

AN INDEPENDENT REVIEW OF THE EU ILLEGAL, UNREPORTED AND UNREGULATED REGULATIONS

A REPORT FUNDED BY THE OAK FOUNDATION

Indrani Lutchman Stephanie Newman Maxine Monsanto

CONTENTS

1	INTRODUCTION 4
2	THE EU IUU REGULATION IN A NUTSHELL
3	METHODOLOGY 7
4	RESULTS
4.1	DG MARE Response to the Questionnaire 8
4.2	Member States' Responses to the Questionnaire 9
4.3	Results of the preliminary analysis on EU imports of fisheries products12
5	REVIEW OF THE IMPLEMENTATION OF THE EU IUU REGULATION12
5.1	Implementation by the European Commission13
5.2	Implementation by the Member States15
5.3	Preliminary analysis of the impact of the catch documentation scheme17
6	CONCLUSIONS AND RECOMMENDATIONS
6.1	Flawed catch certification scheme19
6.2	Unreliability of the Community Black list20
6.3 and	Insufficient progress towards the implementation of the Community Alert System the Non Cooperating Third Country List
6.4	General lack of transparency21
6.5	Areas for further investigation21
7	REFERENCES23
1	ANNEX 1. ELEMENTS OF THE EU IUU REGULATION27
1.1	Port Control of Third Country Vessels27
1.2	Catch Certification27
1 2	Community Alert System28

1.4	Community IUU Vessel List	28
1.5	Non-Cooperating Third Countries	29
	Enforcement Measures and Sanctions	
	Mutual Assistance Mechanism	
2	ANNEX 2. QUESTIONNAIRE FOR DG MARE	31
3	ANNEX 3. QUESTIONNAIRE FOR MEMBER STATES	33
4	ANNEX 4. CONTACT LIST OF COMPETENT AUTHORITIES	37
5	ANNEX 5. LIST OF INTERVIEWEES	39

Acknowledgements

We would like to thank the following individuals for their contribution to this study. Most importantly, the Oak Foundation for their grant which allowed IEEP to undertake this study. We would also like to thank the European Commission (DG Mare) and the Member States listed in Annex 3 for their response to our questionnaires. Specifically we note the invaluable contribution of Alistair Mc Donnell (MMO, UK) and Sandra Suviste (Ministry of Agriculture, Estonia) in providing detailed information through additional interviews and email exchange; Kim Dawson- Guynn (NOAA), Megan Engelke-Ros (NOAA) Beatriz Gorez (CFFA) for their insights into systems to address IUU fishing.

1 INTRODUCTION

Illegal, unregulated and unreported (IUU) fishing refers to fishing activities that do not comply with national, regional, or international fisheries conservation or management legislation or measures (Agnew & Barnes, 2004). IUU fishing is complex and affects many stakeholders from the individual artisanal fisher in national waters, to fishing fleets in Exclusive Economic Zones¹ (EEZ) and the High Seas², to fish processor and fisheries managers in developed and developing countries. Illegal fishing occurs in every ocean in the world, resulting in the loss of individual jobs and income, depletion of existing fish stocks, damage to the marine environment, and loss of state revenue (Doulman, 2000). It affects activities both at sea and onshore, such as shipment, transportation, landing, importation and exportation, sale, and distribution of fish products (Gallic, 2008). IUU fishing also has the potential to reduce the amount of fish available to subsistence fishers and communities who rely on fish as their staple diet. For example in Sierra Leone, fish provides approximately 65% of the protein source consumed by the under-nourished population. Thus people's livelihoods and food security may be seriously threatened by the possibility of losing access to this food source as result of IUU fishing (Environmental Justice Foundation, n.d.).

IUU fishing activities also have a negative effect on the marine environment and marine biodiversity. Furthermore, it impedes fisheries managers from effectively managing fisheries stocks in a sustainable manner (Watson & Pauly, 2001), particularly as the amount or level of IUU fishing is unknown and difficult to estimate. It results in additional pressure on fish stocks, which may already be under existing pressures from legal fishing activities and could contribute to the depletion of fisheries stocks, overfishing and loss of the marine biodiversity. It is estimated that approximately 30% of total catches of globally important fisheries comes from IUU fishing (Doulman, 2000). In some cases, with specific species like the Patagonian toothfish or tuna, the estimates of IUU catches have been three times higher than the legal catches (Agnew, 2000). Uncertainty associated with the estimates of IUU catches often leads to the under estimation of fisheries resources during stock assessments. This inevitably impacts on management decisions, for example, on total allowable catches for particular stocks and species, and can subsequently lead to overfishing (Pitcher et al. 2002).

