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NOTE

From: Commission Services
To: Working Party on Internal and External Fisheries Policy
Subject: Assessment of the ex-post and ex-ante evaluation of the Protocol to the Fisheries Partnership Agreement between the European Union and Greenland
- Working document and Final Report

Delegations will find attached the Final Report parts 4-6 on the abovementioned subject.

This document is circulated in view of the Working Party on 18 July 2014.

Assessment of the ex-post and ex-ante evaluation of the Protocol to the Fisheries Partnership Agreement between the European Union and Greenland
Final Report parts 4-6

DG MARE 2011/01/Lot 3 – SC13

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4 The domestic marine fishing sector in Greenland

4.1 Domestic catching sector

The most important Greenlandic fisheries are trawl fisheries for coldwater shrimp (*Pandalus borealis*), Greenland halibut (*Reinhardtius hippoglossoides*), cod (*Gadus morhua*) and redfish (*Sebastes sp.*) (see Table 4:1). Total landed value in 2012 amounted to around EUR 310 million. In 2012 the total catch by the offshore fleet was valued at around EUR 200 million, with the inshore catch in 2012 valued at EUR 110 million, with Greenland halibut accounting for 42 %. Within the important inshore halibut fishery, the largest TAC, catch shifted from the Eastern Greenland fishery where biomass has been reducing to Western Greenland with an increasing biomass.

Shrimp still represents 41 % of the total value of landings despite the significantly reduced quotas in recent years and the fact that stocks have shifted north, further away than the large shrimp processing centres. Lumpfish is an increasingly significant fishery (for roe) representing 7 % of the total value in 2012.

Table 4:1: total landings into Greenland (in '000 tonnes)

	2007	2008	2009	2010	2011
Fish total	54	40	37	43	47
Greenland cod	0.6	0.6	0.3	0.3	0.2
Wolf-fish	0.9	1.2	1.1	1.2	0.8
Greenland halibut	21.6	19.2	20.6	22.9	23.4
Redfish	0.3	0.2	0.2	0.2	0.1
Roundnose grenadier	9.6	0	0	0	0
Lumpfish	8.8	6.4	6.6	8.6	11.1
Atlantic cod	11.7	12.3	7.8	9.4	11.1
Mackerel	0	0	0	0	0
Shellfish total	65	69	66	57	57
Northern prawn	62.6	67.2	62.6	54.2	55.2
Snow crab	2.2	2.2	3.1	2.8	1.8
Total	119	109	103	100	104

Source: Statistics Greenland, 2013. Note: breakdown for 2012 not available at time of writing. Figures are for processed weights landed

Mackerel is an emerging fishery with over 5 000 tonnes caught by vessels contracted by Greenland in the 2012 exploratory fishery, but this grew to 53 000 tonnes in 2013 (with catches sold to a Chinese factory vessel) and 100 000 tonnes is declared for 2014. There were applications that amounted to 288 000 tonnes in 2014, showing the increasing interest in the fishery from Greenlandic operators¹³¹. A limited scientific survey in 2013 estimated that around 5.7 % of the total biomass of the North East Atlantic stock was within Greenland's EEZ. A more extensive survey is planned for 2014, which MFHA expects will show that further growth in the mackerel fishery is possible.

Greenland's catching sector employed 1 238 full-time equivalent (FTE) fishermen in 2011¹³², with a significant decline due to a decline in vessel numbers in the offshore fishery. The sector is clearly delineated between 'inshore' and 'offshore' fisheries. The offshore fleet operates within Greenlandic waters outside three nautical

¹³¹ MFHA pers. comm., 13 February 2014.

¹³² Statistics Greenland, 2013.

miles as well as in the waters of Iceland and the Faroe Islands and in the Barents Sea. Most of the distant-water catches are offloaded/transhipped rather than landed in Greenland.

The offshore fleet consists of 11 large vessels (10 trawlers of over 1 000 tonnes and one smaller vessel using traps for snow crab) (Table 42). This is a significant decrease, down from 47 vessels in 2007, with the large modern freezer trawlers remaining. Most are owned by Greenland's two largest fishing groups, Royal Greenland (100 % state owned) and Polar Seafoods (privately owned). Six vessels are focused on the shrimp fishery, four on Greenland halibut, whitefish and redfish, and one targets snow crab. Royal Greenland owns three of these large offshore vessels, with part ownership of two further offshore vessels, and a number of inshore vessels. Greenland companies have sold and purchased vessels with other Greenland companies (to the extent that quota ownership limits allow) and internationally, particularly with Iceland.

Table 4:2: Greenland offshore fleet

Name of vessel	GT	kW	Target species
AKAMALIK	3 199	6 610	Shrimp
TIMMIARMIUT	1 775	2 730	Shrimp
REGINA C	2 772	5 516	Shrimp
MARKUS	3 377	5 800	Shrimp
QAQQATSIAQ	2 772	5 516	Shrimp
NATAARNAQ	2 838	4 860	Shrimp
ILIVILEQ	2 847	2 425	Greenland halibut, cod, haddock, saithe, redfish
SISIMIUT	2 373	3 000	Greenland halibut, cod, haddock, saithe, redfish
POLAR NANOQ	2 525	5 296	Greenland halibut, cod, haddock, saithe, redfish
TUUGAALIK	2 652	4 542	Greenland halibut, redfish
SONIA KIIL II	141	415	Snow crab
Total	10 538	15 678	

Source: MFHA

Considering all the companies in Greenland that are wholly or partly owned by these two groups, Royal Greenland and Polar Seafoods account for 77 % of the production value of the Greenland fishery (46 % + 31 % respectively)¹³³. With the recent economic crisis affecting export markets and shrimp quotas reducing, the big companies have been struggling to maintain operations, and they received a EUR 67 million bailout from the Government of Greenland in 2009¹³⁴ and sold off a number of overseas processing facilities over the last three years¹³⁵.

Royal Greenland and Polar Seafoods fish for cold-water shrimp, Greenland halibut and cod with some limited fishing for snow crab, capelin and Atlantic halibut within Greenland's EEZ. The companies also operate in the Norwegian sector of the Barents Sea catching cod, haddock and saithe (these catches are not landed back in Greenland). Arctic Prime is a third significant fishing company operating from the South of Greenland with a smaller proportion of Greenland offshore and Barents Sea quota. An Icelandic company recently purchased Arctic Prime.

¹³³ Copenhagen Economics, 2013.

¹³⁴ Fisheries subsidies blog, 2009.

¹³⁵ Royal Greenland, pers. comm., 11 February 2014.

Whilst there are clear signs that the offshore shrimp fishery is now in good financial condition (following its consolidation into a much smaller fleet of large, efficient, modern vessels), the profitability of the inshore fleet and onshore processing in Greenland remains low, with a number of structural disadvantages (low efficiency, remoteness, too many vessels for profitable and sustainable exploitation, and a lack of alternative employment possibilities)¹³⁶. Much of the inshore fleet, numbering 2 282 vessels in 2013¹³⁷, are small open boats owned by Greenlanders undertaking fishing and hunting at subsistence levels. Inshore fisheries mainly occur in the coastal waters of Western Greenland rather than off the more exposed east coast.

KNAPK, the Fishers and Hunters association, estimates that there are 117 vessels over six metres in length and more than 800 below six metres fishing in the key Greenland halibut fishery. The Greenland halibut fishery quota is divided between these two groups of vessels of different sizes, and there is currently extensive debate as the over 6 m quota is not fully utilised, while the inshore quota for vessels under six metres was exceeded last year resulting in the fishery being closed in September. Monthly allocations are now being issued to extend the fishery over the full year.

In 2012 a new executive order required that all vessels in the inshore fleet be under six metres. The numbers of inshore vessels had been increasing to this point, with 1 298 in 2007 rising to 2 640 in 2012, although this is likely to relate to more comprehensive licensing rather than a significant capacity increase as such, but there is nevertheless consensus among stakeholders that the inshore sector is at overcapacity¹³⁸. Reducing capacity in the inshore fleet is now a priority for MFHA (as it has been for some time but with limited success), and a scrapping scheme has been introduced to speed consolidation. MFHA indicates that there has not been a high take-up of scrapping monies by the inshore fleet as participants are reluctant to lose a key source of income without clear alternatives.

The Greenland shrimp-fishing sector has seen a recent consolidation in ownership with big companies buying up inshore quota from small-scale owner-operators. There are now 18 companies operating in the inshore shrimp fishery operating 23 vessels, whereas there were around 70 companies in 2000¹³⁹. The maximum percentage of quota that can be held by one enterprise limits further consolidation; one company can hold up to 33 % of offshore shrimp quota, 15 % of inshore shrimp quota and 5 % of inshore Greenland halibut quota.

The increasing dominance of the large companies in the inshore fisheries in addition to the same companies monopolising offshore fisheries and the processing sector, has led to government attempts to create separation between quota ownership and processing ownership. However, this is a contentious development that is still to be resolved and will ultimately be clarified in a revised Fisheries Act expected later in 2014.

4.2 Upstream supply sector

Upstream businesses based in Greenland generally supply Greenlandic vessels only, as few foreign vessels land to Greenland, and in 2012 five vessels over 2 000 tonnes and seven vessels of less than 1 000 tonnes from foreign fishing companies (mainly Canadian) landed in Sisimiut and Nuuk harbor. Only small volumes of fish are discharged by the vessels, and benefits to the Greenland economy in terms of supplies are generally limited to fuel provision, and emergency vessel repairs as foreign vessels generally get supplied from their home countries and complete all minor vessel repairs onboard. The upstream supply sector in Greenland is limited due to its geographical isolation and the costs associated with operating in Greenland. In-house teams at Royal Greenland and Polar Seafood deliver some upstream services such as electrical and mechanical

¹³⁶ The Economic Council, 2013.

¹³⁷ MFHA data.

¹³⁸ MFHA pers. comm., 13 February 2014.

¹³⁹ KNAPK, pers. comm., 12 February 2014.

engineering. Larger repairs, replacements and modifications are either undertaken in Iceland or the Faroes or teams from these companies fly in to attend to vessels in Greenland. Imports of foreign goods and services accounted for 22 % of the groups' production in 2011¹³³.

Polar Oil, part of the state-owned KNI Group and Greenland's largest oil supply business, provides much of the fleet's fuel and oil needs from 69 tank installations throughout Greenland. The state control helps to maintain a stable fuel market in Greenland. In the last financial year (2012/13) Polar Oil achieved pre-tax earnings of just under EUR 10 million, which supported the KNI Group overall and losses made in the Group's retail operation, Pilersuisoq¹⁴⁰. Royal Greenland also imports fuel direct from Denmark.

Gear is supplied by foreign companies such as Vonin for the domestic offshore trawl fisheries. Vonin, a Faroese company, has an office and store in Nuuk with various gear supplies for running repairs, but new offshore trawls are imported after being made to order.

There are no vessel construction businesses in Greenland; new offshore vessels are commissioned overseas while new inshore vessels are constructed by Icelandic (Trefjar) and Faroese companies using a stronger fibreglass formula to withstand the ice. One small-scale boat manufacturer in Greenland closed down several years ago.

Due to the importance of the fisheries sector to the exports of Greenland, the transport companies, such as the state-owned Royal Arctic Line, are also dependent on fisheries in terms of both upstream supplies of gear and downstream export of fisheries products.

Table 4:3: Greenland upstream supply sector

Name and type of business	Location	Fleets principally supported	Estimate of employment	Source of inputs to the supply business
Vonin	Nuuk	Domestic offshore	6 (mostly from Faroes, some Danish)	Faroese gear company with Nuuk office
Polar Oil	Sisimut (HQ)	Domestic offshore & inshore, foreign offshore	113 FTE*	Government owned by KNI AS
OS electronics	Nuuk	Domestic offshore	12	Mix of Greenlandic and Danish labour, imported supplies

*Based on cost of labour for Polar Oil as % of total KNI A/S Group with 778 FTE. Not all attributable to fisheries sector

4.3 Downstream processing and marketing sector

The domestic offshore fishery catches and processes its catch on board large factory trawlers. Shrimp is either cooked and frozen for the EU, Russian or Chinese markets (the latter often for subsequent shelling) or raw-frozen for the Japanese market. The Greenland Fisheries Act requires that at least 25 % of domestic offshore and 100 % of inshore shrimp and Greenland halibut be landed to Greenland so that land-based jobs are secured¹⁴¹. Offshore vessels land the minimum 25 % into Greenlandic processing factories (owned by their parent companies) for further processing, while the remaining 75 % is shipped directly to markets upon

¹⁴⁰ KNI, 2013.

¹⁴¹ A tax (currently 14 %) is applied to shrimp and GLH that exported direct from vessels (75 % of the offshore catch). In 2013 for Royal Greenland this amounted to DKK20 million (nearly EUR 3 million).

landing. No catch from foreign vessels is processed in Greenlandic factories, even if landed to Greenlandic ports.

A tax of 14 % of sales value is applied to all shrimp and halibut that are exported directly, and a similar mackerel tax has now been set. The shrimp tax resulted in EUR 7.75 million additional public revenue in 2012. The workers union, Sulinermik Inuussutissariuteqartut Kattuffiat (SIK), has lobbied for more added value to Greenland's fish products before export. In 2013 a team of five Chinese processors were invited to Greenland to explore how more added-value could be achieved in the sector.

There were 60 seafood processing and storage facilities registered with MFHA in 2011, which are dispersed around the Greenland coast at key landing points with most being in the south and west. Royal Greenland is named as the owner of 21 of these, but is understood to have financial holdings in many more¹⁴². Upernavik Seafoods owns nine facilities, Arctic Green Seafoods has six, Polar seafoods has four, and Arctic Prime three facilities. Most are described as cutting and freezing facilities (primarily for Greenland halibut), while some specialise in shrimp peeling, preparing cooked crab, producing pickled fish or salted cod.

Royal Greenland and Polar Seafoods, the two largest fishing companies, own the majority of Greenland's processing factories, processing landings from their own vessels and purchases from other vessels. Very few landing points in Greenland have more than one processor (and so buyer) and so most inshore fishermen selling their catch, which is fresh rather than frozen, have no choice. Prices are much higher (up to 100 %) in Ilulissat where two processing factories, one owned by a consortium of fishermen (Greenland Halibut) and the other by Royal Greenland, compete for landings. In an attempt to increase competition, a permit was granted in 2013 for a factory ship that will operate along the west coast of Greenland purchasing Greenland halibut from the inshore fishery.

Royal Arctic Line has three cold storage facilities in the main ports of Nuuk, Sisimut and Aasiaat.

Fleet and processing plant rationalisation has led to some recent improvements in productivity within Royal Greenland, including the sale of processing facilities outside Greenland. Greenlandic processing capacity has been safeguarded to an extent by the requirement to land 25 % of offshore shrimp and Greenland halibut for landside processing in Greenland.

There are no specific processor associations, but with Greenland's high dependence on fisheries, the Greenland Business Association (Sulisitsisut) and the Greenland Local Employers Association (Nusuka) focus a lot of effort on fish processors. The Greenland Workers Union (Sulinermik Inuussutissariuteqartut Kattuffiat [SIK]) also represents the employees of processing factories.

Fish processing is not defined as an employment sector in its own right, so it is not possible to determine total downstream employment. Royal Greenland estimates that nearly half of its 800 workforce are land-based and most of these are in downstream services, be it processing, distribution or marketing. Therefore a broad estimate is that a similar number of jobs are found in the downstream sector as in fishing, i.e. around 1 200.

¹⁴² KNAPK, pers. comm., 12 February 2014.

5 Fish trade to and from Greenland

5.1 National trade to and from Greenland

Greenland's trade balance is strongly negative, with the import value typically close to double the value of exports. Greenland's exports were valued at EUR 383.2 million in 2011 with fish accounting for nearly 90 % of exported goods (within the 'provisions and livestock' category of exports). In recent years the fishing industry has seen increasing prices for most species. In 2012, the export value of fish and shellfish was close to EUR 335 million with export prices around 30 % higher than in 2010, but if prices had held at the same low level as in 2010, the 2012 export value, with unchanged quantities, would have been almost EUR 80 million lower³².

Table 5.1: trade figures for Greenland, by product type (EUR million)

	Product	2007	2008	2009	2010	2011
Exports	Provisions and livestock	231.1	258.6	209.5	294.1	340.4
	Alcoholic beverages and tobacco	0.03	–	0.01	–	0.01
	Raw materials, inedible	36.8	30.5	14.9	2.6	1.1
	Semi-manufactured products,	1.6	0.9	0.6	0.8	1.6
	Machinery and transport equipment	4.5	4.5	11.0	17.5	1.9
	Manufactured products	2.6	2.3	1.2	2.8	1.5
	Miscellaneous articles and transactions	36.7	36.4	29.1	25.5	36.7
	Mineral fuels and lubricants, etc.	–	–	–	–	–
	Total exports	313.4	333.2	266.2	343.2	383.2
Imports	Provisions and livestock	91.3	97.28	103.18	102.7	110.3
	Alcoholic beverages and tobacco	17.4	16.95	18.32	18.7	19.1
	Raw materials, inedible	7.6	8.36	6.30	7.9	7.1
	Mineral fuels and lubricants, etc.	119.3	159.9	88.1	131.6	162.0
	Animal or vegetable fats and oils	0.3	0.6	0.4	0.5	0.6
	Chemicals and chemical products	28.5	29.4	34.5	36.3	38.3
	Semi-manufactured products,	68.5	78.8	70.3	78.0	80.8
	Machinery and transport equipment	151.3	162.3	157.9	178.0	179.4
	Manufactured products	78.0	74.1	68.4	72.2	68.2
Total imports	563.2	630.1	549.0	642.5	694.4	
Balance	- 249.9	- 296.9	- 282.8	- 299.3	- 311.2	

Source: Statistics Greenland, 2013

5.2 Fish trade flows

According to DG TRADE data¹⁴³, the EU imported EUR 339 million of fishery products from Greenland in 2012, which slightly exceeds the total export value estimated by Statistics Greenland and therefore accounts for virtually all of Greenland's exports of fish products. Denmark accounted for more than 90 % of EU imports of Greenlandic fishery products. By contrast EU exports of fish products to Greenland only amounted to EUR 13 million. Greenland exports of fish to other regions such as North America and China is however being actively explored.

Frozen shrimp (*Pandalus borealis*), just over half peeled and the remainder shell-on, accounted for 57 % by value and 47 % by volume of total exports in 2012. Greenland halibut (81 % of which is whole frozen and 19 % fillets) accounts for 26 % of exports by value. Cod (60 % of which in frozen whole and 32 % frozen fillets) is the third most important export, accounting for just below 7 % of exports. The remaining significant exports include crabs, redfish and lumpfish roe, which have all shown recent growth. Exports of scallops and capelin have declined in recent years. This reflects the trend in landings as all landed products are destined for export.

According to data from Statistics Greenland, fish prices began to dip in 2009 with the onset of the economic crisis in Europe, reaching a low point in 2010. Since then most products have seen a strong recovery in prices. From 2008 to 2013 shell-on shrimp prices increased by 40 % and peeled shrimp by 19 %. Cod prices remain well below 2008 levels due to the growth in supplies from Barents Sea. Prices for whole Greenland halibut rose by 11 % over this period, but Greenland halibut fillets have shown a 35 % decline in prices since 2008.

¹⁴³ EC, 2011a.

Table 5.2: Greenland seafood exports

Species	2007		2008		2009		2010		2011		2012	
	Million EUR	Tonnes	Million EUR	Tonnes	Million EUR	Tonnes	Million EUR	Tonnes	Million EUR	Tonnes	Million EUR	Tonnes
Shrimp	151.6	69 004	168	71 321	139.9	64 256	151.5	67 755	186.1	66 319	189.9	62 226
Cod	24.2	7 955	37	13 263	17.4	8 998	15.1	8 386	20.5	8 695	22.7	10 398
Halibut	59.3	20 351	61	22 450	53.3	20 831	67.9	25 676	80.9	26 924	88.3	27 400
Scallops	3.7	353	1.2	149	1.0	121	0.9	93	1.5	112	0.5	45
Crabs	4.9	1 162	5.5	1 320	6.0	1 380	4.6	1 142	4.5	953	5.7	1 051
Lumpfish roe	3.3	962	3.7	776	2.9	591	5.3	846	8.7	1 204	8.9	1 213
Capelin	2.0	12 805	0.7	5 279	-	-	-	-	-	-	3.6	24 106
Redfish	1.1	1 075	0.4	365	0.8	501	8.7	3 884	9.4	2 991	7.1	2 662
Saithe	1.3	669	1.7	1 206	0.9	749	1.0	544	0.5	164	0.3	173
Other products	3.8	11 532	2.4	1 945	4.1	6 323	2.9	2 196	3.6	2 427	8.4	3 210
Total	255	125 868	282	118 074	226	103 749	258	110 522	316	109 788	335	132 484

Source: Statistics Greenland, 2013

5.3 Access conditions to markets

Greenland is an Overseas Country and Territory (OCT) and therefore enjoys a preferential arrangement in its trade with the EU.

According to the Overseas Association Decision (OAD), OCTs have duty- and quota-free access to the EU market for goods, including seafood products¹⁴⁴. Whilst all Greenlandic products benefit from the tariff preference, given the high significance of shrimp in the fishery products exported to the EU, it is the EU tariff regime for this product that is of particular interest. The EU Most Favoured Nation (MFN) duty applied to whole frozen northern shrimp from other countries is 12 %. The EU maintains a relatively high MFN duty (20 %) for cooked and peeled shrimp (sub chapter 1605), because of the existence of an EU industry for the processing of these products (mainly in Denmark). The entry of Greenlandic products at zero duty rates therefore creates a significant preference in favour of Greenland.

In the context of the OAD, Greenland has also enjoyed a derogation to the EU's 'rule of origin', therefore allowing foreign goods, for example, from Canada, to be considered as originating in Greenland, as long as sufficient processing takes place locally. This possibility for derogation is foreseen in Article 16 of Annex VI of the Council Decision on the Overseas Association Decision (Decision 2013/755). Article 16 provides that upon the Commission's initiative or in response to a request from a Member State or an OCT, an OCT may be granted a temporary derogation from the provisions of the Annex (rules of origin) in any of the following cases:

- 1) internal or external factors temporarily deprive it of the ability to comply with the rules for the acquisition of origin provided for in Article 2 of the Annex, where it could have done so previously;
- 2) it requires time to prepare itself to comply with the rules for the acquisition of origin provided for in Article 2;
- 3) the development of existing industries or the creation of new industries justifies it.

Based on the provisions that existed in the previous OCT Decisions, Greenland benefited from a derogation in 2002 to 2006 (2 100 tonnes) and August 2009 to August 2013 (2 100 tonnes). Greenland has recently applied for a derogation to the EU's rule of origin for northern prawn from Canada through the current OAD, which could mitigate impacts on Greenland's fisheries sector resulting from current low catches of East Greenland northern prawn (Section 3.2.7).

Article 43 of the new OAD (2013/755/EU) states that, "Products originating in the OCTs shall be imported into the Union free of import duty" with Article 44 clarifying that no quantitative restrictions should be applied to products originating in the OCTs. Of particular significance to Greenland and its fleet of offshore freezer trawlers that fish beyond its EEZ as far as the Barents Sea, originating products include:

- products of sea fishing and other products taken from the sea outside any territorial sea by its vessels; and
- products made on board its factory ships exclusively from the products referred to [above].

