on importing company. Source 7

### 4.12 Imports from Norway

It is worth taking a look at the imports from Norway - firstly because the Russian landings in Norway are increasing and secondly because it is useful to prepare for future traceability challenges.

The cod import from Norway over Qingdao harbour first half 2007 was 1 144 tonnes. The total import to China was 4 549 808 in the same period. The Norwegian export to China in the same period was, according to Statistics Norway, 2 293 tonnes. There seems to be a lot of confusion in the various data sources on country of origin and country of departure.

Norwegian export figures may include Russian cod landed in Norway and re-exported to China.

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The imports from Norway range in price from US\$ 3 500/MT to 1000. There are several imports listed with a unit price of US\$ 1 000/MT which might be a spelling mistake or price not being given in the import documents.

Country of origin	volume (kg)	value (US\$)	unit price (US\$/MT)	%
Russia	36 770 512	77 428 389	2 106	81,0 %
USA	5 407 385	12 558 197	2 322	11,9 %
Norway	1 144 640	2 495 452	2 180	2,5 %
Netherlands	568 360	311 208	548	1,3 %
New Zealand	38 000	15 200	400	0,1 %
Japan	389 655	1 036 955	2 661	0,9 %
Greenland	199 154	120 009	603	0,4 %
Denmark	166 113	166 113	1 000	0,4 %
UK	315 875	285 763	905	0,7 %
Portugal	80 024	126 812	1 585	0,2 %
Faeroe Islands	97 146	437 157	4 500	0,2 %
Uruguay	51 412	51 412	1 000	0,1 %
Togo	25 613	112 697	4 400	0,1 %
France	41 063	41 063	1 000	0,1 %
Byelorussia	74 101	325 423	4 392	0,2 %
<b>Total</b>	<b>45 369 053</b>	<b>95 511 850</b>	<b>2 105</b>	<b>100 %</b>

Table 43: Cod imports over Qingdao harbour Jan-June 2007. Sorted on exporting country. Source 7.

### **5. Description of control mechanisms and private control**

*A key condition for exposing illegal fishing and illegal trade is to have good control and description of the legal trade. It is against the background of the legal trade that the illegal becomes visible. The other point to make at the introduction of this chapter is that the control primarily needs to be conducted close to the fishing. Without good records and good control on what is fished, transhipped and landed, no control further down the chain can repair it.*

*There are control mechanisms and/or sources for tracking at all the points in the chain described; the fishing ground, the transhipment, the landing in port, the export and import and the re-export and re-import.*

*Today there are sever problems in using this chain of control, partly because some controls are missing and partly because the reporting systems from these do not follow compatible formats (e.g there is no agreement on what a cod is or what a country of origin is).*

*The NEAFC port state control regime is a major improvement, but has the weakness that fish transports that are not landings are not recorded. It also has the weakness that it is not open information.*

I have not been able to get any interviews with Chinese officials regarding control mechanisms. My impressions of the control systems thus stems from industry players and academics.

The main concern of the Chinese control system has to do with tax. Fish imported for the sole purpose of processing are exempt from custom duties. There are standard yields for different species and products. To avoid paying the tariff, (26%) you must stay above that standard yield. When asked what yield you could have upwards before there was any reaction, on processor said that “*as long as you are below 100% it is ok.*” This control system, thus, works

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on the opposite side than what you need to see if IUU fish enters the process. It is possible that really high yields are being claimed to camouflage IUU fish. This would be necessary if the IUU fish was not counted in the imports. But if the customs process is corrupt and IUU fish are entering China and receiving legal paperwork, e.g. through forged certificates of origin or bribing customs officials to provide legal import paperwork, falsely claiming a high yield wouldn't be necessary.

The fish from the Smolninskiy was imported with papers and the buyers will not have any problem with Chinese controls as long as the fish is not sold in China, but is re-exported. (The fish is imported as "Customs Warehousing Trade"). The only problem would be if a retailer in Europe demanded papers to show that the fish was legally caught since the landings would not be found in the NEAFC port state control regime. But if the processor in China processes maybe 10 000 tonnes of cod per year, it is no problem adding 400 tonnes of IUU fish.

Mixing different sources or batches of raw materials is prohibited under the CIQ (China Inspection and Quarantine) regulations and is controlled quite rigorously, according to the processors. The reason is that there have been several instances of "food scandals" over the last few years and Chinese authorities are eager to avoid more of these. In some larger factories, the CIQ is more or less present all the time or control at a daily basis. In others there is video surveillance. It is said that the control is better in Shandong (Qingdao) than in Dalian.

### **5.1 The EU regulations**

New EU regulations to prevent IUU fishing are expected to come into force in 2010. The regulations are partly inspired by the NEAFC Port State Control Regime (and the other way around) in its dealing with transshipments and landings. Non-EU vessels must give a 72 hour notice before landing in an EU port, and transshipments in EU waters will be prohibited as will transshipment to EU vessels in other waters.

The provisions most important to China are that fish from non-EU countries must come with catch documentation. Chinese processors must thus get the catch documentation with the fish they import and provide it to the buyer when the processed product is exported. For most cod processors, this should not be a problem. Firstly because, as mentioned earlier, they usually process the fish for the one they bought it from. If Findus wants Pacific Andes to process cod,

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they buy it from a vessel or trader in Europe, send it to China and get it back again, with the paperwork attached. If the CIQ regulations already in place in China are followed and documented, this should be sufficient to make the China processed fish comply with the EU-regulations.