The harmful environmental effects of IUU fishing inevitably impact negatively on the profitability and employment levels in the legitimate fisheries sector. Thus, alongside the impacts on the marine environment, IUU fishing also has severe economic consequences.

¹ EEZ under the Law of the Sea is a sea area over which a state has special rights for exploration and use of marine resources including fisheries. It stretches 200 nautical miles seaward from the state territorial sea.

² High Seas is the term used for the open seas of beyond national jurisdictions. Ships sailing in the high seas are under the jurisdiction of the flag state.

The economic impact of IUU fishing is difficult to quantify, but attempts to do so, have been made for specific species and more recently on a global scale. According to a study conducted in 2008, the economic loss of IUU fishing is estimated at 10 to 23 billion dollars globally (Agnew et al, 2009; MRAG and University of British Columbia, 2008). This roughly equates to between 11 and 26 million tonnes of illegally caught fisheries products reaching the global market annually (Agnew et al, 2009). Due to the illegal nature of these activities, these figures are likely to be underestimates. However, they show the scale of the economic impact and highlight the global importance of the problem.

IUU fishing has far-reaching effects and concerns all countries, whether they are coastal states, flag states³, port states⁴, market states, or processing states. Therefore, reducing and eliminating IUU fishing requires collective efforts at all levels, including at the national level, through government management of fisheries resources and fishing fleets; the regional level, under Regional Fisheries Management Organizations (RFMOs); and internationally, through organisations such as the United Nations (UN) and the UN Food and Agricultural Organisation (FAO).

The United Nations Food and Agriculture Organization (FAO) considers illegal, unreported and unregulated (IUU) fishing as a global threat to food security and sustainable fisheries resources (FAO, 2007). In the last twenty years, the issue of IUU fishing has moved to the forefront of fisheries management as an issue which has significant economic, environmental, and social impacts (Sumaila, et al., 2006; U.S. Department of Commerce, 2011). Understanding the need to address the problem of IUU fishing, in 2001 the international community adopted the FAO International Plan of Action to Prevent Deter and Eliminate Illegal, Unreported, and Unregulated Fishing (IPOA-IUU) (FAO, 2001). The IPOA-IUU and additional technical guidelines for responsible fishing function as a toolkit for countries to use in developing measures to address IUU fishing (FAO, 2002). RFMOs also developed various mechanisms for addressing IUU fishing such as Catch Certification and Port State Control schemes and vessel lists (Cullis-Suzuki & Pauly, 2010). These measures, along with those set forth in the IPOA-IUU are used as guidelines by different countries and regions, including the United States of America (USA) and the European Union (EU), to develop their own plans of action to address IUU fishing, although approaches to address IUU fishing differ greatly by State.

On 29 September 2008, the European Union adopted Council Regulation (EC) No 1005/2008 establishing a Community⁵ system to prevent, deter, and eliminate IUU fishing, commonly

³ Flag State is used in place of Flag of Convenience referring to the registering of a vessel in a State other than the ship.

⁴ Port State is the term used to describe the responsibilities of a coastal state with port facilities.

⁵ Community refers to the European Community consisting of twenty-seven Member States. Community Regulations are implemented by all Member States unilaterally upon entry into force.

referred to as the EU IUU Fishing Regulation. The Implementing Regulation (EC) No 1010/2009 was adopted on 22 October 2009, and both Regulations entered into force on January 1, 2010.

2 THE EU IUU REGULATION IN A NUTSHELL

One of the main objectives of the EU IUU Regulation is to control the movement of fisheries products entering the EU Market (European Commission, 2009a). This is a key instrument contributing to the EU's overall goals to improve global fisheries sustainability, combat IUU fishing, and strengthen regional fisheries enforcement frameworks within RFMOs (Tsamenyi et al, 2009). The Regulation intends to regulate access of illegal fisheries products from 'third countries' into the EU market. Based on this Regulation, the ability for a non-Member State to export fisheries products into the EU is dependent on how the State addresses IUU fishing in its area, or the region where the fisheries product originated (Tsamenyi et al, 2009; European Commission, 2009a). This restriction of imports is accomplished through the implementation of: port state control of third country vessels, the establishment of a Community IUU vessel list, the establishment of a non-cooperating third countries list and the implementation of catch certification requirements for all fisheries products (European Commission, 2009a).