The OAD also makes provision to mitigate for any fluctuations in export earnings in relation to the degree of dependence that OCT economies have on agriculture, fisheries and mining. The objective is to safeguard the development programme jeopardised by drops in export revenue.

Overall, the tariff preferences and derogations granted by the EU make a considerable contribution towards the competitiveness of Greenlandic products. The measures are considered by the Government of Greenland and fishery sector to substantially compensate for the additional costs incurred due to the remoteness of

¹⁴⁴ However rules of origin applies, i.e. products have to be "originating" in Greenland to benefit from the preferential arrangement.

Greenlandic production and processing from its main markets in the EU. However, it is claimed by Greenland that these benefits have eroded as a result of the granting of the autonomous tariff quota (ATQ) under the Regulation 1220/2012, creating the potential for competitor nations, specifically Canada in the case of shrimp, to benefit from reduced tariffs for exports to the EU.

The current ATQ regulation (2012–2015) sets the volume for the cooked and peeled *Pandalus Borealis* shrimp at 30 000 tonnes compared to the previous 20 000-tonne level under Regulation 1062/09 (both volumes are at 0 % duty). The ATQ scheme is "erga omnes", meaning that any third country can benefit from it on a first come first served basis. As Table 5:2 shows, the total volume amounts to nearly 50 % of Greenlandic shrimp exports to the EU and there was concern in Greenland that the increased volumes of Canadian shrimp entering the UK market would reduce demand for product from Greenland¹⁴⁵. Industry reports show that Greenlandic shrimp exports to Denmark were marginally higher than 2012 levels¹⁴⁶. Danish to UK shrimp sales were significantly down on 2012, which is thought to be the result of increased Canadian exports to the UK, but this has been offset by growth in onward markets from Denmark to other Member States and outside the EU.

Greenland has expressed a strong interest in the ongoing negotiations between the EU and Canada on the EU–Canada Comprehensive Economic and Trade Agreement (CETA)¹⁴⁷, due to its concerns that Greenland's preferential access for products imported by the EU would be reduced. The EU-Canada free trade agreement has not yet been initialled, but the CETA could include progressive liberalisation on fish and seafood tariff lines¹⁴⁸.

5.4 Catch certification

The implementation of the EU IUU Catch Certification Scheme (CCS) is laid down in Council Regulation EC 1005/2008 and subsequent legislation for third countries exporting marine fisheries products to the EU. The European Union has published the flag State notification of Greenland¹⁴⁹ with the Fisheries Division being the competent authority. With such a notification, a flag State certifies that a) it has in place national arrangements for the implementation, control and enforcement of laws, regulations and conservation and management measures that must be complied with by its fishing vessels, and b) its public authorities are empowered to attest the veracity of the information contained in catch certificates and to carry out verifications of such certificates on request from the Member States. Hence, Greenland can validate EU catch certificates for fishery products.

Cooperation and compliance on matters of IUU fishing are considered by the EU as pre-requisites for discussion with third countries on potential FPAs/Protocols. In this context, it should be noted that Council Regulation (EC) No 1005/2008 Article 38 (9) [Action in respect of non-cooperating third countries] states that 'the Commission shall not enter into negotiations to conclude a bilateral fisheries agreement or fisheries partnership agreements with such countries'.

¹⁴⁵ MFHA, pers. comm., 13 February 2014.

¹⁴⁶ Undercurrent News, 2013.

¹⁴⁷ Minutes of the Joint Committee of the EU/Greenland FPA, November 2013.

¹⁴⁸ Canada–European Union, 2014.

¹⁴⁹ http://ec.europa.eu/fisheries/cfp/illegal_fishing/info/flagstatenotifications.pdf (accessed 24 January 2014).

6 Ex post evaluation

6.1 Introduction to the Fisheries Partnership Agreement and the Protocol

6.1.1 History and background of the FPA

The FPA between Greenland and the EU allows EU vessels to fish for surplus stocks in Greenland's EEZ and provide sectoral policy support in a legally regulated environment monitored by the Joint Committee set up by the associated Protocol. The Greenland–EU FPA takes the form of a 'mixed-agreement', which permits the EU vessels to fish for a wide range of species, as detailed in Table 6:1. The initial fisheries agreement between the EU and Greenland dates back to 1985. This agreement ran for a period of ten years and was thereafter extended for an additional six year periods until it was eventually replaced by the FPA. The FPA between the parties was initialled in June 2006, and entered provisionally into force on 1 January 2007 for a period of six years (until 31 December 2012) with renewal periods of six years. It was adopted into EU law by Council Regulation (EC) No 753/2007 of 28 June 2007. The initial Protocol to the Fisheries Partnership Agreement applied for six years, from 1 January 2007 to 31 December 2012. The current Protocol¹⁵⁰ applies from 1 January 2013 to 31 December 2015 for a period of three years. The duration of the current Protocol was shortened for a number of reasons, namely the desire to align the renegotiation of the Protocol with the renewal and/or revision of other relevant EU policy instruments, i.e. the Common Fisheries Policy (CFP), the Overseas Association Decision and the EU-Greenland Partnership Initiative.

As described in Section 1.4.1, since 2007 there has been a clear distinction between: i) EU funds provided to Greenland for sectoral fisheries policy support and access to fishing opportunities, provided through the Protocol; and ii) EU funds provided to Greenland to support and contribute to the general development of Greenland, provided through the EU-Greenland partnership instrument which is managed by DG DEVCO. Section 6.1.2 provides a review of the current FPA and Protocol.

In the context of the EU's FPAs as a whole, at the time of writing the EU–Greenland FPA was the second-largest in terms of the EU's total annual financial contribution, accounting for 16 % of the total EU contribution per annum for FPAs worldwide¹⁵¹.

It is important to note that the FPA/Protocol text enables the EU to swap fishing opportunities obtained through the FPA/Protocol with Norway, Iceland and the Faroe Islands as part of the EU's agreements with these parties. This is the only FPA where quota allocation between EU Member States is submitted to the EU Fishing Opportunities Regulation.

6.1.2 Description of current Protocol

The principal characteristics of the Protocol are provided in Table 0:1 and summarised here.

The Protocol lays out the regulatory and conditional framework within which EU vessels can operate in Greenland's EEZ, including compliance with bycatch, control and reporting regulatory guidelines. Cooperation within the fishing industry is also fostered by the provision of partnerships between companies (joint ventures). As required by the exclusivity principle of the CFP, Greenlandic authorities may only authorise EU fishing vessels through the Protocol. The fishing activity of the EU vessels remains governed by the laws and regulations of Greenland, unless otherwise stated in the Protocol or agreed by the Joint Committee.

The Joint Committee plays an important role in the implementation of the Protocol, with responsibilities including:

¹⁵⁰ Council Decision 2012/653/EU.

¹⁵¹ <http://ec.europa.eu/fisheries/cfp/international/agreements/indexen.htm> (accessed 18 March 2014).

- agreeing the level of fishing opportunities of the species listed in Table 6:1 on a yearly basis;
- reviewing and assessing the temporary joint ventures and enterprises that have been proposed by the EU and the corresponding Greenlandic partner;
- agreeing on a multiannual sectoral programme designed to allocate the contribution made by the EU to the sustainable development of Greenland's fisheries (as discussed in Section 6.1.3);
- reviewing the implementation of this sectoral programme against the suggested indicators; and
- reviewing bycatch composition and quantity on a yearly basis.

The Protocol details indicative levels of fishing opportunities on an annual basis, as shown in Table 6:1. Indicative fishing opportunities are available for 11 target species stock components, with explicit fishing opportunities for two bycatch species stock components. As outlined above, the Protocol states that the actual fishing opportunities are agreed on an annual basis by the Joint Committee, taking into account available scientific advice (i.e. from ICES, NAFO and, where applicable, Greenland's Institute of Natural Resources), the needs of the fishing industry and minimum quantities required to maintain Greenlandic fishing activities (discussed later). In practice, the fishing opportunities are agreed by the Joint Committee by the following process. Greenland first offers the EU fishing opportunities, taking account of Greenland's overall quotas for the various stocks and the needs of the domestic fishing sector. The EU then can accept entirely or a proportion of the offered fishing opportunity, based on the needs of the fishing industry, scientific advice and the precautionary principle, where relevant.

In accordance with Article 2 of the Protocol the EU undertakes to pay Greenland up to EUR 17 847 244 per annum, comprising an annual access fee of EUR 15 104 203 and an additional EUR 2 743 041 per annum for the support and implementation of Greenland's sectoral fisheries policy. The annual access fee includes a financial reserve of EUR 1 500 000, that is not paid annually but is available to the EU to compensate Greenland for agreed fishing opportunities in excess of the indicative levels outlined in the Protocol. The access fee therefore consists of EUR 13 604 203 for the indicative fishing opportunities plus a potential additional payment not exceeding EUR 1 500 000 from the financial reserve for fishing opportunities in addition to those outlined in the Protocol. It is important to note that any unused portion of the financial reserve can also be carried over to the following year.

The access fee payment of EUR 13 604 203 is equal to 17.5 % of the reference price (Table 6:2) multiplied by the indicative fishing opportunities (Table 6:1). The applied 17.5 % multiplier is the ratio of earnings before interest, tax, depreciation and amortisation (EBITDA) to revenues, and is used to determine an appropriate payment for access to Greenland given the economic benefits generated to EU fishing vessels. This approach to setting access fees is also used for the other mixed EU fishery partnership agreements¹⁵².

As such, the EU pays in advance a fixed annual financial compensation for access irrespective of the fishing opportunities finally agreed through the Joint Committee. If the agreed fishing opportunities are lower than the indicative fishing opportunities outlined in the Protocol (Table 6:1), then the Protocol makes provision for Greenland to either provide equivalent alternate fishing opportunities to the EU for the year in question, or compensate the EU in the following year either by additional opportunities or by proportional adjustment of financial compensation for access. In the event that additional fishing opportunities for the stipulated target species become available then Greenland notifies the EU and the EU decides whether and how much to accept, subject to scientific advice or any other consideration i.e. length of fishing season. If additional opportunities are accepted, the EU must then pay the sum of 17.5 % of the reference price as indicated in Table 6:2.

¹⁵² DG MARE, pers. comm., 14 April 2014.

Table 6.1: indicative level of fishing opportunities authorised by Greenland (in tonnes) under the current Protocol

Stock Components	2013	2014	2015
Cod in ICES Subarea XIV and in NAFO Subarea 1 ¹⁵³	2 200	2 200	2 200
Pelagic redfish in ICES Subareas XIV & V and in NAFO Subarea 1 F ⁽¹⁵⁴⁾	3 000	3 000	3 000
Demersal redfish in ICES Subareas XIV & V and in NAFO subarea 1F ⁽¹⁵⁵⁾	2 000	2 000	2 000
Greenland halibut in NAFO Subarea 1 – South of 68° North	2 500	2 500	2 500
Greenland halibut in ICES Subareas XIV & V ¹⁵⁶	4 315	4 315	4 315
Northern prawn in NAFO Subarea 1	3 400	3 400	3 400
Northern prawn in ICES Subareas XIV & V	7 500	7 500	7 500
Atlantic halibut in NAFO Subarea 1	200	200	200
Atlantic halibut in ICES Subareas XIV & V	200	200	200
Snow crab in NAFO Subarea 1 ¹⁵⁷	250	250	250
Capelin in ICES Subareas XIV & V	60 000	60 000	60 000
Grenadier spp. In ICES Subareas XIV & V ¹⁵⁸	100	100	100
Grenadier spp. In NAFO Subarea 1 ¹⁵⁸	100	100	100

Source: EU Protocol of Council Decision 2012/653/EU

Table 6.2: reference prices (EUR per tonne live weight) for fishing opportunities and 17.5 % of the reference price

Species	Reference price	17.5 % of reference price
Cod	1 800	315.00
Pelagic redfish	1 700	297.50
Demersal redfish	1 700	297.50
Greenland halibut	3 500	612.50

¹⁵³ In the event that Harvest Control Rules be implemented through a multiannual management plan being adopted by the Greenlandic authorities, the figures may have to be revised accordingly. If this revision leads to additional fishing opportunities for the European Union, the financial compensation referred to in Article 2(2)(a) of the Protocol shall be increased proportionally.

¹⁵⁴ To be fished with pelagic trawls.

¹⁵⁵ To be fished with trawls.

¹⁵⁶ To be fished by no more than six vessels at the same time. This catch limit and effort limitation may be revised in the light of a multi-annual management plan to be agreed between Coastal States. If this revision leads to additional fishing opportunities for the European Union, the financial compensation referred to in Article 2(2)(a) of the Protocol shall be increased proportionally.

¹⁵⁷ Fishing activities shall only take place in accordance with Greenlandic national legislation.

¹⁵⁸ Roundnose grenadier and rough-head grenadier shall not be targeted and catches shall only be taken as bycatch in association with other targeted species and shall be reported separately.

Northern prawn – east	2 500	437.50
Northern prawn – west	2 300	402.50
Atlantic halibut	4 100	717.50
Capelin	190	33.25
Snow crab	5 500	962.50
Grenadier spp.	2 204	385.70

Source: Council Decision 2012/653/EU

The total annual fishing opportunities for the FPA are set at 85 765 tonnes (indicative quota values), which is a reduction on the previous 2007–2012 Protocol, which was set at 91 700 tonnes. The protocol sets out that five target species (cod, redfish, Greenland halibut and northern prawn) are subject to minimum quantities of TAC that is required to maintain Greenlandic fishing activities¹⁵⁹. If the TACs are set below these amounts, Greenland is then not obligated to offer the EU quota opportunities. The species and minimum quantities for maintaining Greenlandic fishing activities are included in Table 6:3.

Table 6:3: the minimum quantities (tonnes) for maintaining Greenland fishing activities by species and area

Species	NAFO 1	ICES XIV/V
Cod	30 000	–
Redfish	2 500	10 000
Greenland halibut	4 700	4 000
Northern prawn	75 000	1 500

Source: Council Decision 2012/653/EU

In addition to the access fees paid by the EU, EU fishing vessels operators are required to pay an authorisation fee per tonne of authorised quota to obtain an authorisation from the Greenlandic authorities in order to take up fishing opportunities within Greenland's EEZ. Importantly, vessels of the same ship owner are permitted to submit a collective application. The fishing authorisation indicates the total authorised quantity by species that can be caught and retained by vessel or group of vessels. If a vessel exceeds the authorised amount, the vessel operator is liable to pay a fee equivalent to three times the fishing authorisation fee for the surplus amount. Vessels are not required to pay a fisheries authorisation fee for bycatch. The fishing authorisation fees payable by fishing vessel operators are presented in Table 6:4.

The Protocol provides some flexibility with regard to fishing authorisations. Unused quantities of fishing authorisations for northern prawn, up to a maximum of 5 % of the total authorised quantity, may be transferred to the following year, on request and subject to scientific advice, and must be utilised by April. EU fishing vessels may also use East Greenland northern prawn quota in West Greenland, on the basis of a company-to-company quota transfer with a Greenlandic quota holder, at which point the EU fishing vessel would be subject to the same conditions as those applicable to a Greenlandic ship owner. Furthermore, EU fishing vessels may utilise fishing authorisations for redfish in NEAFC waters subject to a number of conditions, including the requirement for the fishing vessel to have exhausted its quota for redfish in NEAFC waters along with specific reporting obligations. Finally, in the event that EU legislation fixing fishing opportunities is not adopted by the

¹⁵⁹ This is understood to mean a minimum amount that would enable Greenlandic fishing vessels and dependent onshore industries to remain economically viable (MFHA, pers. comm., 13 February 2014)

beginning of a given year, EU fishing vessels may continue to fish on a fishing authorisation from the previous year, with a monthly quota of $\frac{1}{12}$ of their authorised quota from the previous year. Again, this is subject to scientific advice.

Table 6.4: fishing authorisation fees by species

Species	EUR / per tonne
Cod	90
Redfish	53
Greenland halibut	129
Northern prawn – east	50
Northern prawn – west	80
Atlantic halibut	217
Capelin	5
Snow crab	120

Source: Council Decision 2012/653/EU

The species subject to the FPA have been expanded within the current Protocol, with specific quotas for bycatch of grenadier species. Bycatch of other quota species is counted against the total EU quota, which should not be exceeded. The discard ban in the Greenland also applies to EU fishing vessels, though with exceptions including derogations for northern prawn trawlers (see Section 3.3.1). Bycatch must be reported separately.

Additional conditions applying to EU fishing vessels include the following. EU fishing vessels are required to have on board, and use, an electronic reporting system (ERS) of catches. The Protocol additionally states that for the first year of the Protocol, 2013, fishing vessels should implement ERS and Greenlandic paper logbooks. After the first year, the ERS should be used on the basis of an agreed format. The Protocol also outlines requirements for observer coverage and satellite vessel monitoring systems.

The Protocol also deals with new fishing opportunities and experimental fisheries. With respect to new fishing opportunities, the Protocol states that Greenland laws and regulations would apply unless an additional agreement is concluded. With respect to experimental fisheries, the Protocol states that authorisations for experimental fisheries should be made available for a trial period of between three and six months. No financial compensation for access to experimental fisheries is foreseen in the Protocol. The Protocol specifies that once both parties have agreed that experimental fisheries of EU fishing vessels have achieved positive results, then Greenland should allocate 50 % of the fishing opportunities for the new species to the EU fleet, in conjunction with an increased financial contribution from the EU. There are a number of conditions for EU fishing vessels operating in experimental fisheries, including observer coverage requirements.

Regulation (EU) No 927/2012 provides a mechanism for any EU Member State to request authorisations for EU fishing opportunities obtained through the Protocol if there are EU fishing opportunities that have not been fully utilised beyond a specified date, i.e. EU quota that has not been authorised. In 2013 there were no requests made for fishing opportunities through Regulation (EU) No 927/2012, probably due to the fact that quotas for the most attractive fishing opportunities are generally fully authorised (see Section 6.2.1)

6.1.3 Description of sectoral support matrix

The EU's total annual sectoral support contribution as outlined in the Protocol is EUR 2 743 041. This must be spent by Greenland in accordance with Article 3 of the Protocol. Specifically, the Protocol states that the Joint Committee should agree on a multiannual sectoral programme and implementing rules. The specific budgetary

allowance by area is detailed in Table 6:27, including the EU sectoral support funding as well as operational budgets for the relevant government administration. The multiannual sector policy programme for 2013–2015 is outlined in the ‘Sectoral Policy Programme Document; Sector Policy for the Fisheries in Greenland 2013–2015’¹⁶⁰. It is important to note that in 2013 the EU’s sectoral support contribution was higher than that outlined in the Protocol due to the Greenlandic debt resulting from agreed fishing opportunities in 2012 (Section 6.2.1).

The main objectives of the sectoral support programme are to: promote sustainable management and utilisation of Greenland’s fisheries; and, develop and modernise Greenland’s fisheries sector, including undertaking experimental fisheries and exploration of new fishing grounds. These objectives are expected to contribute towards the aim of maintaining the fisheries sector as Greenland’s biggest industry.

The Joint Committee assumes the responsibility of programming the sectoral policy support payment from the EU for the duration of the protocol with matrices on a yearly basis, ascertaining the objectives to be achieved in order to obtain sustainable and responsible fisheries and formulating the indicator activities and criteria that the success of the framework can be measured against.

The sectoral policy support is broken down into three main overall objectives, namely;

- administration;
- control and enforcement; and
- support of scientific research and advice.

These are then further broken down into main area objectives, which have specific targets.

The administration sectoral support focuses on capacity-building within fisheries organisations, improving the skills level of fisheries officials and enhancing the relevant legal frameworks relevant to both the inshore and offshore fisheries. Specific to the inshore fishery component, it is hoped that the sectoral policy support will enhance its efficiency, e.g. through a reduction in old, less-efficient vessels, and additional finances have been allocated for this purpose to be implemented under a specific support framework.

Control and enforcement of Greenland’s regulatory and legal requirements is a key developmental objective in order to increase control of both the inshore and offshore fisheries. Key specific targets include enhancing the catch data systems in line with both national and international standards, implementing IT systems to introduce a risk-based control of landings and inspections, increasing control vessel numbers, inspections and also increasing observer coverage of these fisheries. These targets are to be implemented in collaboration with international and regional frameworks and additional equipment provision and digitalisation of fisheries systems is included within this support.

Greenland aims to improve the scientific basis for resource exploitation of its commercially important stocks and enhance its level of international cooperation on matters of fisheries science, particularly in relation to straddling stocks. Specific targets include increased data collection on age, stock composition and index biomass and specific primary target outputs are more annual advisory documents and publications in scientific journals. It is also hoped that engagement on a national level with industry stakeholders, particularly fisheries, will increase.

The success of these targets is then measured against primary and secondary target indicators on an annual basis by the Joint Committee. Primary target indicators tend to be broad and will refer to the implementation of specific management plans, executive orders, and maintaining and developing capacity within the relevant organisations. Secondary indicators tend to be a more specific measure of success and include reduction in fleet size, increased use of logbooks, number of inspections and number of meetings concerning that particular objective.

¹⁶⁰ MFHA, 2013a.

6.2 Utilisation

6.2.1 Utilisation of Protocol catches in Greenland waters

As outlined in Section 6.1.2, the quota allocated to the EU through the Protocol is agreed by Greenland and the EU at meetings of the Joint Committee. The process can be summarised as: Greenland offers the EU a volume of quota for fishing opportunities in Greenlandic waters; the EU then either accepts the quota, accepts a proportion of the quota, or rejects the quota. The resulting quotas agreed by the Joint Committee can vary, and in practice have varied, from the indicative fishing opportunities as outlined in the Protocol (Table 6.5). In 2013 the total agreed quota was less than half of the indicative quota outlined in the relevant Protocol. However, this is almost exclusively accounted for by the low level of agreed quota for capelin, due to both the inherent natural variability of the stock (Section 3.2.11) and the timing of the setting of the preliminary TAC for the fishery (Section 2.3.1).

Additionally the preliminary advice from ICES forms the basis of capelin quota offered to the EU, which is then revised following the Icelandic survey for capelin, taking place once capelin fishing in Greenlandic waters has ended (Section 2.3.1). In some cases the in-season revision has been upwards (ie for 2013/2014 fishing season) while in other cases there could potentially be a downwards revision of the predicted final TAC (this could potentially happen in the 2014/2015 fishing season). The latter case also creates difficulties for the EU in accepting a share of Greenlandic fishing quota without a commitment from Greenland to ensure that the overall TAC for the fishery will be respected, i.e. through securing additional capelin quota in transfers with other parties if Greenland's share of the final TAC is less than expected based on the predicted TAC. In 2014 (and 2012) the total quotas agreed by the Joint Committee were much higher relative to the indicative Protocol quotas than in 2013, due to the availability of quota for capelin.