### 5.2 Private control and audit systems

The bigger players have their own, internal control systems and some of these are audited by external agents. The following is a short description of some of these.

#### 5.2.1 Det Norske Veritas – Ocean Trawlers

*“Ocean Trawlers has had DNV (Det Norske Veritas) to audit their control system.*

***Sustainability in practice** can be seen as the art of doing business in an interdependent world. Mr. Lagerqvist and Mr. Mansfeld then proceeded to look at how the Group has made the issue of sustainability an integral part of its business model and what results had been achieved. One of the examples that were shared with the audience was of course the Traceability System that was now also audited and verified by DNV” (Ocean Trawlers newsflash)*

The scope of verification for the DNV audit was:

To verify the accuracy, integrity and reliability of OTI’s internal quota control system by reviewing the underlying purchasing documentation to confirm that the Cod & Haddock purchased by OTI during quota year 2006 was within the quotas issued to the relevant fishing companies by Murmanrybvod and that the system was so accurate and reliable and had such integrity so as to form the basis for continued service in OTI’s operations.

a) Review quota control procedures developed by OTI to ensure that:

- Cod and Haddock were purchased within the legal quotas of each relevant fishing company.

b) Review of the evaluation and selection processes of the suppliers to ensure that:

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- fishing vessels used to harvest and transport vessels used to transport catches were not on either of the black lists set up by NEAFC, NAFO or the Norwegian Directory of Fishery.
- that each fishing vessel used by the relevant fishing companies was entrusted with legal and sufficient quotas to supply OTI.
- there was always a designated individual responsible and accountable for continuous monitoring and controlling all purchases against issued quotas.
- there were reliable and transparent records kept ensuring the evaluations.

### c) Review of the procurement process

- Review of the procurement route of the purchased catches to verify that OTI had not received catches exceeding the issued quotas for the relevant fishing companies in OTI's ordinary business routines and the circumstance in general
- Review of which quota control system was used to ensure that purchased quantities were within the issued quotas (Before the order releases)
- Control of documentation, e.g. invoice, goods delivery note, and etc.
- Traceability and record keeping requirements

2. To verify the documentation that Cod & Haddock were purchased within the quota issued by Murmanrybvod:

a) Review of the summary reports on the purchased quantities within relevant quotas (These reports were prepared by OTI)

- List of approved quota given to fishing companies for 2006 by Murmanrybvod
- A complete invoice list with all purchased fish in 2006 by OTI
- List of the invoices for purchased fish quantities during quota year 2006 by OTI
- OTI's purchasing orders and Suppliers' delivery documents or invoice
- Summary report specifying total purchased quantities against issued quotas for each relevant quota holder, so as to confirm that total purchased volumes are all caught on issued quotas

## Trade flow in the Asian seafood business

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b) Complete check of all documentation to verify the accuracy of the summary reports, including invoices, goods delivery evidence, approval quota of each fishing company and summary reports for proofing the purchased Cod & Haddock within the given quota

DNV concluded that the company's internal quota control system has proven its accuracy, integrity and reliability. What this verifies is that OT would most probably find out, if a fishing company was trying to sell them IUU fish. It does not, however, verify that OT cannot have bought IUU fish and integrated it in their processing industry or resold it to other companies.

The audit verifies that the fish bought by OTI, through its regular channels is not IUU fish. As seen above, OT has several trading subsidiaries and traders related to OT. Processing factories in China may have received fish from one of these related companies or they may have bought fish in China and inserted it in their filet production. There is, e.g., nothing in DNV's audit that prevents OT from buying the fish from Smolninskiy and adding it to their legal fish in one of the processing plants in Qingdao.

### 5.2.2 Pacific Andes

Pacific Andes has a similar control system, although it is not, as far as I understand, linked to the relevant countries quota information for the relevant vessel, as the DNV audit for Ocean Trawlers is.

The audit is performed quarterly by Deloitte Touche Tohmatsu in Hong Kong. The report says that:

*The procedures were performed solely to assist you in evaluating whether the Purchase Transactions were substantiated by proper certification and documentation issued by the relevant governments or other relevant authorities to ensure that illegally caught fish do not enter the supply chain of the Pacific Andes (Holdings) Group and are summarised as follows:*



## Trade flow in the Asian seafood business

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(i) *In respect of the Purchase Transactions set out in the Company's purchase log book provided by the management of the Company, we compared the details set out therein with the following documents:*

- *Purchase order or suppliers' sales contract*
- *Supplier's invoice*
- *Packing list (if available)*
- *Bill of lading or mate receipt*
- *Photocopy of certificate of origin issued by respective regulated bodies*
- *Photocopy of health certificate issued by respective regulated bodies*

(ii) *For each of the Purchase Transactions, we checked to copies of the certificates of origin and health certificates, certified as true copies of the originals by the Company's in-house legal counsels.*

### **5.3 Discussion and conclusions**

The private verification systems may guarantee that the fish they have officially bought is not IUU fish. It does not guarantee that the end product is IUU-free. Both companies are eager to get MSC certification for the cod and haddock fisheries. With today's control system an MSC certificate will guarantee the sustainability of the official source of fish, like the audits above, but it has been questioned if it can guarantee that no other fish has been sourced into the production line.