The Regulation is designed to limit access to the EU market dependent on 'the extent the country, area, or region of origin of the exported fish product is completely free or increasingly free of IUU fishing' (Tsamenyi et al, 2009). In simplest terms, the Regulation limits the accessibility of any country or fishing vessel wishing to export fish products into EU based on their individual record for addressing and reducing IUU fishing. It specifies sanctions and trade measures that may be used against fishing vessels and foreign States, which either support IUU fishing or fail to meet the requirements in the Regulation. The core elements of the Regulation are measures to address (1) Port State Control of Third Countries; (2) Community Alert System; (3) Catch Certification; (4) Community IUU Vessel List; (5) Non-Cooperating Third Country List and (6) Enforcement Measures and Sanctions (see Annex 1).

The EU IUU Regulation and its implementing regulation (Regulation 1010/2009) are very significant because the EU is the largest market for fisheries products in the world – in 2006 the EU accounted for approximately 40% of the global market (including both imports and exports of fisheries products) (FAO, 2007). Projections show that by 2020, global fisheries production will expand reaching approximately one hundred and sixty-four million tonnes, an increase of 15% from 2010 (OECD/FAO, 2011). During this time, the EU is still expected to be the largest importer of fisheries products with approximately 22% of the global import market and exporting 9% in 2020. The next largest importer of fishery products is expected to be the US at 15% according to 2020 projections (OECD/FAO, 2011).

The high demand for fish products within the EU makes it a profitable market for the offloading of IUU catch. In 2007, the EU imported approximately 15 billion Euros of fisheries products (European Commission, 2007a). However, conservative estimates of EU imports of IUU catches have been valued at approximately 1.1 billion Euros in 2005 (European Commission, 2007a). The relatively large scale of the EU market means that if the Regulation is successful, it could have a considerable influence on global IUU fishing.

The seriousness of the IUU fishing problem and the significance of the EU IUU Regulation on the global fisheries market demonstrate the importance of evaluating the efficacy of the Regulation. This study reviews the Regulation and its implementation 18 months after its entry into force in order to determine any issues, challenges, problems and opportunities that may have arisen during its infancy. Comparisons and lessons have also been drawn from other schemes to deter IUU fishing. Based on these analyses recommendations are proposed for improvements to the EU IUU Regulation to increase its effectiveness and legitimacy.

3 METHODOLOGY

The objective of this study was to determine if the recently implemented EU IUU Regulation has been effective since its implementation on January 1, 2010 and if any changes are needed to improve the implementation process. To determine this, the study was conducted in three phases. The first phase was a desktop review of the existing legislation and documentations on IUU fishing. The review was carried out to gain a general understanding of the global IUU fishing issue, define what IUU fishing is, and identify the contributing factors to IUU fishing. The measures used globally, such as international treaties and agreements, and regionally, within RFMOs and States, to address IUU fishing were identified and used to develop a historical overview of measures which led to the development of the Regulation.

The second phase was to identify any issues and challenges which may have occurred within the EU Member States during the first year of implementation. In order to collect this information on these issues two questionnaires were developed and distributed. The first questionnaire (see Annex 2) was sent to DG Mare, the specific body within the Commission responsible for implementing the EU IUU Regulation. This questionnaire comprised of 14 questions on specific areas of the implementation process for which the Commission has responsibility. The questions focused on the community vessel list, the community alert system, the non-cooperating third country lists, and the sanctions, if any, the EU has implemented against any party since January 1, 2010. The second questionnaire (see Annex 3) was developed for the EU Member States and contained 15 general questions. The questions relate to the implementation of legislation, administration, vessel inspections, the catch certification scheme, and the measures and sanctions carried out in each country. Both questionnaires were distributed and returned via electronic mail to the competent

authorities identified in Member States list (2009/ C 320/07)⁶ published in the Official Journal of the European Union on 24 December 2009. Twenty questionnaires were distributed to 20 of the 27 Member States, the list of names and organizations can be found in Annex 4. Follow-up interviews were conducted with two officials of the competent authorities in Member States to explore issues raised in their response to the questionnaire.