Table 6.5: indicative fishing opportunities and agreed quotas (tonnes), by species and area, 2012–2014

Species	Area	2012		2013		2014	
		Indicative	Agreed	Indicative	Agreed	Indicative	Agreed
Bycatch	ICES V, XIV & NAFO 1	2 300	2 300	n/a	n/a	n/a	n/a
Capelin	ICES V, XIV	55 000	56 364 ^c	60 000	5 775 ^d	60 000	34 650 ^f
Cod	ICES XIV & NAFO 1	3 500	2 000	2 200	2 200	2 200	2 200
Snow crab	NAFO 1	500	500	250	250	250	200
Greenland halibut	ICES V, XIV	7 500	6 320	4 315	4 465	4 315	4 465
Greenland halibut	NAFO 1	2 500	2 650	2 500	2 650	2 500	2 650
Grenadier ^a	ICES V, XIV & NAFO 1	n/a	n/a	200	400	200	200
Atlantic halibut	ICES V, XIV	1 200	1 200	200	200	200	200
Atlantic halibut	NAFO 1	200	200	200	200	200	200
Mackerel ^b	ICES V, XIV	n/a	0	n/a	1400	n/a	0
Northern prawn	ICES V, XIV	7 000	8 000	7 500	7 500	7 500	6 500
Northern prawn	NAFO 1	4 000	4 000	3 400	3 400	3 400	3 400
Demersal redfish	ICES V, XIV & NAFO 1	n/a ^e	n/a ^e	2 000	2 000	2 000	2 000
Pelagic redfish	ICES V, XIV & NAFO 1	8 000 ^e	5 999 ^e	3 000	3 000	3 000	3 000
Total		91 700	89 533	85 765	33 440	85 765	59 665

Source: European Commission, DG Mare. ^a Grenadier – separate quota for east and west, but presented combined for convenience. ^b Experimental fishery. ^c Quotas agreed for 2011/12 season. ^d Quotas agreed for 2012/13 season. ^e In the previous protocol, fishing opportunities for demersal redfish were grouped with pelagic redfish. ^f DG MARE, pers. comm., 20 June 2014

After the Joint Committee have agreed quotas to be allocated to the EU through the Protocol, the EU may then exchange these quotas with Norway, Iceland and the Faroe Islands. Since 2011, the EU has swapped quota for Greenlandic fishing opportunities with Norway (2012 to 2014) and the Faroe Islands (2014), but not with Iceland. The Greenlandic fishing opportunities transferred from the EU to Norway and the Faroe Islands are presented in Table 6.6 and Table 6.7 respectively.

Overall in 2013 and 2014 the EU transferred quotas for East Greenland prawn, Greenland halibut and pelagic redfish to Norway, along with smaller amounts of cod, Atlantic halibut and grenadiers. The quotas transferred to Norway represented between 13 and 38 % of the EU's total quota for each species. The quotas transferred were broadly similar to the equivalent transfers in 2012, with the following exceptions. The amount of quota transferred to Norway in 2013 and 2014 was approximately 9 000 tonnes less than in 2012. This is mainly due to the absence of capelin quotas, of which Norway received 7 965 tonnes of quota in 2012. However, there were also decreases in transfers of quota for pelagic redfish and Greenland halibut, in the context of decreasing total agreed quotas with Greenland, and the exceptional allocation of 500 tonnes of cod quota in 2013.

Table 6.6: quota transferred to Norway and total agreed EU quota by species and area (2012 to 2014)

Species	Area	2012			2013			2014		
		NOR	EU-GRL Agreed	%	NOR	EU-GRL Agreed	%	NOR	EU-GRL Agreed	%
Bycatch	ICES V, XIV & NAFO 1	120	2 300	5	n/a	n/a	n/a	n/a	n/a	n/a
Capelin	ICES V, XIV	7 965	56 364 ^c	14	0	5 775	0	0	34 650	0
Cod	ICES XIV & NAFO 1	0	2 000	0	500	2 200	23	0	2 200	0
Snow crab	NAFO 1	0	500	0	0	250	0	0	200	0
Greenland halibut	ICES V, XIV	824	6 320	13	575	4 465	13	575	4 465	13
Greenland halibut	NAFO 1	800	2 650	30	575	2 650	22	575	2 650	22
Grenadier ^a	ICES V, XIV & NAFO 1	n/a	n/a	n/a	120	400	30	120	200	60
Atlantic halibut	ICES V, XIV	75	1 200	6	75	200	38	75	200	38
Atlantic halibut	NAFO 1	75	200	38	75	200	38	75	200	38
Mackerel ^b	ICES V, XIV	0	0	n/a	0	1 400	0	0	0	n/a
Northern prawn	ICES V, XIV	2 900	8 000	36	2 700	7 500	36	2 550	6 500	39
Northern prawn	NAFO 1	0	4 000	0	0	3 400	0	0	3 400	0
Demersal redfish	ICES V, XIV & NAFO 1	n/a	n/a	n/a	0.0	2 000	0	0	2 000	0
Pelagic redfish	ICES V, XIV & NAFO 1	1 500	5 999	25	800	3 000	27	800	3 000	27
Total		14 259	89 533	16	5 420	33 440	16	4 770	59 665	8

Source: European Commission, DG Mare. 2014 quotas for Norway – Regulation (EU) 432/2014. ^a Grenadier – separate quota for East and West, but presented combined for convenience. ^b Experimental fishery. ^c Quotas agreed for 2011/12 season. ^d Quotas agreed for 2012/13 season

Table 6.7: quota transferred to the Faroe Islands and total agreed EU quota by species and area (2014)

Species	Area	2014		
		Faroe Islands	EU-GRL Agreed	%
Capelin	ICES V, XIV	0	34 650	0
Cod	ICES XIV & NAFO 1	0	2 200	0
Snow crab	NAFO 1	0	200	0
Greenland halibut	ICES V, XIV	110	4 465	2
Greenland halibut	NAFO 1	0	2 650	0
Grenadier ^a	ICES V, XIV & NAFO 1	0	200	0
Atlantic halibut	ICES V, XIV	0	200	0
Atlantic halibut	NAFO 1	0	200	0
Mackerel ^b	ICES V, XIV	0	0	n/a
Northern prawn	ICES V, XIV	1 300	6 500	20
Northern prawn	NAFO 1	0	3 400	0
Demersal redfish	ICES V, XIV & NAFO 1	0	2 000	0
Pelagic redfish	ICES V, XIV & NAFO 1	250	3 000	8
Total		1 660	59 665	3

Source: European Commission, DG Mare. 2014 quotas for the Faroe Islands – Regulation (EU) 432/2014

Following the transfers of quota to Norway, Iceland and the Faroe Islands, the remaining EU quota is distributed amongst the EU Member States using relative stability keys (Table 6.8 and Table 6.9). Overall in 2013, the total quota for EU Member States was 28 020 tonnes including 1 400 tonnes for the experimental mackerel fishery. This compares to a total of 26 750 tonnes in 2012. Germany receives the highest volume of quotas and receives the majority of quotas for cod, Greenland halibut and redfish. The UK and France also receive lower quantities of redfish, and in the case of the UK, cod. Denmark and France each receive 50 % of the total EU quota for northern prawn. Portugal receives all the Atlantic halibut East quota. Spain receives the majority of the snow crab quota, with the remainder received by Ireland. Finally, Denmark receives the majority of capelin quota. It is important to note that the volumes of quota that each Member State initially receives are dependent on both the overall quota agreed at the Joint Committee meeting and the volume that is transferred with Norway. For example, Germany received approximately 14 % less quota in 2013 compared to 2012, mainly due to the 500 tonnes of cod transferred to Norway and reductions in the overall quota agreed for Greenland halibut. Some quotas, or portions thereof, are not allocated and are open to all member states.

Demersal redfish fishing opportunities were explicitly included in the EU–Greenland FPA through the current protocol, in doing so allowing management of redfish fisheries in Greenlandic waters to better match the stocks and management units used by ICES. There was disagreement between Member States as to how the fishing opportunities for demersal redfish should be shared. Some Member States considered the demersal redfish fishery to be a new fishery, and as such argued that the application of the pelagic redfish relative stability key was inappropriate. Nevertheless, relative stability keys for demersal redfish were set equivalent to those for the existing pelagic redfish fishery, which was known to interact with demersal redfish components in Greenlandic waters¹⁶¹.

¹⁶¹ EC, 2011b.

Table 6.8: initial Member State quota allocations in 2012, by species and area

Species	Area	DE	DK	EE	ES	FR	IR	LT	LV	PL	PT	UK	SE	EU
Bycatch	ICES V, XIV & NAFO 0, 1													2 180
Capelin	ICES V, XIV	0	0	0	0	0	0	0	0	0	0	0	0	0
Cod	ICES XIV & NAFO 0, 1	1 636	0	0	0	0	0	0	0	0	0	364	0	2 000
Snow crab	NAFO 0, 1	0	0	0	437	0	62	0	0	0	0	0	0	500
Greenland halibut	ICES V, XIV	5 221	0	0	0	0	0	0	0	0	0	275	0	5 496
Greenland halibut	NAFO 0, 1	1 850	0	0	0	0	0	0	0	0	0	0	0	1 850
Atlantic halibut	ICES V, XIV	0	0	0	0	0	0	0	0	0	1 000	0	0	1 000
Atlantic halibut	NAFO 0, 1	0	0	0	0	0	0	0	0	0	0	0	0	125
Northern prawn	ICES V, XIV	0	2 550	0	0	2 550	0	0	0	0	0	0	0	5 100
Northern prawn	NAFO 0, 1	0	2 000	0	0	2 000	0	0	0	0	0	0	0	4 000
Pelagic redfish	ICES V, XIV & NAFO 1	4 446	0	0	0	22	0	0	0	0	0	31	0	4 499
Total		13 153	4 550	0	437	4 572	62	0	0	0	1 000	670	0	26 750

Source: European Commission, DG Mare. Note: 125 tonnes of quota for east Atlantic halibut was unaccounted for. 125 tonnes of quota for west Atlantic halibut were not allocated to Member States. The 2011/12 quota for capelin for EU vessels was used in 2011

Table 6.9: initial Member State quota allocations in 2013, by species and area

Species	Area	DE	DK	EE	ES	FR	IR	LT	LV	PL	PT	UK	SE	EU
Capelin	ICES V, XIV	214	4 909	0	0	0	0	0	0	0	0	46	352	5 775
Cod	ICES XIV & NAFO 1	1 391	0	0	0	0	0	0	0	0	0	309	0	1 700
Snow crab	NAFO 1	0	0	0	219	0	31	0	0	0	0	0	0	250
Greenland halibut	ICES V, XIV	3 695	0	0	0	0	0	0	0	0	0	195	0	3 890
Greenland halibut	NAFO 1	2 075	0	0	0	0	0	0	0	0	0	0	0	2 075
Grenadier	ICES V, XIV													140
Grenadier	NAFO 1													140
Atlantic halibut	ICES V, XIV	0	0	0	0	0	0	0	0	0	125	0	0	125
Atlantic halibut	NAFO 1	0	0	0	0	0	0	0	0	0	0	0	0	125
Mackerel ^a	ICES V, XIV	0	0	1 400	0	0	0	0	0	0	0	0	0	1 400
Northern prawn	ICES V, XIV	0	2 400	0	0	2 400	0	0	0	0	0	0	0	4 800
Northern prawn	NAFO 1	0	1 700	0	0	1 700	0	0	0	0	0	0	0	3 400
Demersal redfish	ICES V, XIV & NAFO 1	1 976	0	0	0	10	0	0	0	0	0	14	0	2 000
Pelagic redfish	ICES V, XIV & NAFO 1	2 173	0	0	0	11	0	0	0	0	0	16	0	2 200
Total		11 524	9 009	1 400	219	4 121	31	0	0	0	125	580	352	28 020

Source: European Commission, DG Mare. ^a Experimental fishery. Note: 254 tonnes of capelin quota and 125 tonnes of west Atlantic halibut quota were not allocated to Member States

After the initial allocation of quotas, quota can then be transferred between Member States to match available quotas to the needs of the fishing industry (Table 6:10 and Table 6:11). It is important to note that Estonia, Latvia, Lithuania and Poland acceded to the EU in 2004 and receive no Greenlandic quota through relative stability (e.g. Table 6:9). As such, these Member States rely on intra-EU transfers of quota to obtain fishing opportunities in Greenland.

Intra-EU Member State quota transfers were relatively stable between 2012 and 2013, with a total of approximately 9 900 tonnes swapped in each year. This corresponds to approximately 36 % of the EU's total quota remaining after transfers to Norway. However, quota transferred between Member States can be transferred to other Member States, or even back to the original Member State, so the estimates of total volume of quotas swapped do include double counting. Nevertheless, the stability in intra-EU transfers is not unexpected as the quota swaps are often a product of joint ventures and/or long-standing arrangements for cooperation between Member States.

Northern prawn quota is transferred from France to Denmark as the Danish fishing vessel is co-owned by French and Danish companies¹⁶². Similarly, northern prawn quotas are transferred between Denmark and Estonia as the Estonian fishing companies are in a joint venture with Danish companies¹⁶³. Cod and Greenland halibut quotas are transferred between the UK and Germany to optimise fishing opportunities in Greenland, for example by ensuring that sufficient quotas are available to make a fishing trip and associated travel financially viable¹⁶⁴. Germany has also transferred significant volumes of redfish quota with a variety of Member States, notably Latvia, Lithuania and Poland, as well as transferring cod to Poland.

Table 6:10: intra-EU transfers between Member States in 2012, by species and area

Species	Area	From	To	Tonnes
Cod	NAFO 0, 1	DE	UK	760
Greenland halibut	ICES V, XIV	DE	PL	831
Greenland halibut	ICES V, XIV	PL	DE	43.5
Greenland halibut	ICES V, XIV	UK	DE	275
Atlantic halibut	ICES V, XIV	PT	EE	20
Northern prawn	ICES V, XIV	DK	EE	1 550
Northern prawn	ICES V, XIV	FR	DK	2 550
Northern prawn	NAFO 1	DK	EE	575
Northern prawn	NAFO 1	FR	DK	2 000
Pelagic redfish	ICES V, XIV	DE	ES	150
Pelagic redfish	ICES V, XIV	DE	LT	816
Pelagic redfish	ICES V, XIV	DE	LV	360
Total				9 931

Source: European Commission, DG MARE

¹⁶² Ocean Prawns, pers. comm., 11 March 2014.

¹⁶³ Ocean Prawns, pers. comm., 11 March 2014.

¹⁶⁴ UK Fisheries Ltd, pers. comm., 12 March 2014.

Table 6:11: intra-EU transfers between Member States in 2013, by species and area

Species	Area	From	To	Tonnes
Cod	ICES XIV & NAFO 1	DE	UK	616
Greenland halibut	ICES V, XIV	DE	PL	390
Greenland halibut	ICES V, XIV	DE	UK	275
Greenland halibut	ICES V, XIV	PL	DE	390
Greenland halibut	ICES V, XIV	UK	DE	470
Northern prawn	ICES V, XIV	DK	EE	1 500
Northern prawn	ICES V, XIV	FR	DK	2 400
Northern prawn	NAFO 1	FR	DK	1 700
Demersal redfish	ICES V, XIV	DE	UK	21.5
Demersal redfish	ICES V, XIV	FR	DE	10
Pelagic redfish	ICES V, XIV & NAFO 1	DE	ES	414
Pelagic redfish	ICES V, XIV & NAFO 1	DE	LT	600
Pelagic redfish	ICES V, XIV & NAFO 1	DE	LV	585
Pelagic redfish	ICES V, XIV & NAFO 1	DE	PL	285
Pelagic redfish	ICES V, XIV & NAFO 1	FR	DE	11
Pelagic redfish	ICES V, XIV & NAFO 1	LT	DE	37
Pelagic redfish	ICES V, XIV & NAFO 1	PL	LV	285
Total				9 990

Source: European Commission, DG MARE

In 2013, following intra-EU transfers, the EU quota was more widely distributed than before the transfers had occurred (Table 6:13). Denmark held the highest volume of quota as a consequence of holding the majority of quota for both northern prawn and capelin. Germany retained large portions of cod, Greenland halibut and demersal redfish quota, though having transferred some to other Member States. Spain, Lithuania and Latvia held the majority of pelagic redfish quota following transfers from Germany. The UK held the majority of cod quota, along with smaller quantities of quota for both demersal and pelagic redfish. The situation in 2012 was broadly similar to that described above for 2013 (Table 6:12).

Table 6:12: final Member State quota allocations by species and area following third country and intra-EU transfers in 2012

Species	Area	DE	DK	EE	ES	FR	IR	LT	LV	PL	PT	UK	EU
Bycatch	ICES V, XIV & NAFO 0, 1												2 180
Capelin	ICES V, XIV												0
Cod	ICES XIV & NAFO 0, 1	876	0	0	0	0	0	0	0	0	0	1 124	2 000
Snow crab	NAFO 0, 1	0	0	0	437	0	62	0	0	0	0	0	500
Greenland halibut	ICES V, XIV	4 709	0	0	0	0	0	0	0	787	0	0	5 496
Greenland halibut	NAFO 0, 1	1 850	0	0	0	0	0	0	0	0	0	0	1 850
Atlantic halibut	ICES V, XIV	0	0	20	0	0	0	0	0	0	980	0	1 000
Atlantic halibut	NAFO 0, 1	0	0	0	0	0	0	0	0	0	0	0	125
Northern prawn	ICES V, XIV	0	3 550	1 550	0	0	0	0	0	0	0	0	5 100
Northern prawn	NAFO 0, 1	0	3 425	575	0	0	0	0	0	0	0	0	4 000
Pelagic redfish	ICES V, XIV & NAFO 1	3 120	0	0	150	22	0	816	360	0	0	31	4 499
Total		1 555	6 975	2 145	587	22	62	816	360	787	980	1 155	26 750

Source: European Commission, DG MARE

Table 6:13: final Member State quota allocations by species and area following third country and intra-EU transfers in 2013

Species	Area	DE	DK	EE	ES	FR	IR	LT	LV	PL	PT	UK	SE	EU
Capelin	ICES V, XIV	214	4 909	0	0	0	0	0	0	0	0	46	352	5 775
Cod	ICES XIV & NAFO 1	775	0	0	0	0	0	0	0	0	0	925	0	1 700
Snow crab	NAFO 1	0	0	0	219	0	31	0	0	0	0	0	0	250
Greenland halibut	ICES V, XIV	3 890	0	0	0	0	0	0	0	0	0	0	0	3 890
Greenland halibut	NAFO 1	2 075	0	0	0	0	0	0	0	0	0	0	0	2 075
Grenadier	ICES V, XIV													140
Grenadier	NAFO 1													140
Atlantic halibut	ICES V, XIV	0	0	0	0	0	0	0	0	0	125	0	0	125
Atlantic halibut	NAFO 1	0	0	0	0	0	0	0	0	0	0	0	0	125
Mackerel	ICES V, XIV	0	0	1 400	0	0	0	0	0	0	0	0	0	1 400
Northern prawn	ICES V, XIV	0	3 300	1 500	0	0	0	0	0	0	0	0	0	4 800
Northern prawn	NAFO 1	0	3 400	0	0	0	0	0	0	0	0	0	0	3 400
Demersal redfish	ICES V, XIV & NAFO 1	1 964.5	0	0	0	0	0	0	0	0	0	35.5	0	2 000
Pelagic redfish	ICES V, XIV & NAFO 1	337	0	0	414	0	0	563	870	0	0	16	0	2 200
Total		9 255.5	11 609	2 900	633	0	31	563	870	0	125	1 022.5	352	28 020

Source: European Commission, DG MARE and consultant's calculations

Table 6:14 and Table 6:15 show the final quota for all Member States after transfers to Norway, the amount of quota authorised and reported catches for fishing opportunities from the EU–Greenland FPA, separated by species and area, for 2012 and 2013 respectively. The total quota and authorised quota for EU Member States was almost identical for 2012 and 2013. However, it is important to note that the total for 2013 includes relatively large quotas for capelin and the experimental mackerel fishery, which counterbalanced the reductions in quota for cod, Greenland halibut, northern prawn and redfish. In 2013, the total proportion of quota authorised was approximately two thirds of the total quota available. Quotas for cod, Greenland halibut, west northern prawn and redfish were fully authorised. Quotas for east northern prawn were not fully authorised, and no quota was authorised for capelin, snow crab and Atlantic halibut. However it is important to note that Atlantic halibut quota was transferred to Norway (Table 6:6 and Table 6:16). All authorised quotas were close to, if not fully, caught (i.e. within 5 %) with the exception of northern prawn. Again, this is consistent with the pattern seen in 2012, with some exceptions. The main difference was the comparatively low level of authorised quota and catches for redfish in 2012. Half of the snow crab quota was also authorised in 2012, though no catches were reported.

It is clear that in 2013, there was no interest in taking up fishing opportunities for Atlantic halibut, capelin and snow crab, with limited interest in fishing opportunities for east northern prawn. Discussion is provided below for these fishing opportunities, noting also that (as mentioned in Section 6.1.2) the provisions of Regulation (EU) No 927/2012 were not used by member states in 2013 to obtain access to fishing opportunities that were not fully authorised.

Interest in the east northern prawn fishery is less than that for the west fishery for a number of reasons. Operators have reported difficulties in finding aggregations to fish in East Greenland, resulting in higher risk fishing operations, along with adverse weather conditions that have coincided with the fishing season¹⁶⁵. Operators also reported that access to the Icelandic region of Dohrn Bank would allow for increased catches of East Greenland northern prawn fishing opportunities, which is currently granted to Greenlandic prawn trawler vessels¹⁶⁶. However Greenlandic vessels may only catch 375 tonnes in the Icelandic region of Dohrn Bank, and as such access to the Icelandic region would likely be limited if it were to be permitted in the future. As such, it appears unlikely that authorised quotas or catches of East Greenland northern prawn quotas will increase within the timeframe of the current Protocol. It is important to note that the Protocol makes provision for EU fishing vessels to transfer up to 2 000 tonnes of east northern prawn quota to the west northern prawn fishery through quota transfers with Greenlandic operators (Section 6.1.2). This provision flexibility in quota was not taken up in 2013, due to the lack of interest from Greenlandic operators in transferring west northern prawn quota for east northern prawn quota (for reasons discussed above). Additionally, the Protocol makes provision for EU fishing vessels to transfer unused authorised northern prawn quota from one year to the next if scientific advice allows it (Section 6.1.2). Estonia used this provision to transfer 75 tonnes of East Greenland northern prawn quota from 2013 to 2014, the maximum amount permitted at 5 % of their total authorised quantity. Given the low volume of quota transferred, the impact of the transfer on the stock was expected to be minor and as such was considered to be coherent with scientific advice¹⁶⁷.

The East Greenland Atlantic halibut fishery is not considered to be economically viable by Portugal due to high bycatch levels¹⁶⁸ and the requirement to use longline gear¹⁶⁹, with suggestions that interest would increase with access to the West Greenland Atlantic halibut fishery¹⁶⁸ or if a trawl fishery were permitted¹⁶⁹. As such it is

¹⁶⁵ Ocean Prawns, pers. comm., 11 March 2014.

¹⁶⁶ Estonian Long Distance Fishing Association, pers. comm., 27 March 2014.

¹⁶⁷ DG MARE, pers. comm., 11 June 2014.