# Trade flow in the Asian seafood business

Attachment 1. CIQ I mport Certificate. Note that field 1.28 identifies Latin name.

27. DEC. 2005 10:55 SHANTEX T.F. CO. 86-532-2971726 NO. 712 P. 2

**中华人民共和国出入境检验检疫**  
**ENTRY-EXIT INSPECTION AND QUARANTINE**  
**OF THE PEOPLE'S REPUBLIC OF CHINA**

ORIGINAL  
 共 3 页第 1 页 Page 1 of 3  
 370100207165008  
 编号 No.

Veterinary certificate to EU

**HEALTH CERTIFICATE FOR IMPORTS OF FISHERY PRODUCTS INTENDED FOR HUMAN CONSUMPTION**

P. R. China

**Part I: Details of dispatched consignment**

1.1. Consignor Name: HIKING GROUP SHANDONG GAINTEX CO., LTD. Address: NO. 51 TAIPING RD., QINGDAO CHINA Postal code: *** Tel No.: ***		1.2. Certificate reference number 370100207165008		1.2.a.	
1.5. Consignee Name: A. ESPERSEN A/S Address: FISKERIVEJ 1, DK-3700 ROENNE, DENMARK Postal code: *** Tel No.: ***		1.3. Central Competent Authority General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China		1.4. Local Competent Authority Qingdao Entry-Exit Inspection and Quarantine Bureau	
1.7. Country of origin	ISO code	1.8. Region of origin	Code	1.9. Country of destination	ISO code
P. R. China	CN	Shandong	***	DENMARK	DK
1.1. Place of origin Name: QINGDAO XIYUAN REFRIGERATE FOOD CO., LTD. Address: XIYUANZHANG VILLAGE, JIMO TONGJI STREET OFFICE, QINGDAO Approval number: 3700/02498		1.12.		1.10.	
1.13. Place of loading Qingdao, China		1.14. Date of departure 28 OCT. 2007		1.16. Entry BIP in EU COPENHAGEN BIP 0921699	
1.15. Means of transport Aeroplane <input type="checkbox"/> Ship <input checked="" type="checkbox"/> Railway wagon <input type="checkbox"/> Road vehicle <input type="checkbox"/> Other <input type="checkbox"/> Identification: OOCL QINGDAO V.23W43 Documentary references: ***		1.17.		1.19. Commodity code (HS code) 03.04	
1.18. Description of commodity FROZEN COD FILLET'S BLOCKS		1.20. Quantity -20236.74-KGS		1.22. Number of packages -676-CTNS	
1.21. Temperature of product Ambient <input type="checkbox"/> Chilled <input type="checkbox"/> Frozen <input checked="" type="checkbox"/>		1.23. Identification of container/Seal number HLXU3740240/EILA0277514		1.24. Type of packaging CARTONS	
1.25. Commodities certified for Human consumption <input checked="" type="checkbox"/>		1.26.		1.27. For import or admission into EU <input checked="" type="checkbox"/>	
1.28. Identification of the commodities		Approval number of establishments		Number of packages	
Species (Scientific name)	Nature of commodity	Treatment type	QINGDAO XIYUAN REFRIGERATE FOOD CO., LTD. 3700/02498	-676-CTNS	-20236.74-KGS
GADUS MORHUA	WILD ORIGIN	FROZEN			

中华人民共和国出入境检验检疫机关及其工作人员或代表不承担签发本证书的任何法律责任。No financial liability with respect to this certificate shall attach to the entry-exit inspection and quarantine authorities of the P. R. of China or to any of its officers or representatives.

**B 2470611** [ee-2(2000, 1.1)]

# Trade flow in the Asian seafood business

## Attachment 2. Customs Import Declaration

2-32

Customs Import Declaration

进料加工专用

中华人民共和国海关进口货物报关单



预录入编号:

海关编号: (Customs Code) 00422531

进口口岸 (Port of Import)		备案号 (Manual No.)		进口日期 (Date)		申报日期 (Declaration Date)	
经营单位 (Processor)		运输方式 (Method of Transportation)		运输工具名称 (Vessel Name)		提单号 (B/L No.)	
收货单位 (Consignee)		贸易方式		贸易性质		征税率	
许可证号 (Certificate No.)		起运国(地区) (Country of Origin)		装运港 (Port of Loading)		境内目的地 (Destination)	
批准文号 (Authorization No.)		成交方式 (Trade Terms)		运费 (Freight)		保费 (Insurance)	
合同协议号 (Contract No.)		件数 (No. Package)		包装种类 (Type of Packing)		毛重(公斤) (Gross Weight)	
集装箱号 (Container No.)		随附单据 (Attached Documents)		用途 (Purpose)		净重(公斤) (Net Weight)	
标记唛码及备注 (Remark)							
项号	商品编号	商品名称、规格型号	数量及单位	原产国(地区)	单价	总价	币制 税率
	(HS Code)	Product Description	Quantity	Country of Origin	Price	Amount	
税费征收情况 (Duty Declaration)							
录入员	录入单位	兹声明以上申报无讹并承担法律责任			海关审单批注及放行日期(签章)		
报关员					审单	审核	
单位地址		申报单位(签章)			征税	统计	
邮编	电话	提单日期			查验	放行	