The third phase consisted of an preliminary analysis EU fisheries imports in order to determine the effectiveness of one particular part of the Regulation, the catch certification scheme. This analysis was based on the hypothesis that if the catch certification scheme is effective in preventing or deterring illegal fisheries products from entering EU markets, then there should be a marked effect on the trends in fish imports. Within the scope of this study and the short timeframe since the implementation of the IUU Regulation a full trade analysis was not possible and it would have been impossible to investigate any specific incidents of fraudulent behaviour; however the Commission's conservative estimate valued the illegal fish products imported into the union annually at €1.1 billion (European Commission, 2007a), and therefore any measure effective at detecting and excluding illegal fish from EU markets would be expected to have a visible effect on import trends. Thus imports of fisheries products into the EU prior to the entry into force of the Regulation, and following entry in force were compared. The data on imports was obtained from Eurostat, and at the time of the analysis the available data covered up to June 2011, exactly 18 months after entry into force.

This preliminary imports analysis was complemented with an investigation into the catch documentation scheme (CDS) in place within CCAMLR for Patagonian and Antarctic toothfish (*Dissostichus eleginoides* and *D. mawsoni*). The CCAMLR toothfish CDS was adopted in May 2000, and requires all landings, transhipments and imports of toothfish into CCAMLR countries to be accompanied by a catch document, containing specifics such as vessel name, license number, location, date of catch, gross weight, and other specifics. Due to the relatively long time period that this scheme has been in operation, there is a significant amount of relevant information and research available. Furthermore, the EU catch certification scheme has many similarities to the CCAMLR toothfish CDS, when it was first implemented, and thus many lessons drawn from the decade of experience with the CCAMLR toothfish CDS can be applied to the EU catch certification system.

4 RESULTS

4.1 DG MARE Response to the Questionnaire

A summary of DG MARE responses to the questionnaire (see Annex 2) is found in Table 1. The Commission responded to the questionnaire on July 7, 2011, noting that most information can be found on the <u>DG Mare website</u>. The Commission did not provide further

⁶ A copy of the Competent Authorities list can be found at (European Commission, 2009b) for further review.

sources of information but noted that other relevant documents can be found in the Official Journal of the European Union.

Table 1 Summary of the response to questionnaire regarding actions taken by DG MARE in implementing the EU IUU Regulation since January 1, 2010

Section	Overall Response	Notes
	- The list is updated every 3 months or as	All documents are
Community	needed.	available publicly in the
IUU Vessel	- Vessels published in Community IUU vessel	Official Journal of the
List	list are all from RFMOs.	European Union and
	- No Community Alert System has been	internet.
	established.	
	- Investigations into third country vessels have	
	occurred.	
	- Actions/measures have been taken against	
	third country flagged vessels identified as	
	part of IUU activities.	
	- Method of communication with Member	
	States is internet and Official Journal of	
	European Union.	
		Information regarding
Non-	- The non-cooperating third country list has	investigations into
Cooperating	not been established.	countries that may be
Third Country		listed as non-
List		cooperating is
		confidential.
		Information regarding
Sanctions	- No Emergency measures have been used.	investigations and non-
since entry	- No denunciation of bilateral agreements or	cooperating countries is
into force	partnerships with non-cooperating third	confidential.
	countries has occurred.	

4.2 Member States' Responses to the Questionnaire

The second questionnaire (see Annex 3) was distributed to the competent authorities identified in the Member States list (2009/C 320/07) published in the Official Journal of the European Union (European Commission, 2009b). Of the 20 questionnaires distributed, only six Member States returned a completed questionnaire - the United Kingdom, Estonia, Malta, the Republic of Lithuania, Germany and Sweden. Our analysis has been limited by the lack of responses from key Member States such as Spain and the Netherlands. However, the

information provided by the other Member States has given useful insights on the issues during 18 months of implementation. These include:

- There have been no issues or challenges to the implementation of the Prior Notification process from third country flagged vessels in any of the sampled Member States.
- A scheme for inspecting third country vessels has been implemented in each Member State.
- To date in the five Member States that responded, no vessel has been denied access to port services for the purposes of landing and transhipment as a result of the implementation of the regulation.
- To date all vessels entering the designated ports have provided a validated catch certificate.
- No vessel on the community IUU vessel list has been found in the EU ports.

None of the Member States that responded provided a breakdown of the fishing vessels inspected between January 2010 and January 2011, regardless of the flag state. The UK stated that vessels are regularly boarded, and dealt with accordingly within UK waters. Malta noted that while they have no landings of third country fishing vessels, landings of processed Bluefin tuna from vessels occurs specifically for re-export⁷, but these already have to be accompanied by validated catch certificates.