¹⁶⁸ Direção de Serviços de Recursos Naturais, pers. comm., 13 March 2014.

¹⁶⁹ ADAPI, pers. comm., 31 March 2014.

unlikely that uptake of fishing opportunities for Atlantic halibut will improve in the current Protocol, unless Portugal (or any member state) fish for Atlantic halibut in West Greenland using quota which is not currently allocated to specific member states (Table 6:9).

As discussed in Section 2.3.1, in 2013 (and earlier years) there were issues with EU fishing vessels taking up fishing opportunities for capelin due to the late provision of advice, and therefore quota, for the stock relative to the fishing season in Greenlandic waters. Additionally, in previous years, fishing opportunities for capelin were limited due to the natural variability of the stock. Nevertheless, in 2013 progress was made in ensuring timely advice from ICES, which may lead to increased utilisation of capelin quotas by EU fishing vessels within the timeframe of the current protocol, subject to available fishing opportunities. However, in 2014, scientific advice was again requested by coastal states rather late (7 May).

Interest in the snow crab fishery in 2013 was limited due to spatial restrictions in fishing areas¹⁷⁰. In the 2014 season the spatial restrictions have been removed, with a closed season from 1 January to 31 March. As such, interest in the fishery may increase in 2014 and 2015.

Given the information above, it appears likely that uptake of fishing opportunities by EU fishing vessels in Greenlandic waters in 2014 and 2015 will be similar to 2013. However, based on the most recent work of ICES (Section 3.2.2), it is important to note that fishing opportunities for pelagic redfish in 2015, and beyond, are likely to be far lower than the levels seen in recent years.

Table 6:14: quota (tonnes), quota authorised (tonnes), percent of total quota authorised, catch (tonnes) and % of quota caught for fishing opportunities under the EU–Greenland Fisheries Partnership Agreement, 2012 (after transfers to Norway)

Species	Area	Quota	Authorised	%		
				authorised	Catch	% quota caught
Bycatch	ICES XIV & NAFO 1	2 180	n/a	n/a	142	6.5
Capelin	ICES V, XIV	0	0	n/a	0	n/a
Cod	NAFO 1	2 000	2 000	100.0	2 040	102.0
Snow crab	NAFO 1	500	250	50.0	0	0.0
Greenland halibut	ICES V, XIV	5 496	5 496	100.0	5 400	98.3
Greenland halibut	NAFO 1	1 850	1 850	100.0	1 784	96.4
Atlantic halibut	ICES V, XIV	1 000	0	0.0	0	0.0
Atlantic halibut	NAFO 1	125	0	0.0	0	0.0
Northern prawn	ICES V, XIV	5 100	1 850	36.3	1 405	27.5
Northern prawn	NAFO 1	4 000	4 000	100.0	3 717	92.9
Pelagic redfish	ICES XIV & NAFO 1	4 499	3 050	67.8	2 596	57.7
Total		26 750	18 496	75.3	17 084	63.9

Source: European Commission, DG MARE

¹⁷⁰ ARVI, pers. comm., 28 March 2014.

Table 6:15: quota (tonnes), quota authorised (tonnes), percent of quota authorised, catch (tonnes) and % of quota caught for fishing opportunities under the EU–Greenland Fisheries Partnership Agreement, 2013 (after transfers to Norway)

Species	Area	Quota	Authorised	%		
				authorised	Catch	% quota caught
Capelin	ICES V, XIV	5 775	0	0.0	0	0.0
Cod	ICES XIV & NAFO 1	1 700	1 700	100.0	1 676	98.6
Snow crab	NAFO 1	250	0	0.0	0	0.0
Greenland halibut	ICES V, XIV	3 890	3 890	100.0	3 799	97.7
Greenland halibut	NAFO 1	2 075	2 075	100.0	2 034	98.0
Grenadiers	ICES V, XIV	140	n/a	n/a	n/a	n/a
Grenadiers	NAFO 1	140	n/a	n/a	n/a	n/a
Atlantic halibut	ICES V, XIV	125	0	0.0	0	0.0
Atlantic halibut	NAFO 1	125	0	0.0	0	0.0
Mackerel ^a	ICES XIV, V	1 400	1 400	100.0	1 367	97.6
Northern prawn	ICES V, XIV	4 800	2 000	41.7	1 504	31.3
Northern prawn	NAFO 1	3 400	3 400	100.0	3 331	98.0
Demersal redfish	ICES XIV & NAFO 1	2 000	2 000	100.0	1 957	97.8
Pelagic redfish	ICES XIV & NAFO 1	2 200	2 184	99.3	2 177	99.0
Total		28 020	18 649	67.2	17 844	63.7

Source: European Commission, DG MARE. ^a Experimental fishery

Table 6:16: total EU quota (tonnes), quota authorised by EU fishing vessels (tonnes), EU quota transferred to Norway, percent of quota authorised or transferred to Norway, catch (tonnes) and % of quota caught or transferred to Norway, for fishing opportunities under the EU–Greenland Fisheries Partnership Agreement, 2013

Species	Area	Quota	Transferred	Authorised	% authorised and/or transferred	Catch	% quota caught and/or transferred
Capelin	ICES V, XIV	5 775	0	0	0.0	0	0.0
Cod	ICES XIV & NAFO 1	2 200	500	1 700	100.0	1 676	98.9
Snow crab	NAFO 1	250	0	0	0.0	0	0.0
Greenland halibut	ICES V, XIV	4 465	575	3 890	100.0	3 799	98.0
Greenland halibut	NAFO 1	2 650	575	2 075	100.0	2 034	98.5
Grenadiers	ICES V, XIV	200	60	n/a	30.0	n/a	n/a
Grenadiers	NAFO 1	200	60	n/a	30.0	n/a	n/a
Atlantic halibut	ICES V, XIV	200	75	0	37.5	0	37.5
Atlantic halibut	NAFO 1	200	75	0	37.5	0	37.5
Mackerel	ICES XIV, V	1 400	0	1 400	100.0	1 367	97.6
Northern prawn	ICES V, XIV	7 500	2 700	2 000	62.7	1 504	56.1
Northern prawn	NAFO 1	3 400	0	3 400	100.0	3 331	98.0
Demersal redfish	ICES XIV & NAFO 1	2 000	0	2 000	100.0	1 957	97.8
Pelagic redfish	ICES XIV & NAFO 1	3 000	800	2 184	99.5	2 177	99.2
Total		33 440	5 420	18 649	72.0	17 844	69.6

Source: European Commission, DG MARE

Table 6:17 and Table 6:18 present the number of authorised EU fishing vessels in 2012 and 2013. The number of licensed vessels was pretty stable, with the decrease in total vessel numbers mainly due to the reduction in UK vessels authorised for the cod fishery. In 2013, Spain had the highest number of authorised vessels with eight vessels authorised for pelagic redfish. Germany had the next highest, with six vessels authorised for cod, Greenland halibut and pelagic and demersal redfish. Estonia had four vessels authorised for east northern prawn. The remaining Member States had one authorised vessel each. All vessels were listed as pelagic or demersal trawlers, with gross registered tonnage and length overall (LOA) ranging between 660 and 3 070 tonnes and 40 and 90 metres respectively. The number of authorised EU vessels in 2014 and 2015 will probably be determined by the level of agreed quotas. The recent stability in agreed quotas suggests that the number of authorised vessels will only increase if fishing opportunities for capelin are authorised, though stabilisation or a slight decline in vessel numbers appears more likely.

Table 6:17: number of vessels authorised by Member State and authorisation type in 2012

Member State	Cod	Snow crab	Greenland halibut – east	Greenland halibut – west	Northern prawn – east	Northern prawn – west	Demersal redfish	Pelagic redfish	Total
DE	5	0	5	5	0	0	0	6	6
DK	0	0	0	0	1	1	0	0	1
ES	0	1	0	0	0	0	0	8	9
EE	0	0	0	0	4	3	0	0	4
UK	4	0	0	0	0	0	0	0	4
LT	0	0	0	0	0	0	0	1	1
LV	0	0	0	0	0	0	0	1	1
PL	0	0	1	0	0	0	0	0	1
Total	9	1	6	5	5	4	0	16	27

Source: European Commission, DG Mare. Note: east – east Greenland, west – west Greenland

Table 6:18: number of vessels authorised by Member State and authorisation type in 2013

Member State	Cod	Snow crab	Greenland halibut – east	Greenland halibut – west	Northern prawn – east	Northern prawn – west	Demersal redfish	Pelagic redfish	Total
DE	5	0	5	5	0	0	5	4	6
DK	0	0	0	0	1	1	0	0	1
ES	0	0	0	0	0	0	0	8	8
EE	0	0	0	0	4	0	0	0	4
UK	1	0	0	0	0	0	0	0	1
LT	0	0	0	0	0	0	0	1	1
LV	0	0	0	0	0	0	0	1	1
PL	0	0	0	0	0	0	0	0	0
Total	6	0	5	5	5	1	5	14	22

Source: European Commission, DG Mare. Note: east – east Greenland, west – west Greenland

6.2.2 Bycatch and experimental fisheries

In the previous Protocol a collective bycatch reserv was set aside for the EU's fishing vessels, with maximum bycatch for a given fishing vessel outlined on authorisations. However, the management of bycatches was changed for the current Protocol. Bycatch of EU fishing vessels currently count against the EU's fishing opportunities for the relevant stock, with specific bycatch quotas set for grenadier species. This change in bycatch management appears to have been aimed at providing separate fishing opportunities for grenadiers, which the EU has historically transferred to Norway (Section 6.2.1), whilst applying consistent management of bycatch for all species¹⁷¹. In practice this requires EU fishing vessels to have quotas for bycatches from stocks with EU quotas, though it is not necessary for vessel operators to request an authorisation and pay authorisation fees for bycatches.

¹⁷¹ European Commission (Unit B3), pers. comm., 14 April 2014.

The change in management of EU bycatches has not had any real impact on the work of GFLK, due to the low levels of bycatches in the fisheries¹⁷². For the same reason, it has not impacted EU fishing vessels targeting northern prawn¹⁷³ or pelagic redfish¹⁷⁴. However, the change in bycatch management did cause difficulties for Germany and the UK in 2013, primarily due to bycatches of cod in the demersal redfish fishery and vice versa. Difficulties were reported by vessel operators both in anticipating how much quota might be required to cover bycatches, and then managing quotas in season to ensure that bycatches were covered. This is particularly true for the UK, where it was necessary to transfer quotas of demersal redfish in season from Germany¹⁷⁵. Both countries also commented on the time taken to add quota of bycatch species to authorisations, given the 15-day turn-around. This particular issue of timing may not be problematic in 2014 given that it is not necessary for EU vessel operators to have fishing authorisations for bycatch species. However, difficulties experienced by vessel operators in managing bycatch quotas will persist for the duration of the Protocol. Additionally, it was noted that potential experimental fisheries could also be affected by the new system of bycatch management, e.g. bycatches of redfish in experimental fisheries for silver smelt¹⁷⁶.

In 2013, one European fishing vessel applied for, and was granted, authorisation to operate in the experimental fishery for mackerel in Greenland waters with a quota of 1 400 tonnes¹⁷⁶. A Greenlandic scientific observer and a national research scientist were present on the vessel and a report was produced summarising the experimental fishing campaign¹⁷⁶. The quota was almost fully utilised (Table 6:15). It is important to note that members of the Northern Pelagic Group of the European Association of Fish Producers had agreed not to apply for authorisations for the experimental mackerel fishery, though the one European fishing vessel that did participate in the experimental fishery was not constrained in this way whilst other vessels of the same company were¹⁷⁷. The level of interest in participating in the experimental fishery in 2013 was therefore higher than suggested by the number of authorised vessels. Additionally, some stakeholders reported receiving conflicting information from different units of the European Commission as to whether they should participate in the experimental fishery^{177, 178}.

Regardless, the EU has stated that there will be no applications for the mackerel fishery in 2014, citing the high level of quota set by Greenland for an experimental fishery¹⁷⁹. Additionally, further EU participation in the Greenlandic experimental fishery would be constrained by the effective 4 000-tonne limit for EU catches from the fishery imposed due to the tripartite agreement on north-east Atlantic mackerel between the EU, the Faroe Islands and Norway¹⁸⁰. Therefore, it appears likely that significant EU catches of mackerel in Greenlandic waters would require Greenlandic quotas to be set within the framework of the coastal states agreement.

6.2.3 Utilisation of quota transfers by and from third countries

The EU–Greenland fishery partnership agreement and the EU–Norway agreement are highly interdependent. In simple terms, this is because the EU uses some of the fishing possibilities provided for by Greenland to

¹⁷² Greenlandic Fisheries License Control Authority, pers. comm., 12 February 2014.

¹⁷³ Ocean Prawns, pers. comm., 11 March 2014 / Estonian Ministry of Environment, pers. comm. 27 March 2014.

¹⁷⁴ ARVI, pers. comm., 28 March 2014 / Batterfiša, pers. comm., 28 March 2014.

¹⁷⁵ UK Fisheries Ltd, pers. comm., 12 March 2014 / Deutsche Fischfang-Union GmbH & Doggerbank Seefischerei GmbH, pers. comm., 19 March 2014.

¹⁷⁶ Estonian Long Distance Fishing Association, pers. comm., 27 March 2014.

¹⁷⁷ Danish Pelagic Producers Organisation, pers. comm., 9 March 2014.

¹⁷⁸ Danish AgriFish Agency, pers. comm., 9 March 2014.

¹⁷⁹ Anon., 2014b.

¹⁸⁰ Anon., 2014a.

exchange for fishing possibilities in North Norway. In relation to the EU–Norway agreement it is important to distinguish between so-called ‘access quota’ and ‘transfer quota’. The linkage to the EU–Greenland agreement concerns transfer quota, where additional fishing opportunities are granted in each other’s fisheries zones under the terms of the reciprocal fisheries agreement to provide a balanced exchange of fishing possibilities. Table 6:19 gives an overview of the quota exchanged between the EU and Norway in 2013, including EU quota in Greenland, and what the EU secured from Norway in exchange. It is clear that fishing opportunities in Greenland make a significant contribution to the overall quota traded by the EU (in cod equivalents), contributing approximately one-third in 2013. Cod equivalents are a unit of weight reflecting the relative market value of different fish species compared to cod, and are used to standardise fishing opportunities of different species. Cod equivalents are used to ensure balanced transfers in the EU’s northern agreements, as well as by other countries in Northern Europe. The values of cod equivalent by species used in the northern agreements are fixed and provided in Annex H.

Table 6:19: exchange of fishing opportunities between the EU and Norway in 2013 in tonnes and cod equivalents, with disaggregation between EU quota from EU stocks and that obtained through the Protocol (Greenland)

Transfer	Area	Tonnes	Cod equivalents (t)
EU to Norway	Greenland	4 920	10 358
	EU stocks	92 810	20 731
	Total	97 730	31 077
Norway to EU	Norway stocks	33 579	31 075

Source: DG MARE, pers. comm., 13 June 2014. Note: An additional 500 tonnes of Greenland cod was transferred to Norway by the EU in addition to the balanced exchange¹⁸¹

Data available for the study was only for total Norway catches in Greenland, with no differentiation between catches of transferred FPA fishing opportunities and catches of quotas under the bilateral Greenland-Norway agreement. In 2013 Norway’s total uptake of quota in Greenlandic waters, for species and areas where Norway received quota from the EU, was generally high (Table 6:20). Exceptions to this included east and west Atlantic halibut and east northern prawn, where low utilisation of quotas may have been due to similar reasons to the EU’s low utilisation of these fishing opportunities (Section 6.2.1), as well as reasonably low utilisation of East Greenland halibut.

¹⁸¹ Anon., 2013c.

Table 6:20: EU–Greenland FPA quota transferred to Norway (FPA quota – tonnes), Norway’s total quota and reported catch in Greenlandic waters and the percentage utilisation of total quota in 2013 (for species and areas of relevance to fishing opportunities listed in the Protocol)

Species	Area	Total quota ^a	FPA quota	Catch	Utilisation (%)
Capelin	ICES V, XIV	0.0	0.0	0.0	n/a
Cod	ICES XIV & NAFO 1	1 250.0	500.0	1 237.9	99.0
Snow crab	NAFO 1	0.0	0.0	0.0	n/a
Greenland halibut	ICES V, XIV	850.0	575.0	561.1	66.0
Greenland halibut	NAFO 1	1 475.0	575.0	1 473.3	99.9
Atlantic halibut	ICES V, XIV	235.0	75.0	3.9	1.6
Atlantic halibut	NAFO 1	75.0	75.0	0.0	0.0
Northern prawn	ICES V, XIV	2 700.0	2 700.0	0.0	0.0
Northern prawn	NAFO 1	0.0	0.0	0.0	n/a
Demersal redfish	ICES XIV & NAFO 1	400.0	0.0	355.1	88.8
Pelagic redfish	ICES XIV & NAFO 1	2 600.0	800.0	2 670.6	102.7
Total		9 585.0	5 300.0	6 301.9	65.7

Source: GFLK. Notes: ^a Norway’s total quotas, including EU-Greenland FPA quota transferred to Norway as well as quotas through Norway’s bilateral agreement with Greenland

In 2013, in exchange for fishing opportunities for EU and Greenland stocks, the EU received fishing opportunities for Barents Sea cod, haddock and saithe, along with fishing opportunities for *Nephrops*, anglerfish and prawns in the North Sea. It is not possible to identify specific fishing opportunities in Norway received by the EU in exchange for Greenland quota and therefore quantify the benefits of these fishing opportunities to the EU, as the Greenland quotas are transferred as part of a package. Nevertheless, Member States consulted for the study reported high utilisation of fishing opportunities from the EU–Norway agreement¹⁸² or specifically commented on the importance of the fishing opportunities at a Member State level¹⁸³. It is important to note that these member states (consulted for this study) also received the majority (95 %) of EU quota resulting from the EU–Norway agreement in 2013¹⁸⁴. As such, the feedback from the consultations can be considered to be reflective of the relevant EU member states. The apparent importance of fishing opportunities secured in Norway through the EU–Greenland FPA is expected given the recognised significance of the secured fishing opportunities at an EU level¹⁸⁵.

¹⁸² Deutsche Fischfang-Union GmbH & Doggerbank Seefischerei GmbH, pers. comm., 19 March 2014 / MAGRAMA, pers. comm., 20 March 2014.

¹⁸³ UK Fisheries Ltd, pers. comm., 12 March 2014 / Danish Agrifish Agency, pers. comm., 9 March 2014 / French Directorate of Marine Fisheries and Aquaculture, pers. comm., 19 March 2014.

¹⁸⁴ 96 % of total quota in Norwegian waters was allocated to the UK, Denmark, Germany, France, Spain and Portugal in 2013, based on quota information in Regulation (EU) No. 40/2013 as amended.

¹⁸⁵ E.g. see http://ec.europa.eu/fisheries/cfp/international/agreements/norway/index_en.htm (accessed 25 April 2014).

Table 6:21: member states that fished or were entitled to fish through the EU-Greenland FPA and member states that received quota in Norwegian waters through the EU-Norway agreement, in 2013 (in descending order by tonnes of catch and quota respectively)

MS fished through EU-Greenland FPA	MS with quota through EU-Norway agreement
Germany	UK
Denmark	Denmark
Estonia	Germany
UK	France
Latvia	Spain
Lithuania	Portugal
Spain	Ireland
Ireland	Greece
France	Netherlands
Portugal	Belgium

Source: Catches through EU-Greenland FPA – DG MARE. Quotas through EU-Norway agreement – Regulation (EU) No. 40/2013, as amended

6.2.4 Utilisation of intra-community quota transfers

As discussed in Section 6.2.1, intra-community quota transfers do not necessarily represent a balanced exchange of fishing opportunities, with northern prawn quotas generally transferred due to shared economic interests in fishing vessels taking up fishing authorisations in Greenland, or joint ventures. However, the transfers of Greenland halibut, cod and redfish quotas from Germany to other Member States were part of exchanges of fishing opportunities between the two parties¹⁸⁶. As with transfers between the EU and Norway, these transfers of fishing opportunities were based on transfer of quota packages, so it is not possible to determine exactly what quotas were provided in exchange for Greenland quota alone. However, this should not necessarily affect the quantification of the total benefit of the FPA to the EU. This is because the benefit to an individual Member State generated from quotas transferred for Greenland quota alone is likely to be approximately equal to the benefits foregone by the other party of the quota exchange.

6.3 Costs of the Protocol

The EU's annual financial contribution to Greenland is outlined in the Protocol, with the financial compensation based on payment for quotas equal to the indicative level of fishing opportunities outlined in the Protocol (Section 6.1.2). The Protocol also states that if agreed fishing opportunities are set lower than indicative levels, then Greenland should compensate the EU with alternative fishing opportunities, or the EU financial compensation should be adjusted proportionally (Section 6.1.2). In recent years the agreed fishing opportunities have been less than the indicative levels, primarily due to low fishing opportunities for capelin (Section 6.2.1). Furthermore, it has not been possible for Greenland to provide additional fishing opportunities to cover the difference largely due to scientific advice on stock status. As such, it has been necessary for the EU's financial compensation to be adjusted.

The mechanism used to achieve this adjustment can be described as follows. First, the overpayment in financial compensation by the EU for a given year is calculated by multiplying any deficit in fishing opportunities (i.e. indicative minus agreed fishing opportunities in tonnes) by 17.5 % of the reference fee. The

¹⁸⁶ Bundesanstalt für Landwirtschaft und Ernährung, pers. comm., 19 March 2014.

same approach is used to calculate any underpayment by the EU resulting from the agreed fishing opportunities exceeding the indicative levels. The overpayment of the EU is then adjusted by taking account of any underpayments to determine the overall 'Greenlandic debt'. The resulting Greenlandic debt for a given year is agreed at the November meeting of the Joint Committee for the following year, e.g. the Greenlandic debt for fishing opportunities in the 2012 season was agreed at the November 2013 meeting of the Joint Committee.

In recent years the financial contributions of the EU have been adjusted in a consistent way to take account of the value of Greenlandic debt for a given year's fishing opportunities. The EU's financial compensation for access for the following year has been reduced by an amount equal to two-thirds of the Greenlandic debt. The EU's sectoral support payment for the following year has been increased by an amount equal to one-third of the Greenlandic debt for the preceding year. For every EUR 1 of overpayment by the EU in a given year, this results in a reduction of EUR 0.66 in the EU's overall financial compensation to Greenland the following year. The increase in sectoral support resulting from Greenlandic debt is discussed further in Section 6.5.

Table 6:22: timing of events affecting the EU's financial contributions for the duration of the Protocol

Date	Action
November 2012	Quotas for 2013 agreed. Debt for 2012 fishing opportunities agreed. Adjustment of EU's financial compensation for 2013 fishing opportunities agreed.
1 March 2013	Deadline for payment of EU contribution for 2013.
November 2013	Quotas for 2014 agreed. Debt for 2013 fishing opportunities agreed. Adjustment of EU's financial compensation for 2014 fishing opportunities agreed.
1 March 2014	Deadline for payment by EU for access to fishing opportunities for 2014.
March 2014	Approval of 2013 Annual Status Report
1 June 2014	Deadline for payment of EU sectoral support for 2014.
November 2014	Quotas for 2015 agreed. Debt for 2014 fishing opportunities agreed. Adjustment of EU's financial compensation for 2015 fishing opportunities agreed.
1 March 2015	Deadline for payment by EU for access to fishing opportunities for 2015 ^a .
March 2015	Approval of 2014 Annual Status Report
1 June 2015	Deadline for payment of EU sectoral support for 2015 ^a .
November 2015	Quotas for 2016 agreed (?). Debt for 2015 fishing opportunities agreed. Adjustment of EU's financial compensation for 2016 fishing opportunities agreed (?).