Sample

## Trade flow in the Asian seafood business

### Attachement 3: Chinese HS codes for fish

Chinese HS codes		
HS code	Name	English Name
030411000 0	鲜或冷的剑鱼(Xiphias gladius)鱼片或鱼肉(不论是否绞碎)	swordfish - fresh or chilled, fillet or meat
030412000 0	鲜或冷的南极犬牙鱼(Toothfish,Dissostichus spp.)鱼片或鱼肉(不论是否绞碎)	toothfish - fresh or chilled, fillet or meat
030419001 0	其他鲜或冷的濒危鱼片及其他鱼肉(不论是否绞碎)	other endangered - fresh or chilled, fillet or meat
030419009 0	其他鲜或冷的鱼片及其他鱼肉(不论是否绞碎)	other - fresh or chilled, fillet or meat
030421000 0	冻剑鱼(Xiphias gladius)片(不论是否绞碎)	frozen swordfish fillet
030422000 0	冻南极犬牙鱼(Toothfish,Dissostichus spp.)片(不论是否绞碎)	frozen toothfish fillet
030429100 0	冻罗非鱼片(不论是否绞碎)	frozen tilapia fillet
030429210 0	冻斑点叉尾鮰鱼片(不论是否绞碎;斑点叉尾鮰鱼亦称沟鲶,属于鲶形目、叉尾鮰科、叉尾鮰属)	frozen [catfish or other farmed] fillet
030429290 0	冻的其他叉尾鮰鱼片(不论是否绞碎)	frozen [catfish or other farmed] fillet
030429901 0	冻的其他濒危鱼类鱼片(不论是否绞碎)	other endangered frozen fillets
030429909 0	其他冻鱼片(不论是否绞碎)	other frozen fillets
030491000 0	其他冻剑鱼(Xiphias gladius)肉(不论是否绞碎)	frozen swordfish meat
030492000 0	其他冻南极犬牙鱼(Toothfish,Dissostichus spp.)肉(不论是否绞碎)	frozen toothfish meat
030499001 0	濒危鱼类其他冻鱼肉(不论是否绞碎)	frozen meat of endangered species
030499009 0	其他冻鱼肉(不论是否绞碎)	other frozen fish meat
03031100	冻红大马哈鱼(鱼肝及鱼卵除外)	frozen sockeye
03031900	其他冻大马哈鱼(鱼肝及鱼卵除外)	frozen other salmon
03032100	冻鳟鱼(鱼肝及鱼卵除外)	frozen trout
03032210	冻大西洋鲑鱼(鱼肝及鱼卵除外)	frozen Atlantic salmon
03032220	冻多瑙哲罗鱼(鱼肝及鱼卵除外)	frozen Danube salmon?
030329001 0	冻川陕哲罗鲑(鱼肝及鱼卵除外)	frozen river fish [from Western China]
030329002	冻秦岭细鳞鲑(鱼肝及鱼卵除外)	frozen river fish [from

## Trade flow in the Asian seafood business

0		Western China]
030329009	其他冻鲑鱼(鱼肝及鱼卵除外)	Other frozen salmon
0		
03033110	冻格陵兰庸鲽鱼(鱼肝及鱼卵除外)	frozen Greenland halibut
03033190	其他冻庸鲽鱼(鱼肝及鱼卵除外)	other frozen halibut
03033200	冻鲽鱼(鱼肝及鱼卵除外)	frozen plaice
03033300	冻鲷鱼(鱼肝及鱼卵除外)	frozen sole
03033900	其他冻比目鱼(鱼肝及鱼卵除外)	frozen flatfish nes
03034100	冻长鳍金枪鱼(鱼肝及鱼卵除外)	frozen albacore (or longfinned) tunas
03034200	冻黄鳍金枪鱼(鱼肝及鱼卵除外)	frozen yellowfin
03034300	冻鲣鱼(鱼肝及鱼卵除外)	frozen skipjack or striped bellied bonito
03034400	冻大眼金枪鱼(鱼肝及鱼卵除外)	frozen bigeye
03034500	冻蓝鳍金枪鱼(鱼肝及鱼卵除外)	frozen bluefin
03034600	冻南金枪鱼(鱼肝及鱼卵除外)	frozen southern bluefin
03034900	其他冻金枪鱼(鱼肝及鱼卵除外)	frozen tunas nes
030351000	冻鲱鱼(大西洋鲱鱼、太平洋鲱鱼),但鱼肝及鱼卵除外	frozen Atl or Pac herring
0		
030352000	冻鳕鱼( ( 大西洋鳕鱼、太平洋鳕鱼、格陵兰鳕鱼 ) , 鱼肝及鱼卵除外	frozen cod
0		
03036000		former code for cod
030361000	冻剑鱼(Xiphias gladius) , 鱼肝及鱼卵除外	frozen swordfish
0		
030362000	冻南极犬牙鱼(Toothfish,Dissostichus spp.) , 鱼肝及鱼卵除外	frozen toothfish
0		
03037100	冻沙丁鱼、黍鲱鱼(鱼肝及鱼卵除外)	frozen sardines, bristling or sprat
03037200	冻黑线鳕鱼(鱼肝及鱼卵除外)	frozen haddock
03037300	冻绿青鳕鱼(鱼肝及鱼卵除外)	frozen saithe
03037400	冻鲭鱼(鱼肝及鱼卵除外)	frozen mackerel
030375001	冻鲸鲨、噬人鲨、姥鲨(鱼肝及鱼卵除外)	frozen endangered species of shark
0		
030375009	其他冻角鲨及其他鲨鱼(鱼肝及鱼卵除外)	other frozen sharks
0		
030376001	冻花鳗鲡(鱼肝及鱼卵除外)	some kind of frozen eel ?
0		
030376009	其他冻鳗鱼(鱼肝及鱼卵除外)	other kinds of frozen eel
0		
03037700	冻尖吻鲈鱼(鱼肝及鱼卵除外)	frozen seabass