_

⁷ Re-export in the context of this paper refers to the importation and exportation of fisheries product inside the EU from Member State to Member State.

Table 2 The difference in the implementation process of the EU IUU Regulation in six Member States: Estonia (EE), Malta (MT), Lithuania (LT), Germany (DE), United Kingdom (UK) and Sweden (SE)

ISSUE	EE	MT	LT	DE	UK	SE
Was there an increase in personnel to	Minor	Minor	NO	NO	Major Increase, created a	NO
implement the prior notification review	Increase	Increase			specific unit	
process?						
Was there any increase personnel to	Minor	Minor	NO	YES/major	Major Increase, extra staff	NO
conduct vessel inspections?	Increase	Increase		require up to	in main designated port	
				5 people	and using additional staff	
					as needed	
Was there an increase in personnel to	Minor	Minor	NO	NO	Yes, One Man Year in over-	NO
implement for Catch Certification process?	Increase	Increase			time and created a new	
					post	
Have fishery products been refused entry	NO	NO	YES	YES	YES	NO
into the state based on the regulation?						
Has there been any appeal to rejecting	NO	NO	**	NO	NO	NO
importation?						
Has the Member State implemented	**	**	NO	YES	NO	NO
sanctions based on the EU IUU regulations						
against vessels identified in IUU activities?						

^{*} Based on responses to a questionnaire distributed between June 24 -July 8, 2011 and returned via email by September 14, 2011

^{**} No response was provided

4.3 Results of the preliminary analysis on EU imports of fisheries products

Our analysis of fish imports into the EU, before and after the IUU Regulation came into effect on the 1 of January 2010 found that there has been no major impact on the trends in trade as a result of the Regulation (see Figure 1). Figure 1 demonstrates that trade flows after the entry into force are no different from those prior to the application of the Regulation. These findings are confirmed by the 2011 Finfish Study, which states that 'the impact (of the IUU Regulation) on day to day trade has generally not been disruptive' (AIPCE-CEP, 2011). Furthermore, it states that 'to date there are no reported major instances of product being unavailable or shorted because of catch documentation problems' (AIPCE-CEP, 2011). However, the conclusion that the lack of any trade distortions 'appears to have had the desired effect of all but eliminating IUU fish from the EU market' (AIPCE-CEP, 2011) may be premature, particularly in light of the problems with the CCAMLR toothfish CDS during its first years of implementation (discussed further in Section 5.3).

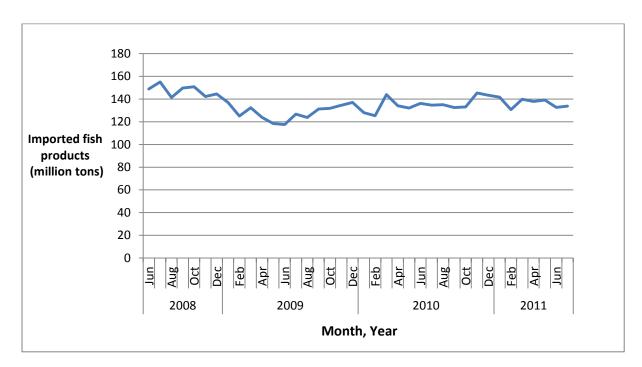


Figure 1 Imports of fish products to the EU 27. (Source: Authors; Data obtained from Eurostat)

5 REVIEW OF THE IMPLEMENTATION OF THE EU IUU REGULATION

The review is based on the information collected during the desktop review, but is also supplemented by information provided in the questionnaire responses and follow-up interviews. The review focuses on the current implementation by the European Commission, Member States and third countries.

5.1 Implementation by the European Commission

The Commission functions as the overall coordinating body for the implementation of the Regulation. As such, the Commission is responsible for establishing and coordinating the Community Alert System, the Community IUU Vessel List, and the Non-cooperating Country List. Based on the outcomes of the desktop review, the questionnaires and the interviews, several issues with the implementation of these three components of the Regulation have been identified.

The first relates to the **Community Alert System**. This is supposed to be coordinated by the Commission and should have already been established by time the Regulation entered into force. Even if this was not accomplished by January 1, 2010, it has since been a year of implementation and as of January 1, 2011, the system is still not in place. The reason for the lack of its establishment is unclear. Furthermore, no timeframe was provided for when it would become operational. If operational, the Community Alert System would provide the Port State Control Agents and the IUU officers within the Member States with the ability to track and identify potential IUU vessels moving within EU waters and port facilities. The idea is to increase the effectiveness of port state control authorities in identifying IUU vessels through an alert notice. The notice would be placed on the European Commission Fisheries website and the Official Journal of the European Union and available to the public. Additionally, it would deter and prevent the movement of IUU fishing vessels within designated ports. The lack of the Community Alert System removes a tool which the Regulation has provided in combating IUU fishing.