Source: Summary of information in minutes of Joint Committee meetings. Note: Timing of future events (i.e. June 2014 onwards) based on continuation of current annual process. ^a Subject to confirmation by the Joint Committee

An overview of the timing of events affecting the EU's financial contributions is presented in Table 6:22. It is important to note that the Joint Committee agreed to change the schedule of payment of EU contributions for 2014, to allow for the Annual Status Report to be approved before payment of sectoral support. This change

was required due to the strengthening of conditionality of sectoral support in the context of the common fisheries policy reform¹⁸⁷. The payment schedule for 2015 is subject to confirmation by the Joint Committee.

The EU's financial contribution to Greenland in 2013 and 2014 was in the region of EUR 16 million, on average 2 % lower than the amount outlined in the Protocol due to the low levels of fishing opportunities for capelin in Greenlandic waters and the resulting Greenlandic debt. For comparison, the overpayment by the EU in 2012 and 2013 averaged 6 % (Table 6:23). The financial reserve of EUR 1 500 000 for additional fishing opportunities was not required in 2013 and 2014 due to the Greenlandic debt from agreed fishing opportunities for 2012 and 2013. Taking account of authorisation fees and other payments by EU fishing vessel operators, the total payment by the EU in 2013 was EUR 17 620 990 (Table 6:24).

Table 6:23: EU payments for financial compensation and sectoral support as outlined by the relevant Protocol, the agreed Greenlandic debt and the adjusted EU payments taking account of the agreed debt, 2012 to 2014 (EUR)

	2012	2013	2014
Protocol compensation	11 045 775	13 604 203	13 604 203
Protocol sectoral support	3 261 449	2 743 041	2 743 041
Protocol EU contribution	14 307 224	16 347 244	16 347 244
Agreed debt ^a	1 371 607	731 766	1 051 632
Actual compensation	10 174 168	13 116 359	12 903 115
Actual sectoral support	3 761 449	2 986 963	3 093 585
Actual EU contribution	13 935 617	16 103 322	15 996 700

Source: Agreed debt – minutes of Joint Committee meetings; actual payments – Consultant's calculations.

Notes: ^a Agreed debt from agreed fishing opportunities for the preceding year

Table 6:24: total EU contributions and payments by EU fishing vessel operators, 2012 to 2014 (EUR)

Payments	2012	2013	2014
EU	13 935 617	16 103 322	15 996 700
Vessel operators	1 805 157	1 517 668	n/a ^a
Total	15 740 774	17 620 990	n/a

Source: EU payments – Table 6:23. Authorisation fees – data provided by DG MARE. Notes: ^a The total payment of EU fishing vessel operators in 2014 is not currently available

The agreed quota for capelin in recent years has made the most significant contribution to Greenland's debt, and is also the most variable (Section 3.2). It is therefore difficult to predict what capelin quota may be offered to the EU for the 2014/15 season and the implications of this on Greenlandic debt resulting from 2015 fishing opportunities. It is also difficult to predict whether the EU will be in a position to accept any capelin quota offered due to the late timing of management advice relative to the fishing season in Greenlandic waters (Section 2.3.1). As discussed in Sections 3.2.2 and 6.2.1, it is likely that fishing opportunities for pelagic redfish in 2015 will be lower than those agreed for 2013 and 2014. As such, there is potential for the EU's financial compensation for access to be lower in 2015 than for the previous years in the Protocol.

Member State data on landings volume and value from relevant ICES and NAFO regions, i.e. ICES Subarea XIV and Division Va; NAFO Divisions 1C, 1D and 1F, and Icelandic landings data (see Annex G) suggests that the reference prices in the Protocol were higher than landings prices received by EU fishing vessels for catches made in Greenlandic waters in 2013 (Table 6:25). The authorisation fee paid by EU vessel operators

¹⁸⁷ EC, 2014b.

ranges from 2 to 5.3 % of the reference price (Table 6:26), and in 2013 the authorisation fee ranged from 2.5 to 7.9 % of estimated landing prices obtained by EU vessel operators.

Table 6:25: authorisation fee, reference price, Member State landing price from AER data (and percentage of reference price) and Iceland landing price (and percentage of reference price), by species, 2013 (EUR per tonne live weight)

Species	Reference price	Member State price (% of reference price)	Iceland price (% of reference price)	Average Member State and Iceland price (% of reference price)
Capelin	190	n/a	561 (295 %)	561 (295 %)
Cod	1 800	1 146 (64 %)	1 369 (76 %)	1 258 (70 %)
Snow crab	5 500	n/a	3 348 (61 %)	3 348 (61 %)
Greenland halibut	3 500	2 385 (68 %)	3 321 (95 %)	2 853 (82 %)
Grenadier	2 204	371 (17 %)	421 (19 %)	396 (18 %)
Atlantic halibut	4 100	2 919 (71 %)	3 358 (82 %)	3 139 (77 %)
Northern prawn – E	2 500	n/a	1 992 (80 %)	1 992 (80 %)
Northern prawn – W	2 300	n/a	1 992 (87 %)	1 992 (87 %)
Demersal redfish	1 700	1 491 (88 %)	1 547 (91 %)	1 519 (89 %)
Pelagic redfish	1 700	1 491 (88 %)	1 547 (91 %)	1 519 (89 %)

Source: Authorisation fee and reference price – Protocol; Member State price and Iceland price – see Annex G for explanation. Note also that for cod and northern prawn, consultations suggest that actual prices in 2013 were above reference prices (see Table 6:29 below)

Table 6:26: authorisation fee as a percentage of the reference price, Member State landing price and Iceland landing price, 2013

Species	Authorisation fee	% of reference price	% of Member State price	% of Iceland price
Capelin	5	2.6	n/a	0.9
Cod	90	5.0	7.9	6.6
Snow crab	120	2.2	n/a	3.2
Greenland halibut	129	3.7	5.4	3.9
Grenadier	n/a	n/a	n/a	n/a
Atlantic halibut	217	5.3	7.4	6.5
Northern prawn – E	50	2.0	n/a	2.5
Northern prawn – W	80	3.5	n/a	4.0
Demersal redfish	53	3.1	3.6	3.4
Pelagic redfish	53	3.1	3.6	3.4

Source: Table 6:25

6.4 Compliance with the covenants and obligations specified in the FPA

A detailed examination of the key covenants and obligations required by the FPA, and the status of compliance with them, is provided in Annex E. The Annex highlights that in many areas the covenants and obligations are being complied with by both the EU and Greenland. Key areas where compliance has not been achieved include:

- A format for an electronic catch reporting system (ERS) has not been agreed between the EU and Greenland, despite attempts to achieve a compromise at the June 2013 technical meeting held in Copenhagen. As such, it has not been possible for EU fishing vessels to use the agreed ERS to submit logbook data to Greenlandic authorities.
- In 2013 the Joint Committee did not discuss bycatches and composition as required by the Protocol, reportedly due to the fact that the necessary data on bycatches was not available at the meeting, though noting that bycatch rates for EU fishing vessels are generally low. Nevertheless, bycatches are planned to be on the agenda for the second 2014 meeting.
- There are stocks for which fishing opportunities agreed by the Joint Committee do not appear to take account of scientific advice and the precautionary approach, most notably fishing opportunities for cod and demersal redfish.
- There has been little real movement towards joint enterprises or joint ventures. The requirement for these are standard across all FPAs. It is important to note that there has been no mutually reciprocated interest in establishing joint enterprises/ventures due to the differing priorities of the Parties coupled with regionally uncompetitive economics for Greenlandic-based operations.
- The late agreement of the multiannual programme for implementation of sectoral policy support. This was agreed at the 2013 meeting of the Joint Committee in November, compared to a deadline of 31 March. However, it is important to note that this does not appear to have prevented the EU's financial contribution for sectoral policy support from being used in 2013 as agreed by the Parties.

6.5 Implementation of the sector support matrix

This section was completed using information from the 2013 Annual Status Report¹⁸⁸ and the multiannual sectoral programme for 2013 to 2015¹⁸⁹.

Table 6:27 provides a comparison of the proposed budget for 2013 for the sectoral policy programme and the actual expenditure, along with the EU share through sectoral support. It is important to note that the Protocol states that the multiannual sectoral programme should be agreed no later than three months following application of the Protocol. The Protocol applied (provisionally) from 1 January 2013 (and concluded on 28 January 2014), so the programme should have been agreed before 31 March 2013. In reality, the programme was agreed at the Joint Committee meeting in November 2013.

¹⁸⁸ Anon., 2014b.

¹⁸⁹ MFHA, 2013.

Table 6:27: the annual budget, expenditure and EU share for 2013 for the sector policy programme

Activity	Budget	Expenditure	EU share	% EU
<i>Area 1 - Administration of MFHA</i>				
Enhancement of the legal framework for sustainable fisheries	n/a ^a	n/a ^a	0	0
Management plans	n/a ^b	n/a ^b	0	0
Financial support fund for inshore fisheries	939 597	659 693	188 041	29
Capacity building of fisheries administration	107 239	122 416	77 000	63
<i>Area 2 - Control and enforcement</i>				
Level of administration	804 290	799 249	481 922	60
Control of offshore fisheries	1 474 531	1 390 096	750 000	54
Control of inshore fisheries	321 716	350 449	160 000	46
Enhancement of International Cooperation for Fisheries Control	n/a ^a	n/a ^a	0	0
Digitalisation projects for fisheries control and services	n/a ^c	n/a ^c	0	0
Improvement and purchase of equipment	n/a ^c	n/a ^c	0	0
<i>Area 3 - Support of research and advice</i>				
Data collection, analysis and international scientific cooperation	2 815 013	2 966 980	1 330 000	45
Total	6 462 386	6 288 883	2 986 963	47

Source: Anon., 2014b. ^a Activity undertaken by a range of parties, not possible to provide budget or expenditure. ^b Considered part of the daily work of the administration, with no specific budget or expenditure. ^c Activity added to matrix in late 2013, so no budget or expenditure for 2013

Qualitative and quantitative indicators and annual target levels are detailed in the sectoral support matrix, grouped by objectives. The indicators provide a useful benchmark to compare the results of the sectoral policy programme against specific target levels. In general, the selected indicators appear to be comprehensive. However there are indicators that have no associated target level, particularly those relating to control of inshore and offshore fisheries. These appear to be included to provide some context to other indicator values, e.g. total fishing days (indicators d and e for objective 2.2) only appear relevant when viewed in the context of numbers of observer days (indicators b1 and b2). It is not clear what benefit is achieved by reporting these indicators separately. There are also specific objectives which can have five or more indicators, making it difficult to determine whether objectives are being met if performance varies by indicator. Finally, consultations with stakeholders in Greenland indicated that flexibility in target levels for indicators could be beneficial, particularly in the context of any future Protocols with longer durations¹⁹⁰. The ex ante evaluation provided in Section 7 (see Section 7.1 and 7.4.4) of this report thus raises the need for indicators that are more robust and more flexible.

It is important to note that the EU's financial contribution for sectoral support in 2013, and in previous years, has been expanded by one-third of Greenland's debt from the preceding year (Section 6.3). In 2013 this additional sectoral support was spent on existing activities in the sectoral support programme, a situation which is expected to continue in 2014¹⁹¹. From the perspective of financial programming, this suggests that the

¹⁹⁰ MFHA, pers. comm., 12 February 2014.

¹⁹¹ Anon., 2014b.

contribution for sectoral support outlined in the Protocol is not sufficient to allow the programme to achieve its objectives. However, it is difficult to draw conclusions with certainty, as the 2013 Annual Status Report does not specify where the additional sectoral support was directed. Therefore, the additional contribution could well have been directed to activities which exceeded primary target indicators, e.g. control of inshore fisheries. In conclusion, a more detailed analysis of the increase in sectoral support resulting from Greenlandic debt would be facilitated with more detail on which activities are supported by the additional funds.

A summary of the implementation of the sectoral policy programme is provided below, by policy area.

Area 1 - Legal Framework

In the spring of 2013 Greenland elected a new government, which meant that the process of enhancing and developing the legal framework, in particular the implementation of executive orders for fisheries, was put on hold. The only legal framework that was implemented on fisheries was the retraction of an existing act on user fees in the inshore fisheries. However, some progress was made towards initiating the revision of the Fisheries Act and further work on this is progressing (see Section 2.2).

Area 1 - Management plans

Progress in relation to management plans is on target with a new cod management plan developed in 2013 and implemented from 1 January 2014. The anticipated number of meetings to develop the management plan were not required. The cod management plan will run for three years, based upon scientific data collected through this sectoral policy matrix. It is not currently clear how sustainable the revised cod management plan is, with catches exceeding scientific advice from ICES (Section 3.2.1). STECF have been requested to review the management plan, due to take place in July (2014).

Additional progress with respect to management plans has been made for the lumpfish roe fishery. Initial processes were started in autumn 2013 and are progressing to plan, with the final management plan completion planned for late spring 2014.

In summary, progress has been made in developing and/or implementing management plans for cod and lumpfish roe. However, it is not clear whether the cod management plan will be effective in ensuring sustainable exploitation of the fishery and as such its contribution to the overall objectives of the sectoral support programme are unclear.

Area 1 - Financial Support Fund for the Inshore Fisheries Component

The restructuring of the inshore fisheries is continuing to plan, with the number of vessels within the inshore Greenland halibut fisheries reduced to below the target level (135 actual; 137 targeted). However, the overall accumulated capacity of the fleet (in terms of catches) was not reduced to the desired level. Therefore, the indicators were not fully achieved in 2013, though progress was made. In summary the Financial Support Fund contributed towards modernisation of sectors of Greenland's fishing fleet not experiencing capacity issues, but did not fully meet targets for reducing capacity in the inshore Greenland halibut fishery, where capacity is currently an issue. This progress was made substantially under budget, though expenditure was greatly increased from 2012 due to the increase in numbers of eligible applications for the financial support fund.

Area 1 - Capacity building

Training is an ongoing activity in the Ministry of Fisheries, Hunting and Agriculture and therefore there were no specific indicators for this sector in 2013. Specific courses attended included: personnel of Ministry of Fisheries, Hunting and Agriculture – legal framework overview; fisheries enforcement officers of GFLK – enforcement courses on inspection, investigation, court proceedings and hygiene control.

As the continued training of all fishing officials was the only primary target indicator, the targets were met for 2013, though total expenditure was slightly over budget. The training courses attended appear highly relevant to core areas of competency required in Greenlandic institutions to adequately manage and control fisheries.

Furthermore, consultations with Greenlandic stakeholders indicated that the training provided through sectoral support in 2013 had met the needs of the institutions¹⁹².

Area 2 - Level of administration

On an administrative level, application of the electronic certification in accordance with the EU IUU regulation was continued through implementation of a new certificate layout. The number of electronic EU certificates completed totalled 3 700, which was below target. Training of the port state control corps was continued in line with the requirements under the FAO Port State Measure Agreement. However, the number of port state controls did not meet the target level, with an actual total of 48 compared to an expected total of 150. Logbook use increased, rather than decreased as was expected, however the number of reports/hails was below the planned amount for 2013. The number of support clerks, fishery observers, inspectors and wildlife officers was 55, which is lower than the targeted number.

A more detailed breakdown for expenditure was provided for Area 2 in the 2013 Annual Status report (Table 6:28). Almost 90 % of expenditure for this activity was spent on salaries, with the remainder spent on travel expenses.

Table 6:28: breakdown of expenditure in 2013 for area 2 (control and enforcement) in EUR

Activity	Salaries	Travel expenses	Total expenditure
Level of administration	691 590	107 659	799 249
Control of offshore fisheries	1 169 349	220 747	1 390 096
Control of inshore fisheries	350 449	0	350 449
Total	2 211 388	328 406	2 539 794

Source: Anon., 2014b

Area 2 - Control of offshore fisheries

The target value for observer coverage in the offshore northern prawn fisheries (the primary target indicator) was 50 %. This was not met, with an achieved observer coverage of 42 %. This shortfall was due to both a reduction in observer members and the growth of the experimental mackerel fishery on the east coast of Greenland. The experimental mackerel fishery was considered a high priority by Greenland for observer coverage, due to the number of vessels taking part in the fishery, vulnerabilities to effective MCS due to transshipment of catches and the infrequent opportunity to undertake port inspections. Therefore, it was not possible to achieve the target of 50 % observer coverage in the offshore prawn fisheries whilst achieving the required observer coverage in the mackerel fishery. Recruitment of observers would be required in order to increase observer day numbers and meet targets for the shrimp fisheries.

An observer coverage of 42 % in the northern prawn fishery is reasonably high by international standards, and is unlikely to have significantly impacted the effective control of the offshore northern prawn fishery. However, it does raise the question of whether observer coverage in the northern prawn fishery is the best indicator for control in Greenland's offshore fisheries as a whole, given the emergence of the experimental mackerel fishery. Regardless the realised observer coverage in the offshore fisheries has provided an important contribution to Greenland's MCS activities in the offshore sector. As indicated in Table 6:28, 85 % of expenditure through the sectoral support programme was spent on salaries with the remainder spent on travel expenses.

¹⁹² MFHA, pers. comm., 12 February 2014.

Area 2 - Control of inshore fisheries

The inshore fishery for Greenland halibut was subject to an intensive inspection campaign during the peak season resulting in a very high number of dockside inspections as well as inspections at sea. In 2013 a total of 1 047 inspection trips were undertaken compared to target level of 700, with the high level of inspection trips a result of more targeted management and cooperation between control units. As a result of this intensive inspection campaign the expenditure was above the target amounts, all of which was spent on salaries (Table 6:28). The number of dockside inspections and hygiene controls were not subject to a target indicator however a total of 124 dockside inspections and 225 hygiene controls were carried out in 2013.

It is encouraging that the primary target indicator of inspection trips was comfortably exceeded, partly as a result of a more efficient approach by the control units. The high level of inspection trips undertaken suggests that control activities for the inshore fisheries will have made a substantial contribution to Greenland's MCS activities for the inshore fisheries sector, certainly more than would be expected if the target number of inspection trips had been met, rather than exceeded. However reconfiguration of the primary indicator could enable a more robust analysis of the implementation of the sectoral support. For example, expressing the primary target indicator as percentage of total trips to be inspected would enable the control activities to be viewed in the context of the total effort in the inshore fisheries component.

Area 2 - Enhancement of international cooperation for fisheries control

Primary targets for increasing cooperation on an international scale in relation to fisheries control through negotiated or renewed control agreements were not met and no agreements were finalised in 2013. However, international cooperation was fostered with control authorities from Norway, Faroe Islands, Russia, the EU and Ireland by the implementation of joint Port State Control operations, in 45 instances. In addition, links to Canadian authorities were enhanced by foreign trips and the implementation of a system for information exchange on Canadian vessels offloading catches in Greenland's ports. Following the VMS agreement between Greenland and Canada the cooperation now includes exchange of landing information from Canadian vessels offloading their catches in Greenland ports. As such collaboration on a regional scale was enhanced, with the number of meetings on NAFO and NEAFC attended by control and enforcement staff exceeding targets.

Area 2 - Digitalisation projects for fisheries control and citizen science & the improvement and purchase of equipment

The creation of a public internet site for authorisation applications and additional purposes is ongoing and is expected to be in place mid-2014. Therefore, the adoption of digital solutions for fisheries control and citizen science is still pending. However, the number of planned projects is on target for 2014–2015.

The improvement of equipment did not reach the expected targets, and vehicle renovation and purchasing did not occur, with a new patrol boat likely to enter service in spring 2014. Renovation of IT equipment is ongoing with the establishment of an IT network to the control offices in Upernavik and Uummannaq. This began in December 2013 and will be operational in February 2014.

Area 3 - The gathering and analysis of scientific data and international scientific cooperation in fisheries in the Greenlandic EEZ.

Overall, this activity allowed for the collection of survey data and information for offshore cod in East Greenland and mackerel stocks and has supported surveys for northern prawn in West Greenland, Greenland halibut in both east and West Greenland and snow crab in West Greenland. Primary target indicators were met, with the number of advisory reports considerably above target due to additional information being made available, with an additional five peer-review publications published during 2013. Secondary indicators, including survey days and attendance at international meetings, were all met or exceeded.

It is important to recognise that the 2013 survey for mackerel improved understanding of the distribution and density of mackerel in Greenlandic waters, and an expanded survey is planned for 2014 to refine this

understanding further. As such, the sectoral support programme has contributed towards the exploration of new fishing opportunities for Greenland. Additionally the survey data for the established fisheries (listed above) has provided or contributed to the scientific basis for management of the stocks, both for fisheries managed domestically and shared stocks, supported by submission of advisory reports and attendance at scientific meetings of NAFO and NEAFC.

6.6 Economic analysis of Protocol

6.6.1 Sales values

Table 6:29 summarises total catches through the Protocol for EU fishing vessels, along with the estimated revenue generated. Prices were assumed to be the mean of the Member State and Icelandic prices presented in Table 6:25, with the following exceptions. In 2013 the UK trawler landed fresh cod in Iceland, rather than frozen. Consequently, the landing price estimate was based on discussion by stakeholders to better reflect the premium for the fresh cod product¹⁹³. Danish and Estonian vessel operators reported average landings prices for northern prawn that were in excess of those suggested by the Icelandic price data. As such, the landings price estimate was based on average prices provided in the consultations¹⁹⁴. Finally the landings price reported for redfish by Lithuania was slightly lower than those in Table 6:25, and was used for Latvia and Lithuania¹⁹⁵. It is important to note that the landings price estimates for cod and northern prawn used for the UK and Denmark are both in excess of the reference price (Table 6:25).

¹⁹³ UK Fisheries, pers. comm., 12 March 2014.

¹⁹⁴ Ocean Prawns, pers. comm., 11 March 2014 / Estonian Long Distance Fishing Association, pers. comm., 27 March 2014.

¹⁹⁵ Lithuanian Ministry of Agriculture, pers. comm., 26 July 2014.