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03037800	冻狗鳕鱼(无须鳕鱼、长鳍鳕鱼 ; 鱼肝及鱼卵除外)	frozen hake
03037910	冻带鱼(鱼肝及鱼卵除外)	frozen ribbonfish (Trichurus)
03037920	冻黄鱼(鱼肝及鱼卵除外)	frozen yellow croaker
03037930	冻鲳鱼(鱼肝及鱼卵除外)	frozen butterfish
03037940	冻罗非鱼(鱼肝及鱼卵除外)	frozen tilipia
03037990	其他冻鲈鱼(鱼肝及鱼卵除外)	other frozen seabas
1		(?)
030379901	其他未列名濒危冻鱼(鱼肝及鱼卵除外)	other frozen
0		[unnamed] endangered species
030379909	其他未列名冻鱼(鱼肝及鱼卵除外)	other frozen
0		[unnamed]
030380001	冻濒危鱼种的肝及鱼卵	frozen livers and eggs
0		of endangered species
030380009	其他冻鱼肝及鱼卵	frozen livers and eggs
0		



## Trade flow in the Asian seafood business

### Attachment 4: 25 biggest Cod and Haddock importers 2006 and 2007 (01-08)

	HADDOCK 2006	HADDOCK 07 (01-08)	COD 2006	COD 07 (01-08)
SHANDONG JINYI TEXTILE CO. LTD.	7 624 015	5 488 843	20 451 516	12 612 748
DALIAN OCEAN FISHERY IMP. & EXP. CORP.	451 070	397 843	4 180 369	6 944 087
DALIAN SANXING SEA PRODUCT CO LTD				4 232 708
SHANDONG ORIENT OCEAN TECHNOLOGIES STOCK CO LTD				4 160 561
RUSHAN HUAGREAT AQUATIC PRODUCTS CO., LTD.			3 873 510	4 122 793
DALIAN HUA LIAN FOOD CO LTD		400 718		3 845 822
QING DAO DA XI YANG YONG XIN FOOD CO LTD	1 249 340	769 014	1 607 162	2 971 589
YANTAI FANG DAN FOOD CO LTD	648 692	508 141	2 996 982	2 703 710
YAN TAI LIAN FA FISHERY CO LTD	1 620 944	839 642	3 365 913	2 659 282
DA LIAN XIN HAI YANG FOOD CO LTD	1 779 924		6 001 505	2 579 869
QINGDAO QILIN FOOD CO LTD			4 501 122	2 114 174
QINGDAO DA XI YANG YONG JIA FOOD CO LTD	404 657	226 279	3 278 064	2 039 230
DA LIAN TAI YANG FISHERY FOOD CO LTD			2 041 222	1 978 184
QINGDAO SANYANG AQUATIC PRODUCT CO LTD				1 877 149
YANTAI JINGANG AQUATIC PRODUCT CO LTD				1 674 858
RIZHAO CHANGHUA AQUATIC FOODSTUFF CO LTD			2 205 001	1 466 161
DALIAN TIANBAO GREEN FOOD STOCK CO LTD			1 746 528	1 403 270
DALIAN HONGDAO SEA FOOD CO LTD				1 254 616
QING DAO COMBINED HUA TONG TRADE CO LTD	2 094 376	3 292 630	3 888 917	1 212 803
QINGDAO HAODA INDUSTRY CO. LTD.				1 072 392
LIAONING WANRONG TRADING CO LTD				1 044 629
XINXING FOOD (QINGDAO) CO LTD				1 012 435
QINGDAO HUA SHI FOOD CO LTD			3 806 414	980 300
YANTAI SHUI XING FOOD CO LTD				917 801
RUSHAN CITY HUANYU FISHERY FOOD CO LTD	3 956 288	1 918 336		
QINGDAO JIN BEIFOOD CO LTD	2 830 189	1 322 398	2 691 542	
QINGDAO SANYANG AQUATIC PRODUCT CO LTD	2 238 443	804 418	3 664 727	
SHANDONG ORIENT OCEAN TECHNOLOGIES STOCK CO LTD	1 980 292	3 643 462	6 212 250	
QINGDAO LONGYUAN AQUATIC PRODUCTS CO.,LTD.	1 531 422	488 327	2 206 949	

DALIAN XU HE LIAN YANG FOOD CO. LTD.	1 044 703	706 955		
QINGDAO ZHONGKEN IMPORT & EXPORT COMPANY	850 970	512 547		
QING DAO HONG FU YING SHUI FOOD CO LTD	628 306			
QINGDAO ZHENGJIN GROUP IMP&EXP CO. LTD	603 110	290 531		
QING DAO RUN YU FOOD CO LTD	601 112	283 546		
QINGDAO FUSHENG FOOD CO LTD	565 604			
QINGDAO YIJIA IMP & EXP CO LTD	411 306	233 548		
LIAONING WANRONG TRADING CO LTD	381 914			
DALIAN TONG YUAN FOOD CO LTD	369 550	286 729		
DALIAN YINJIE FOOD CO LTD	363 780	293 988		
YANTAI TANGMU AQUATIC PRODUCTS CO LTD	351 624			
SHANDONG MEIHEER NÜ TRADING CO LTD	339 973			
YAN TAI LIAN FA FISHERY CO LTD		1 826 616		
QINGDAO HUA KAI AQUATIC PRODUCT CO LTD		626 505		
QING DAO LIAN YANG FOOD PROCESSING CO LTD		586 750		
QINGDAO SAN MU AQUATIC PRODUCT CO. LTD.		429 521		
RI ZHAO RONG XING FOOD CO LTD		330 719		
RUSHAN ZHENGYANG FOOD CO LTD			3 188 158	
QINGDAO GUOXING FOOD CO. LTD.			2 528 954	1 259 120
DALIAN HUACHENG AQUATIC PRODUCTS CO LTD			2 318 111	
PENGLAI LIMING SEA FOOD CO LTD			2 108 096	
WEIHAI DONGYUAN FOOD CO LTD			1 880 668	
DA LIAN FU HAI CHANG AQUATIC PRODUCTS CO LTD			1 757 137	
WEIHAI WEIDONGRI COMPREHENSIVE FOOD CO., LTD.			1 640 914	
QINGDAO DA XI YANG YONG XIN FOOD CO LTD				
<b>sum of above (25 biggest imp each species/year)</b>	<b>34 921 604</b>	<b>26 508 006</b>	<b>94 141 731</b>	<b>68 140 291</b>
<b>total import</b>	<b>37 196 397</b>	<b>27 889 387</b>	<b>127 811 543</b>	<b>89 890 952</b>
<b>adjusted for 12 months</b>	<b>37 196 397</b>	<b>41 834 081</b>	<b>127 811 543</b>	<b>134 836 428</b>

## Trade flow in the Asian seafood business

Atlantic Cod		Attachment 5: Individual imports of Cod over Qingdao harbour Jan-June 2007			
Chinese name, company	Receiver	Buyer	重量(kg)	Country	货物总值 ( US\$ )
青岛红福海洋食品有限公司	QING DAO HONG FU AQUATIC PRODUCTS CO LTD	Blue Ice + Bloomsbury	166 113	DK	166 113
青岛红福英水食品有限公司	QING DAO HONG FU YING SHUI FOOD CO LTD	Blue Ice + Bloomsbury	17 929	Norway	17 929
青岛红福海洋食品有限公司	QING DAO HONG FU AQUATIC PRODUCTS CO LTD	Blue Ice + Bloomsbury	72 120	Greenland	72 120
青岛福生食品有限公司	QINGDAO FUSHENG FOOD CO LTD	Trident	300 000	NL	162 000
青岛福生食品有限公司	QINGDAO FUSHENG FOOD CO LTD	Trident	194 870	UK	104 255
青岛中垦进出口有限公司	QINGDAO ZHONGKEN IMPORT & EXPORT COMPANY	China I&E of State Farms - Icelandic for EU market	120 583	Norway	594 522
青岛中垦进出口有限公司	QINGDAO ZHONGKEN IMPORT & EXPORT COMPANY	China I&E of State Farms - Icelandic for EU market	288 093	Russia	1 344 984
青岛隆源水产品有限公司	QINGDAO LONGYUAN AQUATIC PRODUCTS CO.,LTD.	Longyuan - EU	25 613	TOGO	112 697
青岛隆源水产品有限公司	QINGDAO LONGYUAN AQUATIC PRODUCTS CO.,LTD.	Longyuan - EU	50 356	White Russia	216 464
青岛隆源水产品有限公司	QINGDAO LONGYUAN AQUATIC PRODUCTS CO.,LTD.	Longyuan - EU	362 558	Russia	1 628 805
青岛麒麟食品有限公司	QINGDAO QILIN FOOD CO LTD	Nowaco	127 034	Greenland	47 889
新华锦集团山东锦宜纺织有限公司	HIKING GROUP SHANDONG GAINTEX CO. LTD.	OT Group	77 105	Norway	128 535
新华锦集团山东锦宜纺织有限公司	HIKING GROUP SHANDONG GAINTEX CO. LTD.	OT Group	97 146	Faeroe	437 157
新华锦集团山东锦宜纺织有限公司	HIKING GROUP SHANDONG GAINTEX CO. LTD.	OT Group	9 010 428	Russia	29 095 857
青岛西苑冷冻食品有限公司	QINGDAO XIYUAN REFRIGERATE FOOD CO LTD	OT Group/SSL	148 990	Russia	663 950
烟台方丹食品有限公司	YANTAI FANG DAN FOOD CO LTD	Yantai M&K - OTA	73 854	Russia	273 260
裕富食品(青岛)有限公司	YU FU FOODSTUFF (QINGDAO) CO LTD	PA	25 666	Norway	89 831
太平洋恩利食品有限公司	PACIFIC ANDES	PA	25 113	Norway	87 896
青岛浩大实业有限公司	QINGDAO HAODA INDUSTRY CO. LTD.	PA - Lao Guan	23 745	White Russia	108 959
青岛海诺食品有限公司	QINGDAO HAINUO FOOD CO LTD	Qingdao Hainuo. Simon Sui - Saltfish	313 349	Norway	520 820
青岛长荣食品有限公司	QINGDAO EVERGREEN	Jerry Chang - Drevik	47 600	Russia	114 240
青岛天源水产食品有限公司	QINGDAO TIANYUAN AQUATIC PRODUCTS CO LTD	USA	76 247	Norway	76 247
青岛正进海青水产有限公司	QINGDAO ZHENGJIN HAIQING AQUATIC CO.,LTD	Zhengjin	58 444	Norway	128 576
青岛正进集团进出口有限公司	QINGDAO ZHENGJIN GROUP IMP&EXP.CO.,LTD	Zhengjin	106 932	Norway	235 250
青岛金岛海珍品养殖有限公司	QINGDAO HAIZHEN	New Continental Seafood	51 412	URUGUAY	51 412
青岛冷丰食品有限公司	QINGDAO HAIFENG FOOD CO.,LTD		268 360	Netherlands	149 208
青岛金贝食品有限公司	QINGDAO JIN BEI FOOD CO LTD	Haifeng - Chen	8 119	Norway	26 794