Table 6:29: total catch (tonnes), landing price (EUR per tonne live weight) and estimated revenue (EUR), by country and species, 2013

Member State	Species	Area	Catch	Price	Revenue
DE	Cod	ICES XIV & NAFO 1	756	1 258	950 670
	Greenland halibut	ICES V, XIV	3 798	2 853	10 835 694
	Greenland halibut	NAFO 1	2 034	2 853	5 803 002
	Demersal redfish	ICES V, XIV & NAFO 1	1 921	1 519	2 917 999
	Pelagic redfish	ICES V, XIV & NAFO 1	337	1 519	511 903
DK	Northern prawn	ICES V, XIV	298	3 273	975 448
	Northern prawn	NAFO 1	3 331	3 273	10 903 418
EE	Mackerel	ICES V, XIV	1 367	534	729 818
	Northern prawn	ICES V, XIV	1 206	3 273	3 947 620
ES	Pelagic redfish	ICES V, XIV & NAFO 1	407	1 519	618 233
LT	Pelagic redfish	ICES V, XIV & NAFO 1	563	1 250	703 750
LV	Pelagic redfish	ICES V, XIV & NAFO 1	870	1 250	1 087 500
UK	Cod	ICES XIV & NAFO 1	920	2 337	2 150 286
	Greenland halibut	ICES V, XIV	0.8	2 853	2 282
	Demersal redfish	ICES V, XIV & NAFO 1	36	1 519	54 380
Total			17 844		42 192 003

Source: Catch – DG MARE. Price – average of the landing prices from member state and Iceland data (Table 6:25), with the exception of cod (UK), northern prawn (Denmark and Estonia) and redfish (Latvia and Lithuania) (see above)

6.6.2 EU costs

The costs to the EU take the form of financial compensation for access and sectoral support payments from the EU, authorisation fees for EU vessel owners and the cost associated with foregone fishing opportunities in Greenlandic waters that are transferred to Norway (Table 6:32). The EU transferred 10 858 tonnes of Greenlandic fishing opportunities with Norway in cod equivalents in 2013, including the 500 tonnes of cod outside of the balanced transfer (Table 6:20).

After taking account of quota transfers with Norway, the EU paid a total of EUR 344 per tonne of agreed quota in financial compensation in 2013, plus an additional EUR 107 per tonne in sectoral support. These payments rise to EUR 540 and EUR 167 per tonne of catch due to agreed quotas that were not fully authorised and/or quotas that were not fully exhausted (Section 6.2.1). EU fishing vessel operators paid a total of EUR 88 per tonne of authorised quota, compared to EUR 85 per tonne of catch. Overall, the payments to Greenland from the EU's financial compensation for access and authorisation fees from EU fishing vessel operators per tonne of catch was EUR 625, 26 % of the revenue generated by tonne. Including the EU's sectoral support funds, this payment rises to EUR 792 per tonne, 33 % of the revenue generated by tonne. The payments per tonne caught are lower than the payments per tonne authorised due to the experimental mackerel fishery conducted in 2013, for which there are no EU payments for access or authorisation fees for EU vessel operators.

Table 6:30: summary table of payments by the EU and vessel operators, revenues generated and a comparison against the agreed quota, the authorised quota for EU fishing vessels and the total catch of EU fishing vessels costs and benefits generated by the Protocol in 2013 (in EUR)

	Total	Per tonne quota	Per tonne authorised	Per tonne caught
EU compensation	9 627 077	344	558	540
EU sectoral support	2 986 963	107	173	167
Operator payments	1 517 668	54	88	85
Total payments	14 131 708	504	819	792
Total revenue	42 192 003	1 506	2 446	2 364

Note: EU payments have been reduced to take account of payments for quota exchanged with Norway. EU payments are estimated as 17.5 % of the reference price for agreed quota available to EU fishing vessels after transfers to Norway

6.6.3 EU benefits¹⁹⁶

Catching sector

The EU received 28 020 tonnes of fishing opportunities in Greenland waters in 2013, corresponding to 46 780 tonnes in cod equivalents. Of this 10 858 tonnes in cod equivalents was transferred to Norway, with the EU receiving 10 358 tonnes in return, assuming that the EU received fishing opportunities from Norway of an equal value to those transferred to Norway (not including the 500 tonnes of cod).

EU fishing vessels generated in excess of EUR 42 million in revenue from Greenlandic fishing opportunities (Table 6:32). The overall net profit generated through Greenlandic fishing opportunities was reasonably low (1.6 %) due to poor economic performance in some fleet sectors (see Annex D). Crew earnings generated from Greenlandic fishing opportunities amounted to over EUR 9 million.

The value-added generated by the Protocol in 2013 is provided in Table 6:31. The catching sector generated EUR 10 million in direct value added through crew wages and profits, approximately 45 % of the EU's total value-added through fishing opportunities in Greenland. Additionally, assuming that the value-added per cod equivalent generated by EU fishing opportunities through the Protocol is the same irrespective of the location (i.e. value-added per cod equivalent for Norwegian opportunities is the same as that for Greenlandic opportunities), and assuming similar utilisation of quota in Norway by EU vessels, then the Protocol also generated an additional EUR 2 800 000 of direct value added to the catching sector through fishing opportunities secured in Norwegian waters.

Upstream sector

The Protocol is estimated to have generated approximately EUR 5 600 000 in indirect value-added for the EU's upstream sector through fishing opportunities in Greenland (Table 6:32), due to the high reliance of the EU fishing vessels on EU-based services. The Protocol is estimated to have generated an additional EUR 1 700 000 in indirect value-added to the EU upstream sector from fishing opportunities for EU vessels in Norwegian waters secured through the Protocol (assuming an equivalent value-added per tonne cod equivalent for the respective fishing opportunities and similar utilisation). Consultations with stakeholders indicated that some EU fishing vessels are also serviced and maintained in Iceland.

¹⁹⁶ Explanation of the basis for estimating direct and indirect value added to the EU and Greenland is provided in Annex D.

Downstream sector

The Protocol is estimated to have generated approximately EUR 7 million in indirect value-added for the EU's processing sector through product from Greenland's fisheries (Table 6:32). The Protocol is also estimated to have generated an additional EUR 2 million in indirect value-added to the EU downstream sector from fish products caught by EU fishing vessels in Norwegian waters using fishing opportunities secured through the Protocol.

Wider benefits

The EU's sectoral support contributions outlined in Section 6.6.2 also generate benefit to the EU, by contributing towards sustainable fishing opportunities for EU fishing vessels. Additionally, the sectoral support contributions could generate future benefit through new fishing opportunities for EU fishing vessels, for example fishing opportunities for mackerel. Whilst recognising that these wider benefits exist, it is not possible to quantify them.

6.6.4 Greenland benefits

The benefits in Greenland generated by the Protocol are predominantly accounted for by financial compensation from the EU, authorisation fees from EU vessel owners and EU sectoral support (Table 6:32). There is also a small amount of indirect value-added generated by Greenlandic crew employed on EU fishing vessels and port calls by EU fishing vessels in Greenlandic ports. In 2013 the total value-added generated in Greenland corresponded to approximately 8 % of the total value added generated in the EU and Greenland (Table 6:31). The comparative lack of benefits generated in Greenland's upstream and downstream subsectors is due to the fact that the majority of EU fishing vessels do not rely on Greenlandic ports for landing of catches or upstream services, instead needing to use EU or Icelandic ports due to higher prices for fish products and lower prices for upstream services, and the lack of adequate port facilities on the east coast of Greenland. This also affects the ease of using Greenlandic fishers on EU fishing vessels. In this context it is not surprising that the only EU fishing vessel to employ Greenlandic staff is also the only fishing vessel to be based in Greenland¹⁹⁷.

In 2013 Greenland received approximately EUR 14.1 million in financial contributions from the EU and EU fishing vessels, not including payments for fishing opportunities transferred to Norway, corresponding to 33 % of the revenues generated by EU fishing vessels from Greenlandic fishing opportunities.

¹⁹⁷ Ocean Prawns, pers. comm., 11 March 2014.

6.6.5 Summary of a) value added, and b) costs and benefits

Table 6:31: value added (EUR) generated in the EU and Greenland by the fishing opportunities in Greenland through the Protocol, in 2013

	EU value-added	Greenland value-added	Total value-added
Indirect upstream sub-sector value-added			
Port calls	1 750 420	750 670	2 501 090
Insurance	337 536	0	337 536
Repairs and maintenance	1 582 154	0	0
Vessel depreciation	1 057 134	0	1 057 134
Overhead/management charges	843 840	0	843 840
<i>Total upstream sub-sector</i>	<i>5 571 085</i>	<i>750 670</i>	<i>6 321 755</i>
Direct catching sub-sector value-added			
Crew wages	9 280 554	1 340 483	10 621 036
Vessel profit	688 910	0	688 910
<i>Total catching sub-sector</i>	<i>9 969 463</i>	<i>1 340 483</i>	<i>11 309 946</i>
Indirect downstream sub-sector value-added			
Fish processed	7 102 397	0	7 102 397
TOTAL all sub-sectors	22 642 944	2 091 153	24 734 097

Source: Consultant's calculations. Notes: Upstream inputs only included if the value-added estimated is thought to accrue to either the EU or Greenland. Fuel not included in value-added estimations as assumed from international sources. Port calls only for Danish vessel in Greenland, others 50 % in EU and 50 % in Iceland. No repairs and maintenance take place in Greenland, with Estonian and Latvian vessels serviced in Iceland and the remainder in EU where costs are lower. Vessels assumed to be insured and constructed in the EU.

Table 6:32 provides a summary of the costs and benefits generated by the Protocol in 2013. Considering only financial contributions from the EU and/or EU vessel owners for EU-Greenland fishing opportunities retained by the EU (i.e. not transferred to Norway), the Protocol generated EUR 1.60 in direct and indirect value-added for the EU per EUR 1 of payments from the EU and EU vessel operators. This rises to EUR 1.80 in direct and indirect value-added per EUR 1 of payments from the EU alone. As such, a moderate positive return was generated through the Protocol in 2013, with a slightly higher level of value-added per unit payment than that generated through the EU's other mixed agreements, e.g. the EU-Mauritania FPA¹⁹⁸.

¹⁹⁸ COFREPECHE et al., 2014.

Table 6.32: summary table of costs and benefits generated by the Protocol in 2013 (with varying units)

Costs and benefits in 2013	Costs	Benefits
European Union		
Cod equivalents of total quota agreed (tonnes)		46 780
Cod equivalents of quota exchanged with Norway (tonnes) ^a	10 858	10 358
Cod equivalents of quota available for Member States (tonnes)		36 422
Financial compensation for access based on indicative quota (EUR)	13 604 203	
Sectoral support (EUR)	2 986 963	
Debt from 2012 (EUR)		487 844
Upstream value added related to EU catches in Greenland (EUR)		5 571 085
Upstream value added related to EU catches in Norway (EUR)		1 660 855
Catching sector value added for EU fleet owners and crew		
Payments to Greenland (EUR)	1 517 668	
Value of catches in Greenland (EUR)		42 192 003
Profit before interest and tax in Greenland (EUR)		688 910
Crew earnings in Greenland (EUR)		9 280 554
Total value-added from catches in Greenland (EUR)		9 969 463
Value-added of quota agreed in cod equivalents in Greenland (EUR/tonne)		274
Cod equivalents of quota in Norway (tonnes)		10 358
Assumed value-added per cod equivalent in Norway (based on same rate as in Greenland) (EUR)		2 835 240
Downstream value added related to EU catches in Greenland (EUR)		7 102 397
Downstream value added related to EU catches in Norway (EUR)		2 117 371
Greenland		
Financial compensation from EU for access (EUR)		13 604 203
Authorisation fees from EU vessel operators (EUR)		1 517 668
Sectoral support (EUR)		2 986 963
Debt from 2012 (EUR)	487 844	
Crew earnings in Greenland (EUR)		1 340 483
Value-added from port calls (EUR)		750 670

Source: Consultant's calculations. Notes: ^a mismatch due to 500 tonnes of cod transferred from the EU to Norway outside of the balanced exchange (see Table 6:19)

6.6.6 Supplies to the market

At the time of writing it was not possible to obtain total landings data for EU fishing vessels in 2013 disaggregated by species¹⁹⁹. Landings data for 2013 from the EU Market Observatory for Fisheries and Aquaculture (EUMOFA) were used instead, which are grouped at the species group level. Data were available for cod, northern prawn and redfish through EUMOFA, though not Greenland halibut. Data on EU imports and

¹⁹⁹ i.e. data were not available from EUROSTAT.

exports in 2013 were also extracted from EUMOFA to estimate the net import of the species listed above. In 2013, EU FPA/Protocol catches of cod, northern prawn and redfish amounted to 10 600 tonnes (Table 6:29), of which 3 000 tonnes is estimated to be landed in the EU. This is equivalent to 4.4 % of the EU's total landings for these species (68 000 tonnes) and 0.6 % of the EU's combined landings and net imports. 2013 data for the EU's catches from Norwegian fishing opportunities secured through the Protocol were not available at the time of writing, but are estimated to be in the region of 10 000 tonnes in cod equivalents.

In summary, it is clear that the FPA/Protocol provides only a small contribution to overall supplies of products of the relevant species to the EU market and is thus unlikely to have any significant impact on prices. It does however contribute to ensuring a range of products available to the EU consumer in a number of different Member States.

6.7 Employment analysis of the Protocol

The FPA is estimated to have generated a total of 106 full-time equivalents (FTE) in 2013 in the EU catching sector (Table 6:33). Of these, approximately 75 % were EU nationals whilst 10 % were Greenlandic. As discussed in Section 6.6.4, the Greenlandic fishers were used on the one EU fishing vessel based in Greenland. In this case, sourcing crew locally is incentivised by the high costs of transferring EU crew (or other nationals). Conversely, the majority of EU fishing vessels did not visit Greenlandic ports in 2013, which creates a strong incentive to use crew from the EU and/or home ports. Regardless, the employment of Greenlandic nationals generated by the FPA is clearly low in comparison to employment of EU nationals.

Table 6:33: summary table of direct employment generated by the FPA in 2013

Catching sub-sector	DEU	UK	DK	EE	Others	Total
Fleet (active)	5	1	1	3	6	16
<i>Crew per vessel</i>						
EU crew	22.5	11	11	19.8	8.5	
Greenland crew	0	0	11	0	0	
Other crew	1.5	7	0	2.2	16.5	
Total	24	18	22	22	25	
Dependency on Greenland	39.0%	15.0%	100.0%	30.0%	9.5%	
EU FPA related crew	43.9	1.7	11.0	17.8	4.8	79.2
Greenland FPA related crew	0.0	0.0	11.0	0.0	0.0	11.0
Other FPA related crew	2.9	1.1	0.0	2.0	9.4	15.4
Total FPA related jobs	46.8	2.7	22.0	19.8	14.3	105.6

Source: Consultant's calculations. Notes: Employment in FTE. Not possible to estimate upstream and downstream jobs

It was not possible to estimate indirect upstream and downstream employment generated by the FPA.

6.8 Effectiveness – The extent to which the specific FPA objectives were achieved

The Terms of Reference for the study identifies three objectives for the EU–Greenland FPA, each with a number of specific objectives:

1. To contribute towards resource conservation and environmental sustainability through rational and sustainable exploitation of living marine resources of the coastal state, by:
 - 1.1. directing fisheries exclusively at surplus resources and preventing the overfishing of stocks, on the basis of the best scientific advice and improved transparency on the global fishing efforts in the third countries' waters;

- 1.2. following the same principle and promoting the same standards for fisheries management as applied in EU waters;
- 1.3. improving the scientific and technical evaluation of the fisheries concerned;
- 1.4. ensuring compliance and combatting IUU fishing.
2. To protect the EU long-distance fleet and the employment linked to the fleet operating within FPAs, by:
 - 2.1. seeking appropriate share of the surplus resources, fully commensurate with the EU fleet's interests;
 - 2.2. ensuring that the level of fees payable by Union shipowners for their fishing activities is fair, non-discriminatory and commensurate to the benefits provided through the access conditions while avoiding any discriminatory treatment towards EU vessels and promoting a level playing field among the different fleets;
 - 2.3. ensuring supply for the EU and for the markets of certain developing countries;
 - 2.4. encouraging the creation of a secure environment that is favourable to private investment and economic activities;
 - 2.5. taking into account the specific interests of the Union's outermost regions located in the vicinity.
3. To support the development of a sustainable fisheries sector in partner countries, by:
 - 3.1. contributing to the capacity building in the third countries (notably by improving fisheries legal framework, control and surveillance and science);
 - 3.2. promoting the employment of local seamen, improving infrastructures and encouraging landings, supporting the third country in developing local fisheries and processing industry.

The Terms of Reference also provide success criteria to evaluate specific questions, along with suggested indicators. Each specific objective is addressed in turn, with a general response provided where necessary, followed by a direct response to each success criteria (headings in italics).

Objective 1 – To contribute towards resource conservation and environmental sustainability through rational and sustainable exploitation of living marine resources of the coastal state

Specific objective 1.1 – to direct fisheries exclusively at surplus resources and prevent the overfishing of stocks, on the basis of the best scientific advice and improved transparency on the global fishing efforts in the third countries' waters

As mentioned in Section 3, other studies will be studying the operationalisation of the surplus concept in relation to the EU-Greenland FPA. As such, indicators focus on the stock status of the relevant fisheries, rather than an explicit consideration of what surplus is available for the EU fisheries.

It is important to note that the management of fisheries relevant to the Protocol is reasonably complex, frequently involving shared stocks and the need for joint management. As described in Sections 2.3 and 3.2, Greenland is a party to multilateral or bilateral agreements for the following stocks: pelagic redfish, with the EU, Faroe Islands, Iceland and Norway; West Greenland halibut, with Canada; East Greenland halibut, with Iceland; capelin, with Iceland and Norway. Greenland is also a party to RFMOs that have in place conservation and management measures relevant to Greenland and to the FPA. Additionally, Greenland is currently working towards joint management of East Greenland cod with Iceland and long-term management plans for golden redfish and pelagic redfish. In the case of Northeast Atlantic mackerel there is an agreement in place with the majority of coastal states for 2014 to 2018. Greenland has been setting unilateral TACs for its experimental fishery outside of the agreement. With the exception of mackerel, Greenland is part of all agreements for joint management of shared stocks relevant to the Protocol, and has been setting quotas for these stocks in line with the agreements in place. Greenland has also set unilateral quotas for northern prawn

in NAFO 3LNO, though this fishery is not directly relevant to fishing opportunities through the EU-Greenland FPA.

As described in Section 3.2.14, fish stocks targeted by the EU fleet showing definitive signs of an over-exploited status are cod and pelagic redfish. In 2013 these stocks accounted for 16 % of the EU's total agreed quota in Greenlandic waters and 22 % of catches by EU fishing vessels respectively (Table 6:34). The cod fishery is the only instance where the agreed quota for the EU alone is in excess of the ICES advice, but was within the limits of Greenland quota set for the purposes of an exploratory fishery for data collection. Work is currently ongoing regarding the stock structure of offshore cod in Greenland waters, and the extent to which cod in Greenlandic waters is linked to the Icelandic cod stock (Section 2.2). The TAC for the current management plan has been set at 10 000 tonnes, based on the assumption that cod in East Greenland is a component of the Icelandic cod stock. The current uncertainty in the stock structure of offshore cod in Greenland would appear to suggest that the current TAC levels are not coherent with a precautionary approach to management, though recognising that a limited exploratory fishery is necessary to provide information to allow the understanding of stock status to improve. Regardless, the EU's quota for cod contributed 44 % of the total Greenlandic quota for the cod stock in 2013 (Table 6:34), dropping to 22 % in 2014 due to the increase in Greenlandic TAC for the fishery and the fact that the EU's agreed quota remained the same.

The Greenland quotas, and respective FPA fishing opportunities for pelagic redfish were set fully in line with the redfish management plan agreed by the EU, Iceland, Denmark on behalf of Greenland, Faroes and Norway. In fact, by virtue of the plan Greenland's quotas for the fishery were being gradually reduced to be consistent with advice in 2014 (Section 3.2.2).

In 2013 Greenland's total quotas for the demersal redfish, East Greenland halibut and west northern prawn fisheries exceeded scientific advice. However, of relevance is the fact that Greenland and Iceland have a bilateral agreement for East Greenland halibut, which should strengthen the ability to ensure the fishery is exploited sustainably within the short term.

In 2013, the EU's quota for cod, demersal redfish, East Greenland halibut and pelagic redfish accounted for 44 % (halving to 22 % in 2014), 24 %, 17 % and 12 % of total quotas set for the stocks respectively.

The EU's quota for west northern prawn is minimal in the context of the total quota for the fishery, 3 % in 2013 (Table 6:34), and furthermore the stock appears to be fully exploited despite catches exceeding advice in recent years. In combination, this suggests that the EU fishery for this species poses comparatively small risk of adverse environmental impacts.

The EU's quota for (deep) pelagic redfish in Greenland contributed 12 % of the total quota for the fishery in 2013 (Table 6:34). Greenland, and other parties to the interim management measures, had been reducing their quotas in recent years, setting a quota for 2014 consistent with precautionary advice for the stock. Despite this, reanalysis of previous data in 2014 suggests that the stock is at a historical low level (Section 3.2.2). Whilst the overall quota for the stock was gradually reduced before 2014 to be consistent with precautionary advice before 2014, it is important to note that the effectiveness of the interim management measures was undermined by other fishing nations setting quotas at far higher levels. As such, the EU's contribution to catches that ultimately resulted in depletion of the stock was lower than for other fishing nations.

The EU's quota for demersal redfish accounted for 24 % of the total quota in 2013 (Table 6:34). The fishery has an impact on two stocks, predominantly beaked redfish (Section 3.2.3). It is not clear what the stock status is, though total catches have consistently exceeded the precautionary advice given by ICES. As such, whilst the possible environmental impacts of the total catch is not known, the catch levels do exceed the best scientific advice.

The EU's quota for East Greenland halibut was 17 % of the total quota for the fishery in 2013 (Table 6:34). In 2014 Greenland and Iceland agreed to a quota allocation key for the fishery, along with a phased reduction in

total TAC towards advice for the stock. Whilst catches have been higher than advice, the recent bilateral agreement for the stock and the current stock status (above $B_{trigger}$) could prevent the stock from becoming overexploited.

Table 6.34: TAC advice, total quotas, total quota in Greenland, the agreed quotas for the EU (before transfers with Norway) and catches from EU fishing vessels (tonnes) in 2013

Species	Area	Advice	Quota			EU catch
			Total	Greenland	EU	
Capelin	ICES V, XIV	300 000	300 000	33 000	5 775	0
Cod	ICES XIV & NAFO 1	0	5 000	5 000	2 200	1 676
Snow crab	NAFO 1	1 330	n/a	n/a	250	0
Greenland halibut	ICES V, XIV	20 000	26 000	9 800	4 465	3 799
Greenland halibut	NAFO 1	27 000	27 000	13 500	2 650	2 034
Atlantic halibut	ICES V, XIV	n/a	2 000	2 000	200	0
Atlantic halibut	NAFO 1	n/a	1 000	1 000	200	0
Mackerel ^a	ICES XIV, V	542 000	906 000	71 400	1 400	1 367
Northern prawn	ICES V, XIV	12 400	12 400	12 400	7 500	1 504
Northern prawn	NAFO 1	80 000	102 767	87 263	3 400	3 331
Demersal redfish	ICES XIV & NAFO 1	3 500	8 500	8 500	2 000	1 957
Pelagic redfish	ICES XIV & NAFO 1	20 000	26 000	5 785	3 000	2 177
Total		1 006 230	1 416 667	249 648	33 040	17 844

Source: Advice and Greenland quota – Table 3.1; EU quota and catch – Section 6.2.1

Responses to success criteria

Stocks targeted by the EU fleet are not overexploited in the waters of the partner coastal state or at the regional level, as applicable to the specific species

EU fisheries have targeted overexploited stocks during the course of the Protocol, particularly cod. In the case of pelagic redfish, the current low stock status has only recently become clear after EU fishing opportunities for 2014 were agreed, and which were consistent with NEAFC's management advice and the interim management measures agreed for the fishery. Additionally, catches from other shared stocks are also higher than advised. However, Greenland has signed up to a number of multinational and bilateral agreements which should lead to improvements in sustainability for the fisheries concerned, at least if the efforts of the parties are not compromised by autonomous quotas set by other fishing nations. It is also relevant that agreed quotas for the EU have historically taken account of sustainability concerns. A recent example was the agreed EU quota of 2 000 tonnes of cod for 2012, rather than the indicative level of 3 500, in light of the precautionary approach (Section 6.2.1).