## Trade flow in the Asian seafood business

		MuLin			
新华锦集团山东海润工艺品进出口有限公司	HIKING GROUP		59 505	Russia	267 773
青岛润宇食品有限公司	QING DAO RUN YU FOOD CO LTD		106 169	Norway	257 941
青岛广通食品有限公司	QINGDAO GUANGTONG FOOD CO LTD		108 672	Norway	172 971
青岛碧湾海产有限公司	QINGDAO BIWAN AQUATIC CO LTD		28 027	Norway	28 027
青岛碧湾海产有限公司	QINGDAO BIWAN AQUATIC CO LTD		41 063	France	41 063
青岛大西洋永佳食品有限公司	QINGDAO DA XI YANG YONG JIA FOOD CO LTD	Unibond	121 005	UK	181 508
青岛大西洋永佳食品有限公司	QINGDAO DA XI YANG YONG JIA FOOD CO LTD	Unibond	80 024	Portugal	126 812
青岛大西洋永信食品有限公司	QING DAO DA XI YANG YONG XIN FOOD CO LTD	Unibond	72 285	Norway	130 113
青岛大西洋永信食品有限公司	QING DAO DA XI YANG YONG XIN FOOD CO LTD	Unibond	1 577 673	Russia	2 827 846
青岛大西洋永佳食品有限公司	QINGDAO DA XI YANG YONG JIA FOOD CO LTD	Unibond	1 319 222	Russia	2 374 600
			<b>15 651 424</b>		<b>43 064 424</b>

<b>Pacific Cod</b>					
青岛红福海洋食品有限公司	QING DAO HONG FU AQUATIC PRODUCTS CO LTD	Blue Ice + Bloomsbury	111 836	USA	89 470
青岛红福英水食品有限公司	QING DAO HONG FU YING SHUI FOOD CO LTD	Blue Ice + Bloomsbury	265 259	USA	359 494
青岛福生食品有限公司	QINGDAO FUSHENG FOOD CO LTD	Blue Ice + Bloomsbury	38 000	New Zealand	15 200
青岛福生食品有限公司	QINGDAO FUSHENG FOOD CO LTD	Blue Ice + Bloomsbury	49 500	Japan	69 530
青岛华青进出口有限公司	QINGDAO HUAQING IMP&EXP.CO.,LTD	Eugene Li	81 728	USA	337 107
青岛长荣食品有限公司	QINGDAO EVERGREEN	Jerry Chang - Drevik	111 235	USA	267 144
青岛佳洁食品有限公司		Jerry Chang - Drevik	98 250	USA	147 375
青岛中佳食品有限公司	QINGDAO ZHONG JIA FOOD CO LTD	New Continental Seafood	175 335	USA	883 820
青岛新大地食品有限公司	QINGDAO NEW CONTINENT SEAFOOD CO LTD	New Continental Seafood	394 272	USA	1 901 671
青岛麒麟食品有限公司	QINGDAO QILIN FOOD CO LTD	Nowaco	693 932	USA	343 318
青岛罐头食品厂有限公司	QINGDAO CANNING & FOODSTUFF CO LTD	PA	1 251	USA	457
山东省机械进出口集团公司	SHANDONG MACHINERY IMP&EXP CO LTD	PA	111 163	USA	389 072
裕富食品(青岛)有限公司	YU FU FOODSTUFF (QINGDAO) CO LTD	PA	52 246	USA	182 861
欣兴食品(青岛)有限公司	XIN XIN FOODSTUFF (QINGDAO) CO LTD	PA	256 310	USA	973 978
太平洋恩利食品有限公司	PACIFC ANDES	PA	282 635	USA	1 009 807
裕富食品(青岛)有限公司	YU FU FOODSTUFF (QINGDAO) CO LTD	PA	119 896	Russia	414 514