As such, it can be concluded that the fishing opportunities agreed by the Joint Committee have taken into account the status of fisheries resources but not necessarily to the extent required to prevent over-fishing of stocks, particularly in the case of the cod fishery.

The FPA takes into account the management strategies expressed by the partner country and management or recovery plans in effect for a particular stock

The agreed EU quotas have been set at a level consistent with Greenland's management plans for the relevant species, i.e. cod and West Greenland northern prawn. Additionally, EU fishing vessels must comply with other management measures detailed in the management plans, e.g. the spatial management of the cod fishery designed to prevent concentration of fishing effort (Section 2.2). Finally, the agreed quotas for pelagic redfish have respected the agreed management measures for pelagic redfish fisheries in the Irminger Sea and adjacent waters. In summary, the FPA has taken into account both Greenland's management strategies and management and recovery plans in place for relevant stocks.

The partner country takes part in the relevant RFMO or agreements for joint management and provides data on activities carried out by vessels flying its flag

With respect to fisheries, Greenland is active at the international level. Greenland is a party to all relevant agreements for joint management, with the exception of that for Northeast Atlantic mackerel and northern prawn in NAFO 3LNO where Greenland has set autonomous quotas. Additionally the EU quotas agreed by the Joint Committee have been set at levels consistent with levels agreed through bilateral and multilateral agreements.

Greenland is represented in NAFO and NEAFC as part of the 'Denmark on behalf of Faroes and Greenland delegation' and as such participates in meetings of both RFMOs. GFLK fulfils Greenland's obligations for submission of catch and quota uptake data to NAFO and NEAFC as well as to other coastal states in the North Atlantic, and there is no evidence of non-compliance with the data reporting obligations to either NEAFC or NAFO²⁰⁰.

Specific objective 1.2 – To follow the same principle and promote the same standards for fisheries management as applied in EU waters

Management measures are adopted to reduce bycatches and reduce the possible impacts on the ecosystem

First, it is important to recognise that bycatches in Greenland's offshore fisheries are relatively low (Section 3.3.1). This was verified during consultation with stakeholders²⁰¹. Regardless, management measures have been introduced in Greenlandic legislation to both reduce bycatches and reduce possible impacts on the ecosystem. These also apply to EU fishing vessels and include: the mandatory use of sorting grids in northern prawn shrimp trawl fisheries to reduce bycatch of finfish species (Section 2.2); a discard ban, with derogations for species and fisheries where release mortality is low and prawn trawlers (Section 2.2); and, maximum bycatch rates and move-on rules.

As stated in the Protocol, bycatches by EU fishing vessels count against FPA quotas for species where the EU has fishing opportunities (Section 6.1.2), ensuring that bycatches are taken into account for management of the fisheries. Finally, EU fishing vessels operating in demersal fisheries have used large mesh sizes to both

²⁰⁰ MFHA, 2014.

²⁰¹ E.g. GFLK, pers. comm., 25 April 2014.

reduce bycatch and ensure that catches exceed the minimum sizes detailed in Greenlandic legislation, 145 mm in the case of German trawlers²⁰².

Given the low bycatch rates of EU fishing vessels and the discard ban effective in Greenlandic waters, bycatches of EU fishing vessels are likely to have no adverse impact on stocks that are also the subject of targeted fisheries. It is important to note that relatively little is known about the status of the grenadier stocks in East and West Greenland (Section 3.2.13). As such, it is not possible to say with any certainty what impacts the fisheries are having on grenadiers, or other non-quota species for that matter. However, as described above, management measures have been implemented to reduce bycatches and mitigate their impacts.

Greenland has also implemented a number of measures to protect the corals and the benthic environment (Section 3.3.4). These include closed areas to protect concentrations of coral and sponge communities, move-on rules for bycatches of corals and sponges and technical conservation measures to mitigate the impact of bottom contact gears on benthic communities.

Greenland has implemented mandatory reporting of seabird bycatches, though uncertainties in the total level of seabird bycatch in fisheries persist (Section 3.3.3). Domestic fisheries are known to interact and induce bycatch mortality on seabird species, particularly driftnet fisheries in the southwest of Greenland, and there are currently no management measures aimed specifically at reducing bird bycatch. However, the intention is for the Greenlandic lumpfish fishery to enter the Marine Stewardship Council process in 2014, which could result in an increase in data collection and quantification of impacts on seabirds for this particular fishery in the short-term.

Greenland does not have any fisheries legislation aimed at endangered, threatened and protected (ETP) species (Section 3.3.2). However, interactions between ETP species are reported to be minimal. There is reportedly potential for the Greenland halibut and northern prawn trawl fisheries to have an adverse impact on Greenland shark.

In summary the management of Greenland's fisheries includes management of bycatch and possible impacts on the environment, to a similar extent to that in EU fisheries management, with the exception of management of ETP species. The ban of discarding in Greenlandic waters will ensure that this remains the case after the phased introduction of the landing obligation in EU waters.

Specific objective 1.3 – To improve the scientific and technical evaluation of the fisheries concerned

EU fishing activities are subject to an appropriate data collection framework (logbook, VMS, observers etc.). These data are transmitted to the relevant RFMO, where applicable

EU fishing activities are subject to a robust data collection framework. There are requirements for EU fishing vessels to comply with: obligations for catch reporting through logbook data submission; vessel monitoring system (VMS) requirements; and, Greenland's observer scheme.

Chapter VII of the Annex to the Protocol is dedicated to the VMS required to fish in Greenland's EEZ. In 2013 there were no reported instances of non-compliance with the VMS requirements by EU fishing vessels.

All EU fishing vessels are required to complete logbooks in line with Chapter III of the Annex to the Protocol. There have been no reported instances of non-compliance with logbook requirements by EU fishing vessels.

²⁰² Deutsche Fischfang-Union GmbH & Doggerbank Seefischerei GmbH, pers. comm., 19 March 2014 / UK Fisheries Ltd, pers. comm., 12 March 2014.

However, Greenlandic authorities have reported some difficulties in receiving logbooks from EU fishing vessels²⁰³.

EU scientists and scientists from the third country actively participate in scientific committees of RFMOs or ICES

Scientists from the EU and GINR attend relevant meetings of working groups in ICES and NAFO to contribute towards management advice, as well as meetings in the context of bilateral and multilateral agreements for joint management. In 2013, GINR deployed scientists to international meetings 36 times²⁰⁴. Furthermore, control and enforcement staff from GFLK attended international meetings in the context of NAFO and NEAFC²⁰⁴.

Cooperation between scientific institutes is encouraged

There has been longstanding cooperation and collaboration between scientific institutes of Greenland and EU Member States, outside of working group meetings of ICES and NAFO.

The German Institute of Sea Fisheries has a research vessel that operates in Greenlandic waters, undertaking a stratified-random groundfish trawl survey across the offshore regions in the east and west²⁰⁵. This survey has been undertaken annually since 1982, primarily targeting cod. A scientist from the Danish Technical University is also based in GINR, working with Greenlandic counterparts on Greenland's fish stocks²⁰⁶. The Tartu Marine Institute in Estonia also collaborated with Greenlandic counterparts regarding the experimental mackerel fishery²⁰⁷.

Sectoral support contributes to improve the scientific information to be used for management advice

The total expenditure and EU contribution through sectoral support in 2013 is provided in Table 6:27, by area and activity. The specific targets of the activity 'data collection and analysis and international scientific cooperation' include the collection of scientific data to support management advice, including surveys and biological data²⁰⁸. The EU's contribution through sectoral support for this activity is significant, accounting for just less than half of the total research and advice expenditure in 2013.

Fisheries-independent information about the stocks is available

As described above, there is an annual German survey cruise in Greenland covering the offshore components of East and West Greenland. Greenland also undertakes research surveys for the most economically important species, including: West Greenland northern prawn; east and west-offshore Greenland halibut; west-inshore Greenland halibut; snow crabs in some management areas; and, inshore west cod²⁰⁸. Additionally in 2014 Greenland undertook a survey for mackerel in East Greenland. As mentioned above, these surveys are

²⁰³ EC, 2013b.

²⁰⁴ MFHA, 2014.

²⁰⁵ Bundesanstalt für Landwirtschaft und Ernährung, pers. comm., 19 March 2014.

²⁰⁶ Danish AgriFish Agency, pers. comm., 9 March 2014.

²⁰⁷ Estonian Ministry of Environment, pers. comm. 27 March 2014.

²⁰⁸ MFHA, 2014.

included in Area 3 of the sectoral support programme, which is financed in part by the EU's sectoral support (see above).

Specific objective 1.4 – To ensure compliance and combat IUU fishing

The activity of the EU fleet is properly monitored (VMS, automatic identification systems, etc) and possible infractions are sanctioned

As described in Section 2.6, Greenland possesses a robust MCS regime and is able to effectively control fishing activities within its EEZ. It is important to note that the implementation of an electronic catch reporting system (ERS) for EU fishing vessels would simplify the work of the GFLK and provide opportunities for implementation of a more rigorous risk-based approach to control²⁰⁹. However, this does require the EU and Greenland to agree on a format for the electronic catch reporting system.

Sectoral support is used to improve control in the EEZ of the third countries

In 2013, the EU's sectoral support provided approximately half of the total planned budget for control in both inshore and offshore fisheries (Table 6.27). As described in Section 6.5, the results achieved with the sectoral support were generally close to, if not exceeding, the specified target levels for both the inshore and offshore fishery components. Data on infractions and sanctions were not available during the evaluation, but the substantial contribution of sectoral support to control activities strongly suggests that it is allowing a more comprehensive level of control than would otherwise be possible.

Objective 2: To protect the EU long-distance fleet and the employment linked to the fleet operating within FPAs

Specific objective 2.1 – To seek appropriate share of the surplus resources, fully commensurate with the EU fleet's interests

The Protocol provides for access to fishing zones that are important for the EU fleet

The Protocol provides fishing opportunities that are of substantial importance to the EU fleet. In 2013 two-thirds of the total EU quota was authorised. The remaining one-third were for fishing opportunities for capelin, Atlantic halibut, snow crab and east northern prawn (Section 6.2.1). In 2013 the total catch of Protocol fishing opportunities by EU fishing vessels was approximately 17 800 tonnes compared to a total authorised quota of 18 600 tonnes, i.e. 96 % of the authorised quota. As discussed in Section 6.2.3, the Protocol quotas are also used in quota transfers with Norway and the Faroe Islands through the respective northern agreements to access fishing opportunities in Norwegian and Faroese waters. The Protocol therefore has provided access to important fishing opportunities not only in Greenland, but elsewhere.

In 2013 the fishing opportunities in Greenlandic waters provided 4 % of the EU's total landings of the relevant species, and 0.6 % of the total landings and net imports (Section 6.6.6). It was not possible to include catches of fishing opportunities in Norwegian waters secured through the Protocol. Nevertheless, it is clear that catches from Protocol fishing opportunities make an important contribution to the overall supplies of fish products entering the EU.

²⁰⁹ GFLK, pers. comm., 12 February 2014.

Species/Quantities covered by the protocol correspond to the fishing patterns of the EU fleet

As discussed in Section 6.2.1 and above, the majority of EU fishing opportunities in Greenlandic waters are fully utilised and quotas exhausted, with the exception of those for capelin, Atlantic halibut, snow crab and east northern prawn. This alone suggests that the Protocol fishing opportunities match the fishing patterns of the EU fleet. Utilisation of pelagic redfish fishing opportunities has likely been improved by the NEAFC pelagic redfish flexibility scheme. Three of the four member states with pelagic redfish quota caught all of their Greenland quota in international waters through the flexibility scheme in 2013, corresponding to more than 80 % of the EU's catch of Greenlandic pelagic redfish quota²¹⁰. It is important to note that vessel operators report that redfish caught in the Irminger Sea attracts a higher price than redfish caught in Greenlandic waters, reportedly due to lower rates of parasitism²¹¹.

It should be noted that intra-EU transfers of quotas for fishing opportunities are required to ensure that individual member states have the required quota for their planned fishing operations (Section 6.2.1). In 2013, a total of nearly 10 000 tonnes of quota was transferred between member states, a third of the EU's total quota after transfers with Norway (Table 6:11). It is also important to recognise that the management of bycatches in the current protocol has created a driver for transfers of quotas, either within or between Member States, to ensure that vessels hold quota for bycatches (Section 6.2.2). Furthermore, fishing opportunities through the FPA, both in Greenlandic and Norwegian waters, often form an important component of total fishing opportunities in northern areas required for EU fishing vessels to secure sufficient fishing opportunities for their fishing strategy²¹².

Specific objective 2.2 – To ensure that the level of fees payable by Union shipowners for their fishing activities is fair, non-discriminatory and commensurate to the benefits provided through the access conditions while avoiding any discriminatory treatment towards EU vessels and promoting a level playing field among the different fleets

EU shipowners prefer fishing within the framework of the FPA rather than reflagging and using private licences

As described above, utilisation of fishing opportunities by EU fishing vessels is high. Furthermore, some of the EU fishing vessels are totally, or highly, dependent on EU–Greenland FPA fishing opportunities²¹³ with dependencies in some Member States increasing due to declining fishing opportunities elsewhere²¹⁴. Finally, the EU fishing vessels do not tend to rely on upstream or downstream services in Greenland, and land products elsewhere where prices are more competitive (Section 6.6). In combination, these factors suggest that fishing within the framework of the FPA is more attractive to the EU vessel operators rather than reflagging and fishing through private licences. The level of fees paid by shipowners is not considered high when reviewed against landings prices, which may explain the good utilisation of fishing opportunities (Section 6.3). In line with reform of the CFP this might suggest that shipowners could have afforded to pay higher fees, although on the other hand the low profitability of some fleet segments would suggest that the level of fees being paid is fair (Section 6.6.3).

²¹⁰ Batterfiša, pers. comm., 7 May 2014.

²¹¹ ADAP1, pers. comm., 31 March 2014.

²¹² Deutsche Fischfang-Union GmbH & Doggerbank Seefischerei GmbH, pers. comm., 19 March 2014 / UK Fisheries, pers. comm., 12 March 2014 / Estonian Long Distance Fishing Association, pers. comm., 27 March 2014.

²¹³ Ocean Prawns, pers. comm., 11 March 2014 / Deutsche Fischfang-Union GmbH & Doggerbank Seefischerei GmbH, pers. comm., 19 March 2014.

²¹⁴ Estonian Ministry of Environment, pers. comm., 27 March 2014.

Fishing by other foreign countries is subject to similar conditions

Fishing by other foreign countries is generally subject to similar conditions, with the majority of legislation applying to fishing vessels irrespective of flag. However, there are two examples identified where restrictions or obligations apply to EU fishing vessels but not to vessels from other countries (Section 2.4).

The first is that foreign vessels, unlike EU vessels, do not have to pay to take up fishing opportunities in Greenlandic waters, even if the quota originated from the EU–Greenland FPA. It is expected that foreign fishing vessels would not pay for fishing opportunities originating from Greenland's other agreements as these agreements operate on the basis of a mutual exchange of fishing opportunities, rather than financial compensation for access to fishing opportunities in the case of the EU–Greenland FPA.

The second is that Russian fishing vessels may utilise Greenlandic quotas in NEAFC waters irrespective of whether they have exhausted their NEAFC quota, whereas EU fishing vessels must have exhausted their NEAFC quota. Consultations with industry did not highlight this as a particular point for concern, reflected in the EU catching its full Greenlandic quota for pelagic redfish in 2013 including at least 80 % through the flexibility scheme (see discussion above for specific objective 2.1).

As such, it can be concluded that fishing by other foreign countries is subject to the same conditions that apply to EU fishing vessels.

Specific objective 2.3 – To ensure supply for the EU and for the markets of certain developing countries

Part of the fish caught in the framework of the FPA supplies the EU market / processing industry as well as the local market (i.e. region / third country)

A significant amount of the fish caught under the framework of the FPA/Protocol supplies the EU market and/or processing industry, but the contributions of this fish as a percentage of the total EU market is small. In 2013, 50 % of total EU catch from Greenlandic fishing opportunities is estimated to have either been landed in the EU or otherwise entered the EU fish market (Section 6.6.6). This is estimated to have generated EUR 7 million in indirect value-added to the EU's downstream sector (Section 6.6.3). However, as discussed in Section 6.6.4, fish products from the FPA/Protocol are generally not landed and processed in Greenland. This is due to a number of factors, including: a lack of landing sites in East Greenland; comparatively low ex-vessel prices for fish products landed in Greenland; and, the fact that the majority of EU fishing vessels do not visit Greenlandic ports.

Specific objective 2.4 – To encourage the creation of a secure environment that is favourable to private investment and economic activities

EU shipowners fishing within the framework of the protocol benefit from increased visibility on licence delivery

EU vessel operators do not appear to benefit from increased exposure following authorisation to fish through the framework of the FPA. However, there is little to suggest that this has acted as a barrier to private investments and joint ventures or had an impact on the economics of fishing through the FPA.

Possible difficulties linked to other activities (landings, implementation of the IUU regulation etc.) are discussed in the Joint Committee meeting

Consultations with EU vessel operators indicate that the situation with the electronic catch reporting system (ERS) is causing difficulties. The EU and Greenland have not agreed on a format for the ERS to be

implemented as per the Protocol (Section 6.4). As such the EU fishing vessels have to complete a Greenlandic 'paper logbook' whilst fishing through the FPA, despite having to additionally complete the EU format ERS²¹⁵.

The subject of ERS has been discussed at the Joint Committee meetings and in 2013 a technical meeting was held to explore technical rules relating to implementation of an ERS²¹⁶. At the time of writing of the report no agreement had been reached on the format of the ERS, though the Joint Committee has discussed holding another technical meeting on ERS later in 2014²¹⁷.

Investment projects are facilitated

Consultations with member states indicate that there is currently limited interest in private investments in Greenland, so it is not possible to judge whether investment projects are facilitated. Reasons provided for the lack of interest in private investments included a perceived poor economic outlook for Greenland's fisheries sector, including the comparatively narrow nature of the fisheries sector. However, a number of Member States did comment that the possibilities for fishing operations through joint ventures should be maintained to keep the option available²¹⁸.

Specific objective 2.5 – To take into account the specific interests of the Union's outermost regions located in the vicinity (if relevant)

The FPA covers the specific needs of the EU fleet based in outermost region by ensuring the continuity of their fishing grounds (if relevant)

Not relevant.

Objective 3: To support the development of a sustainable fisheries sector in partner countries

Specific objective 3.1 – To contribute to the capacity building in the third countries

The sectoral support contributes to the improved functioning of the fisheries administration in third countries. It provides for adequate training and equipment

Of relevance to capacity building, in 2013 sectoral support contributed to: the training of personnel from the Fisheries Unit of the MFHA, in order for staff to understand the legal framework within which they operate; participation by GFLK fisheries enforcement officers in enforcement and hygiene control training in Denmark to support capacity development; and, training of the Port State Control Corps to build towards implementation of the Food and Agriculture Organization (FAO) Agreement on Port State Measures²¹⁹. The topics of the training appear to be highly relevant to the functioning of the fisheries administration and the training provided through sectoral support is considered to be sufficient to meet the current needs of the Greenlandic authorities (Section 6.5).

²¹⁵ Estonian Ministry of Environment, pers. comm., 27 March 2014 / Ocean Prawns, pers. comm., 9 March 2014.

²¹⁶ EC, 2013c.

²¹⁷ EC, 2014c.

²¹⁸ Estonian Long Distance Fishing Association, pers. comm., 27 March 2014

²¹⁹ MFHA, 2014.

Specific objective 3.2 – To promote the employment of seamen, landings, fish processing industry

EU vessels recruit part of their staff locally: they benefit from good working conditions and appropriate training

Approximately 10 % of the staff on the EU fishing vessels are recruited locally, corresponding to 11 FTEs (Section 6.7). This low proportion of locally recruited staff is predominantly due to the fact that the majority of EU fishing vessels do not visit Greenlandic ports. No information is available on the working conditions of the crew on the fishing vessels, though it is likely that the working conditions for the Greenlandic crew are equivalent to those for EU nationals. It is also likely that the Greenlandic crew are trained to the same extent as the remaining crew members, i.e. to the level required for them to perform their role.

In summary, the EU fishing vessels do recruit some staff locally, though the proportion is low. Those staff that are employed locally are likely to benefit from the same working conditions as the EU staff.

Part of the catches is landed and processed locally (i.e. region / third country)

As discussed above for objective 2.3, little or no fish products are landed in Greenland and processed by the domestic processing sector for a combination of reasons. One EU fishing vessel does call at Greenlandic ports, generating some value-added for Greenland's upstream sector (Table 6:31). This is because the particular fishing vessel is based in Greenland, unlike the remaining EU fishing vessels, which are based in the EU or Iceland. It is therefore unclear how the FPA could promote the further use of Greenlandic ports, given the financial incentives to land products elsewhere.

6.9 Efficiency – The extent to which the desired effects were achieved at a reasonable cost

The Terms of Reference identifies specific evaluation questions, success criteria and suggested indicators with which to assess the extent to which the desired effects are achieved at a reasonable cost. The evaluation questions are dealt with in turn, with the evaluation questions and success criteria provided in bold and italics respectively.

To what extent is the cost of the fishing possibilities negotiated under the FPA advantageous for the EU?

The EU compensation for access is commensurate to real catches

As discussed in Section 6.6.2, the total EU compensation for access in 2013 equated to EUR 344 per tonne of agreed quota but EUR 540 per tonne of catch by EU fishing vessels. This difference was caused by the fact that some fishing opportunities were not fully authorised, and some authorised quotas were not fully exhausted. Overall, this compensation for access per tonne of catch equates to 23 % of the total revenue per tonne. This compares to a level of 17.5 % used to set the EU's compensation for access, indicating that the EU's compensation for access is not in line with catches of EU fishing vessels. The 344 EUR per tonne and 540 EUR per tonne figures quoted above are for the EU compensation for access only (i.e. not including EU vessel owner authorisation fees). These figures are chosen to enable direct comparison with the 17.5 % used when setting the EU's compensation for access

To what extent have the actions agreed in the initial programming been achieved at reasonable cost?

Sectoral support has been properly used by the third country (results achieved, initial budget respected), in conformity with the decoupling/conditionality clause

As detailed in Section 6.5, the results of the sectoral support in 2013 were generally good, with targets met or exceeded for a range of indicators. Some targets were not met, notably 50 % observer coverage in the northern prawn fishery. Total expenditure was 3 % less than the total budget, predominantly due to payments from the financial support fund being 30 % lower than budgeted (Table 6:27). Expenditure for some activities

exceeded the budgeted amount, notably for Area 3, though not to an extent warranting concern. The expenditure for control and enforcement (Area 2) has also had a strong focus on salaries. In 2013, nearly 90 % of total expenditure on Area 2 activities was spent on salaries (Table 6:28).

The EU financial compensation for access to fishing opportunities is clearly separated from the EU sectoral support contribution (Section 6.1.2). As such, the Protocol is aligned with the decoupling clause. Additionally, the schedule of EU contributions has been changed such that the EU contribution for sectoral support is paid after the Joint Committee has reviewed the Annual Status Report at its first meeting of the year. This provides the opportunity for the results of the sectoral support in the preceding year to be reviewed before sectoral support contributions are paid in the current year. As such, the schedule of EU contributions is well structured to ensure that the conditionality clause is met.

To what extent is the cost of the fishing possibilities negotiated under the FPA advantageous for EU shipowners?

The shipowners contribution is proportionate to their real catches and profits

EU vessel owners paid EUR 88 per tonne of authorised quota and EUR 85 per tonne of catch (Table 6:30). The payment per tonne of catch was lower because of the experimental mackerel fishery, for which there are no authorisation fees. As such, the EU vessel owner's payments for authorisation fees were in line with catches.

However, EU vessel owners in 2013 paid a total of approximately EUR 1 500 000 in authorisation fees and generated approximately EUR 700 000 in profit before interest and taxes from the Greenlandic fishing opportunities (Table 6:32). This equates to EUR 0.45 in profit for every EUR 1 paid in authorisations, indicating that payments were not in line with generated profits. If the economic performance of the EU fishing vessels remains at the levels of 2013, it appears unlikely that the authorisation fees of EU vessel owners could be increased in line with the current CFP, particularly for the fishing vessels operating with negative profit margins. However, it is not possible to predict whether the profitability of the fishing vessels in 2013 is representative for the remaining duration of the Protocol (i.e. 2014 and 2015).

To what extent is the cost of the fishing possibilities negotiated under the FPA advantageous for the third country?

The third country benefits from a fair part of the added value

In 2013 Greenland received a relatively small portion of the value-added generated by the FPA, at EUR 2 million compared to EUR 22.6 million for the EU (Table 6:31). However, Greenland also received total financial contributions from the EU and EU vessel operators of approximately EUR 17 600 000. This is equivalent to 78 % of the EU's direct and indirect value-added generated from Protocol opportunities in Greenlandic waters (EUR 22.6 million), or 60 % of the EU's value-added generated from Protocol-related opportunities in Greenlandic and Norwegian waters, approximately EUR 29 million (Table 6:32).

Finally, as discussed above, having discounted fishing opportunities transferred to Norway, the total financial contribution received by Greenland was equivalent to 33 % of the ex-vessel value of the EU's catches (Table 6:30). This level of resource rent is considered high relative to other fisheries globally.

6.10 Economy – the extent to which resources are available in due time, in appropriate quantity and quality at the best price

The Terms of Reference identifies specific evaluation questions, success criteria and suggested indicators with which to assess to what extent the resources are available in due time, in appropriate quantity and quality at the best price. The evaluation questions are dealt with in turn, with the evaluation questions and success criteria provided in bold and italics respectively.

To what extent is the EU contribution for sectoral support commensurate to the needs and absorption capacity of the partner country?

The EU contribution for sectoral support is in line with the needs and the absorption capacity of the third country

The EU's contribution for sectoral support appears to match the needs of Greenland. Consultations with the authorities relevant to sectoral support, i.e. MFHA, GFLK and the Institute of Natural Resources, provided no indication that the sectoral support was insufficient and/or preventing the authorities from fulfilling their responsibilities. However, it is also important to note that in recent years, sectoral support payments by the EU have been higher than the levels outlined in the respective Protocol due to the agreed mechanism dealing with Greenland's debt in fishing opportunities (Section 6.6.3). This suggests that the sectoral support contribution outlined in the Protocol may not be in line with the needs of Greenland. However, more information is required on which activities are supported by the additional sectoral support in order to draw robust conclusions (Section 6.5).

The total amount of sectoral support is used according to the foreseen calendar

Available information indicates that the EU's contribution for sectoral support was fully spent in 2013, including the additional payment agreed as a consequence of Greenland's debt resulting from agreed fishing opportunities in 2012 (Table 6:27).

To what extent have payments been made in due time?

Contributions have been paid in due time, consistent with the protocol, so that they could be allocated to the fisheries budget of the partner country without delay

The EU financial contributions have been paid in the agreed timeframes, therefore with no impact on Greenland's ability to distribute the necessary funds to budgets of the relevant administrations²²⁰. It is important to note that for 2014 the deadlines for payments of EU financial contributions as outlined in the Protocol were replaced by a revised agreed calendar of payments (see Section 6.3).

²²⁰ MFHA, pers. comm., 12 February 2014.

6.11 Coherence – The extent to which the intervention logic is non-contradictory / the intervention does not contradict other interventions with similar objectives

The Terms of Reference identifies specific evaluation questions, success criteria and suggested indicators with which to assess to what extent the objectives of the FPA are non-contradictory and/or do not contradict other interventions with similar objectives. The evaluation questions are dealt with in turn, with the evaluation questions and success criteria provided in bold and italics respectively.

How coherent is the protocol with the CFP in general and with the regional fisheries policy (RFMO and other fisheries agreements of the EU)?

The protocol is in line with the CFP in general, contributes to achieving EU objectives at regional level and is consistent with other fisheries agreements of the EU in the region

The overall objective of the Common Fisheries Policy (CFP)²²¹ is to ensure that EU fisheries are environmentally sustainable in the long term whilst delivering economic, social and employment benefits. This should be achieved by: implementing management to deliver maximum sustainable yields by 2020 at the latest; applying the precautionary approach to fisheries management; implementing ecosystem-based management; contributing to the collection of scientific data; and gradually eliminating discards. It is clear that the objectives of the FPA and the CFP are coherent, in that the FPA also aims to ensure that EU fisheries in the FPA contribute to sustainable exploitation (objective 1), to protect the EU long-distance fleet and employment generated (objective 2) and support the development of a sustainable fisheries sector in Greenland (objective 3). Additionally, a ban on discards is already in place in Greenland.

However, it is also important to note that whilst the overall objectives may be coherent, EU fisheries in the FPA have targeted stocks that are overexploited and/or contributed to catches that exceed precautionary advice (see discussion for objective 1.1). As such, there are instances where the actual impacts of the FPA have not fully met the objectives of the CFP, the scientific advice of NAFO and ICES, as well as the objectives of the FPA.

In what ways is the protocol coherent with the other EU policies and cross-cutting issues (i.e. development and cooperation policy, trade policy inter alia, the provisions on rules of origin, market access, environmental policy, sanitary policy, human rights and gender mainstreaming)?

The Protocol contributes to priorities identified in the Council Decision on relations between the EU, Greenland and Denmark and the Joint Political Declaration and provides synergies to make a more effective contribution to other EU policies.

The overseas association decision (OAD) between the EU and Greenland is described in Section 1.4.1. The OAD has the following specific objectives: to support and cooperate in addressing major challenges, including sustainable diversification of the economy, increasing the skills of the labour force (including scientists) and improving information systems; and, contribute to the capacity of Greenland to formulate and implement national policies in new areas of mutual interest (to be decided)²²². Main areas of cooperation are also outlined, including education and training; food security; and, research and innovation in sustainable use of living resources. As such, objectives 1 and 3 of the FPA (Section 6.8) appear reasonably well aligned with the objectives of the partnership instrument. Furthermore, activities undertaken within the framework of the FPA and sectoral support matrix appear well placed to contribute to the objectives of the OAD, namely: supporting

²²¹ Regulation (EU) No 1380/2013.

²²² Council Decision 2014/137/EU.

the functioning of the fisheries administrations, including training of personnel; development of digitalisation solutions for fisheries control; and, revisions to Greenland's legal framework to implement fisheries policy, i.e. the Fisheries Act (Section 6.5). As such, the objectives of the Protocol appear to be coherent with the OAD.

Objectives 1 and 3 of the Protocol (Section 6.8) are directly relevant to the first common objective stated in the 2006 Joint Political Declaration, namely cooperation in sustainably managing fish stocks and the environment and provision of fishing opportunities for EU fishing vessels. The remaining priorities are more relevant to the EU–Greenland partnership initiative. It is worth noting that, whilst the EU–Greenland partnership initiative is primarily the driver for cooperation in education and training, the Protocol has also resulted in horizontal capacity building through contributing to the training of personnel in Greenlandic authorities responsible for fisheries policy, management and control through the sectoral support programme (Section 6.5).

The protocol can be suspended in case of violation of human rights and democratic principles

Article 8 of the Protocol allows for the Protocol to be suspended, with three months' notice, if either party ascertains a breach of fundamental human rights as laid out in Article 6 of the Treaty on the European Union. These fundamental human rights cover those required for a fully democratic society and as such provide protection to violation of both human rights and democratic principles.

The Protocol contributes to the promotion of fair conditions of employment by referring to relevant international conventions

The FPA text and/or Protocol do not currently contain a social clause. Additionally, there is no reference to relevant international conventions relating to fair conditions of employment, specifically those within the framework of the International Labour Organisation. In the context of the recent revised social clause for inclusion in the EU's fishery partnership agreements agreed by European social partners²²³ it appears likely that the revised social clause will be included within the revised text. This revised social clause aims to ensure decent working conditions for non-EU fishermen working on board vessels operating through the Protocol.

In what ways is the FPA coherent with the fisheries and developing policy of the partner coastal States?

The Protocol contributes to achieving the priorities identified by the partner country

The overall objective of Greenland's fishery policy is to ensure biologically sound exploitation of Greenland's fish stocks (Section 2.2), in order to maintain fisheries as the most important industry in Greenland (Section 6.1.3). As such, objectives 1 and 3 of the FPA (Section 6.8) are fully coherent with the main aim of Greenland's fisheries policy. Consultations with the Greenlandic Ministry of Fisheries, Hunting and Agriculture confirm that the FPA is considered to be coherent with Greenland's fisheries policy, at least by the authority with overall responsibility for the management of Greenland's fisheries²²⁴. It is also important to note that in 2013, the EU's sectoral support made substantial contributions to activities to ensure that Greenland can achieve the objectives of its fisheries policy, most notably the collection of necessary data to support management advice.

²²³ E.g. http://www.europeche.org/sites/default/files/attachedfiles/EP27%20Social%20clause%20-%20press%20release_0.pdf (Accessed 12 May 2014).

²²⁴ MFHA, pers. comm., 12 February 2014.

6.12 Acceptability – The extent to which stakeholders accept the policy in general and the particular instrument proposed or employed

The Terms of Reference identifies specific evaluation questions, success criteria and suggested indicators with which to assess to what extent the objectives of the FPA are non-contradictory and/or do not contradict other interventions with similar objectives. The evaluation questions are dealt with in turn, with the evaluation questions and success criteria provided in bold and italics respectively.

To what extent are the EU shipowners satisfied with the protocol?

The EU shipowners are satisfied with the conditions set up by the protocol and support its renewal (with possible adaptations).

A full list of private sector organisations consulted is provided in Annex C and shows the comprehensive consultations completed during the evaluation. In general, these organisations signalled that EU vessel operators were satisfied with the conditions as set out in the Protocol. However, vessel operators did report dissatisfaction with particular conditions or aspects of the Protocol which could be improved in the future. These are summarised below.

The Protocol states that fishing authorisations shall be issued within 15 days of receipt of the application and after payment has been received. A number of vessel operators commented that the 15-day limit is too long, causing unnecessary delays in authorisations and acting as a barrier to fishing opportunities in the region²²⁵. Furthermore, as discussed in Section 6.8, vessel operators also commented on the unnecessary administrative burden of completing the EU electronic catch reporting system as well as the Greenlandic paper logbook.

As discussed in Section 6.2.1, some Member States are reliant on transfers of quota from other Member States to secure access to fishing opportunities in Greenland. Vessel operators from these Member States commented on difficulties with strategic and long-term planning given the lack of security in fishing opportunities from year to year²²⁶. On a related note, some vessel operators commented that they disagreed with the allocation of fishing opportunities amongst Member States. In most cases, this was mainly related to the allocation of fishing opportunities for demersal redfish (Section 6.2.1). Vessel operators from Portugal and Spain expressed dissatisfaction at the low level of fishing opportunities allocated to them, despite having a historical record of fishing in Greenland waters²²⁷.

To what extent is the Protocol supported by the civil society in the EU and in the third country?

Representatives of the civil society are satisfied with the conditions set up by the protocol and support its renewal (with possible adaptations)

Overall, representatives of the civil society in Greenland were satisfied with the Protocol and its conditions. However, concerns were expressed that: the FPA has not resulted in substantial benefits for Greenland aside from the EU's financial contributions²²⁸; the reference prices outlined in the Protocol were not necessarily a fair

²²⁵ Deutsche Fischfang-Union GmbH & Doggerbank Seefischerei GmbH, pers. comm., 19 March 2014 / Ocean Prawns, pers. comm., 11 March / Estonian Long Distance Fishing Association, pers. comm., 27 March 2014 / Batterfiša, pers. comm., 7 May 2014 / ADAPI, pers. comm., 31 March 2014 / UK Fisheries, 12 March 2014.

²²⁶ ARVI, pers. comm., 28 March 2014 / Estonian Long Distance Fishing Association, pers. comm., 27 March 2014.

²²⁷ ARVI, pers. comm., 28 March 2014 / ADAPI, pers. comm., 31 March 2014.

²²⁸ SIK, pers. comm., 13 February 2014.

value for the fishing opportunities; and, that EU financial contributions through the Protocol could give additional significant benefit to inshore fishers, for example in co-funding a foundation to assist inshore fishers with complying with regulations required for products going to EU markets, and providing funding to support innovation²²⁹. Furthermore, it is important to note that there was a perception amongst some stakeholders that the FPA and the Council Decision on relations between the EU, Greenland and Denmark were still part of the same package (Section 1.4.1)

6.13 Ex-post evaluation summary

The findings of the ex-post evaluation are summarised in Table 6:35 and Table 6:36.

Generally speaking, the FPA objectives have been achieved. Important exceptions include: agreed quotas for offshore cod that are not consistent with ICES advice, though noting that data collected from the fishery will be used to refine management of the stock; limited supply of fish landings to Greenland; and the generation of limited employment in Greenland.

To date, the Protocol has generated significant benefits to the EU. EU fishing vessels secured access to important fishing opportunities in Greenland, as well as Norway and the Faroe Islands through the EU's northern agreements. Utilisation of agreed Greenlandic fishing opportunities by EU vessels has been high, with the exception of snow crab, capelin, Atlantic halibut and to a lesser extent east northern prawn.

In 2013, the Protocol generated EUR 10 million in direct value-added to the EU catching sector resulting from fishing opportunities in Greenland, with an additional EUR 12 million in indirect value-added to the EU upstream and downstream sectors. Additional value-added will have been generated from fishing opportunities secured in Norway. Indirect value-added generated in Greenland was limited, as the majority of EU fishing vessels did not use Greenlandic ports. However, the Protocol generated additional benefits to Greenland in the form of financial contributions from the EU and authorisation fees from EU fishing vessels, receiving a total payment per tonne equivalent to one-third of the EU catching sectors revenue from Greenlandic fishing opportunities. Fishery products from EU fishing vessels have not been processed in Greenland or entered the domestic market, with reasons including comparatively low landing prices. Furthermore, there is very limited use of Greenland ports for maintenance and other upstream services. In terms of employment the Protocol generated employment equivalent to 106 FTEs in the EU catching sector, 75 % and 10 % of which were EU and Greenlandic nationals respectively. Nevertheless, the Protocol has generated substantial benefits for both parties.

The EU's sectoral support funds have provided substantial support to a number of activities that are vital for Greenland's efforts to manage and control its fisheries. These activities include: supporting the collection and analysis of fishery independent survey data; participation of Greenlandic personnel at scientific and technical meetings of NAFO and ICES; and, control of inshore and offshore fisheries. However, the use of these funds has a strong focus on salaries in some areas.

The EU's financial compensation for access has not been fully aligned with catches, due to low utilisation rates for some species. Furthermore, authorisation fees from EU vessel owners were high in comparison to profits generated from the Protocol by the catching sector. However overall, the Protocol has generated EUR 1.6 in direct and indirect value-added per EUR 1 of payments by the EU and EU vessel operators.

There was full compliance with the majority of the key covenants and obligations of the Protocol. Notable exceptions include: the failure to implement an electronic catch reporting system; and, agreed fishing opportunities that did not fully take account of scientific advice and the precautionary approach.

²²⁹ KNAPK, pers. comm., 13 February 2014.

The current payment schedule for EU financial contributions results in the EU paying compensation for access for the indicative quota levels at a point when the agreed quota levels have already been set. This has resulted in the need to take account of Greenlandic debt in the following year's financial contributions. Basing financial compensation on agreed quota levels in the first instance would prevent the need to adjust payments in subsequent years, and would appear to be a more pragmatic approach.

Table 6:35: summary table of ex-post findings for the extent to which the FPA objectives have been achieved

Objective	Specific objective	Conclusion ^a	Notes
1: Contribute towards resource conservation and environmental sustainability through rational and sustainable exploitation of living marine resources of the coastal state	1.1 Direct fisheries exclusively at surplus resources and prevent the overfishing of stocks on the basis of the best scientific advice and improved transparency on the global fishing efforts in the third countries' waters		The FPA takes account of Greenland's management strategies, as well as agreements for shared stocks. Greenland fulfils data reporting obligations to RFMOs as required. Agreed quotas have generally taken account of stock status and management advice, with exception of cod.
	1.2 Follow the same principle and promote the same standards for fisheries management as applied in EU waters		Greenlandic fisheries management is generally consistent with the standard of management in EU fisheries.
	1.3 Improve the scientific and technical evaluation of the fisheries concerned		EU vessels are subject to an appropriate data collection framework. EU and Greenlandic scientists have cooperated where necessary, and both attend scientific meetings of NAFO and ICES. Fisheries independent (survey) data is collected for Greenland's established fisheries, which is also supported by the EU sectoral support.
	1.4 Ensure compliance and combat IUU fishing		The EU's sectoral support contributions have provided substantial support to Greenland's control activities, and the EU fishing fleet is covered by appropriate MCS activities
2: Protect the EU long-distance fleet and the employment linked to the fleet operating within FPAs	2.1 Seek an appropriate share of the surplus resources, fully commensurate with the EU fleet's interests		The Protocol provides important fishing opportunities to EU vessel operators in Greenland, as well as Norway and the Faroe Islands. However there are fishing opportunities that are not fully utilised, particularly snow crab and Atlantic halibut.
	2.2 Ensure that the level of fees payable by Union shipowners for their fishing activities is fair, non-discriminatory and commensurate to the benefits generated while avoiding any discriminatory treatment towards EU vessels and promoting a level playing field among the different fleets		The conditions applying to EU fishing vessels in Greenlandic waters apply equally to vessels from other foreign countries. The level of fees paid by EU fishing vessels appears to be fair.
	2.3 Ensure supply for the EU and for the markets of certain developing countries		Landings from the EU fishing vessels supply the EU market. However, little product enters the Greenlandic market or markets of developing countries.

Objective	Specific-objective	Conclusion*	Notes
	2.4 Encourage the creation of a secure environment that is favourable to private investment and economic activities		There is currently limited interest in private investment in Greenland, or creation of joint ventures. However, this is not due to factors within the control of the FPA.
	2.5 Take into account the specific interests of the Union's outermost regions located in the vicinity		Not relevant.
3: Support the development of a sustainable fisheries sector in partner countries	3.1 Contribute to the capacity building in the third countries		Appropriate training of staff from Greenland's fisheries administrations has been supported by the sectoral support programme, meeting training needs.
	3.2 Promote the employment of Greenlandic seamen, landings, fish processing industry		The proportion of locally recruited staff on EU fishing vessels is low, with little product landed and processed in Greenland. However, this is not due to factors within direct control of the FPA.

Notes: * Green = satisfactory, orange = average, red = unsatisfactory, grey = not applicable/relevant

Table 6:36: summary table of ex-post findings for the efficiency, economy, coherence and acceptability of the FPA

	Evaluation question	Conclusion*	Notes
Efficiency - the extent to which the desired effects were achieved at a reasonable cost	To what extent is the cost of the fishing possibilities negotiated under the FPA advantageous for the EU?		The EU's financial compensation for access are not fully commensurate to overall catches, as the agreed quotas were not fully utilised and some authorised quotas were not exhausted.
	To what extent have the actions agreed in the initial programming been achieved at reasonable cost?		Targets of the sectoral support programme have generally been met and the overall budget has been respected. The EU's financial contributions conform with the decoupling and conditionality clauses.
	To what extent is the cost of the fishing possibilities negotiated under the FPA advantageous for EU shipowners?		Authorisation fees paid by EU vessel owners are advantageous for EU shipowners, as authorised quotas were generally exhausted.

	Evaluation question	Conclusion ^a	Notes
	To what extent is the cost of the fishing possibilities negotiated under the FPA advantageous for the third country?		Greenland receives a small portion of the value added, but receives a high resource rent through the EU and vessel owner financial contributions.
Economy – the extent to which resources are available in due time, in appropriate quantity and quality at the best price	To what extent is the EU contribution for sectoral support commensurate to the needs and absorption capacity of the partner country?		Sectoral support has been fully spent by Greenland. However, it is not clear whether the sectoral support amount indicated in the Protocol fully meets the needs of Greenland.
	To what extent have payments been made in due time?		Payments by the EU and vessel owners have been made on time.
Coherence - the extent to which the intervention logic is non-contradictory / the intervention does not contradict other interventions with similar objectives	How coherent is the protocol with the CFP in general and with the regional fisheries policy (RFMO and other fisheries agreements of the EU)?		The objectives of the Protocol are coherent with the objectives of the CFP and regional fisheries policy. However, there are instances where the resulting impacts of the Protocol have not met these objectives.
	In what ways is the protocol coherent with the other EU policies and cross-cutting issues (i.e. development and cooperation policy, trade policy inter alia, the provisions on rules of origin, market access, environmental policy, sanitary policy, human rights and gender mainstreaming)?		The Protocol is coherent with other relevant EU policies and cross-cutting issues), including the OAD. However the Protocol does not currently contain a social clause promoting fair conditions of employment
	In what ways is the FPA coherent with the fisheries and developing policy of the partner coastal States?		The FPA is coherent with the fisheries policy of Greenland.
Acceptability – The extent to which stakeholders accept the policy in general and the particular instrument proposed or employed	To what extent are the EU shipowners satisfied with the protocol?		The EU vessel owners were generally satisfied with the conditions of the Protocol, though with suggestions on aspects that could be improved.
	To what extent is the Protocol supported by the civil society in the EU and in the third country?		Representatives of civil society in Greenland were generally satisfied with the conditions of the Protocol, again with suggestions on improvements.

Notes: ^a Green = satisfactory, orange = average, red = unsatisfactory, grey = not applicable/relevant