## Trade flow in the Asian seafood business

<b>Haddock</b>		<b>Attachment 6: Individual imports of Haddock over Qingdao harbour Jan-June 2007</b>			
Chinese name, company	Receiver	Buyer	重量(kg)	Country	货物总值 ( US \$ )
青岛隆源水产品有限公司	QINGDAO LONGYUAN AQUATIC PRODUCTS CO.,LTD.	Longyuan - EU	22 958	ICELAND	79 718
青岛隆源水产品有限公司	QINGDAO LONGYUAN AQUATIC PRODUCTS CO.,LTD.	Longyuan - EU	100 732	NORWAY	337 209
青岛隆源水产品有限公司	QINGDAO LONGYUAN AQUATIC PRODUCTS CO.,LTD.	Longyuan - EU	211 378	RUSSIA	739 086
青岛西苑冷冻食品有限公司	QINGDAO XIYUAN REFRIGERATE FOOD CO LTD	<b>OT Group/SSL</b>	75 384	RUSSIA	251 172
青岛中垦进出口有限公司	QINGDAO ZHONGKEN IMPORT & EXPORT COMPANY	China I&E of State Farms - Icelandic for EU market	25 541	NORWAY	90 415
青岛中垦进出口有限公司	QINGDAO ZHONGKEN IMPORT & EXPORT COMPANY	China I&E of State Farms - Icelandic for EU market	289 737	RUSSIA	1 090 763
青岛正进海青水产有限公司	QINGDAO ZHENGJIN HAIQING AQUATIC CO.,LTD	Zhengjin	4 438	NORWAY	6 657
新华锦集团山东锦宜纺织有限公司	HIKING GROUP SHANDONG GAINTEX CO. LTD.	<b>OT Group</b>	11 691	FAEROE	38 580
新华锦集团山东锦宜纺织有限公司	HIKING GROUP SHANDONG GAINTEX CO. LTD.	<b>OT Group</b>	3 193 596	RUSSIA	10 632 305
青岛益佳通商进出口有限公司	QINGDAO YIJA Towshang Import and Export Comp		105 326	NORWAY	136 924
青岛益佳通商进出口有限公司	QINGDAO YIJA Towshang Import and Export Comp		79 338	RUSSIA	103 139
青岛中佳食品有限公司	QINGDAO ZHONG JIA FOOD CO LTD	New Continental	109 489	NORWAY	371 557
青岛金贝食品有限公司	QINGDAO JIN BEI FOOD CO LTD	ChengMu Lin -	433 101	NORWAY	962 209
		Haifeng			
青岛金贝食品有限公司	QINGDAO JIN BEI FOOD CO LTD	ChengMu Lin - Haifeng	50 916	PORTUGAL	176 677
青岛金贝食品有限公司	QINGDAO JIN BEI FOOD CO LTD	ChengMu Lin - Haifeng	387 708	RUSSIA	845 410
青岛润宇食品有限公司	QING DAO RUN YU FOOD CO LTD		62 944	NORWAY	195 126
青岛润宇食品有限公司	QING DAO RUN YU FOOD CO LTD		240 571	RUSSIA	752 759
青岛连洲食品有限公司			415 857	NORWAY	610 827
青岛连洲食品有限公司			119 889	RUSSIA	179 835
青岛广通食品有限公司	QINGDAO GUANGTONG FOOD CO LTD		52 438	RUSSIA	194 584
青岛大西洋永信食品有限公司	QING DAO DA XI YANG YONG XIN FOOD CO LTD		14 331	NORWAY	22 930
青岛大西洋永信食品有限公司	QING DAO DA XI YANG YONG XIN FOOD CO LTD		548 192	RUSSIA	873 909
青岛元强食品有限公司			25 852	RUSSIA	89 836
青岛三木水产有限公司	Qingdao San Mu Aquatic Product Co. Ltd		25 068	RUSSIA	20 054
青岛三木水产有限公司	Qingdao San Mu Aquatic Product Co. Ltd		175 301	RUSSIA	140 241
青岛正进集团进出口有限公司	QINGDAO ZHENGJIN GROUP IMP&EXP.CO.,LTD	Zhengjin	290 531	NORWAY	710 903
新华锦集团山东海润国际有限公司			13 728	ICELAND	30 888
青岛大西洋永佳食品有限公司	QINGDAO DA XI YANG YONG JIA FOOD CO LTD	Unibond	51 124	NORWAY	81 798
青岛大西洋永佳食品有限公司	QINGDAO DA XI YANG YONG JIA FOOD CO LTD	Unibond	86 109	PORTUGAL	137 774
青岛大西洋永佳食品有限公司	QINGDAO DA XI YANG YONG JIA FOOD CO LTD	Unibond	89 046	RUSSIA	142 474
山东东方海洋科技股份有限公司			77 934	NORWAY	179 249
山东永康进出口有限公司	SHANDONG YONGKANG IMP&EXP CO LTD		445	RUSSIA	1 424
<b>Total</b>			<b>7 390 693</b>		<b>20 226 432</b>