The second component to the Regulation where some issues have been identified is the Non-Cooperating Third Country List. The concept of the Non-cooperating Third Country list as stated in the Regulation is to create a list of third countries which have not taken necessary measures to combat IUU fishing. This includes non-compliance with international, regional, and national laws and agreements based on their responsibilities as flag states, port states, and coastal states, to address IUU activities. Some key steps must be taken before a country is listed, and equally before a country can be removed. These procedures take time, which may explain why to date no list has been established (European Parliament, 2011a). Article 35 of the Regulation states that 'the Commission shall publish the list of non-cooperating third countries in the Official Journal of the European Union, and take any measure necessary to ensure publicity of this list, including putting it on its website'. To date, only one country within the African region is known to have been informed of its potential placement on the non-cooperating list, and this was as a result of a leak from the government to a local newspaper (Gorez, B. Pers. comm. August 2011). However, it follows that until the Commission establishes the non-cooperating third countries list, no sanctions can be implemented against such countries. Again, this is a measure that should have been in operation from entry into force of the Regulation, and by not implementing it, the Regulation is weakened.

The third issue relates to the Community IUU Vessel List. The intention in the EU IUU Regulation is that the Community IUU Vessel List would include vessels identified by the Commission and/or Member States as well as those found in the lists of RFMOs of which the EU is a party. Based on the responses to the questionnaire and the desktop review it is confirmed that the Commission has established a Community IUU vessel list (Commission Regulation (EU) No 468/2010; European Commission, 2011). Such lists can be very effective at dissuading individual vessels from IUU fishing -the North East Atlantic Fisheries Commission (NEAFC) credits its list with significantly reducing IUU fishing in its area (European Parliament, 2011b). However there are some issue with the list established. The first issue is that although the Commission has established and coordinated the Community IUU vessel list, the Commission itself had not specifically placed any vessel on the list at the time of this review. All IUU vessels cited on the Community IUU vessel list, either flagged by Member States or third countries, are vessels which an RFMO has previously identified and cited on an RFMO IUU vessel list. This means that since entry into force the Community IUU list has been dependent on the decisions made by the RFMOs in placing vessels on its own black lists⁸ or white lists⁹, as well as the decision making timetables of RFMOs, which can be very slow and cumbersome (European Parliament, 2011b). The Commission does not verify or re-investigate the RFMO IUU vessel lists as the Regulation simply states that these are adopted in its entirety to the Community list.

In addition, each RFMO has its own procedures and criteria in placing vessels on an IUU Vessel List. Furthermore, the criteria and standards for listing within an RFMO usually arise from a negotiated agreement between contracting parties of the RFMO and consequently they may vary between RFMOs depending on the vested interests of contracting parties (European Parliament, 2011b). In addition, the decision-making procedures of some RFMOs, such as CCAMLR for example, require consensus by all parties to list a vessel on the IUU list. Thus the lists are unlikely to be complete or thorough lists of non-compliant vessels, if the listing of certain vessels is blocked by one party to the regional convention. Indeed, the placing or removal of a vessel on a black list is a commonly employed bargaining chip in the highly politicised negotiations within RFMOs. Additionally, the effectiveness of the RFMOs lists have come into question in recent years, as studies are showing that low-visibility of IUU vessels on RFMOs lists may be due to gaps in documentation (Cullis-Suzuki & Pauly, 2010). There is a clear need to revise and improve the documentation and identification of IUU vessels, perhaps by standardizing the identification of fishing vessels, though a system similar to the International Maritime Organisation (IMO) system of unique vessel numbers

.

⁸ Black lists consist of vessels identified as engaging in IUU activities within the RFMOs. Such vessels are not allowed access to ports of States which are party to the RFMO.

⁹ White lists consist of vessels allowed to trade products from specific RFMOs.

on container ships. All these factors bring into question the apparent dependence of the Commission, so far, on simply adopting the vessels from the RFMO lists and not adding vessels to the list which they have directly identified and investigated themselves.

Another issue with the creation of the Community IUU vessel list is the identification of the vessels in the designated Member State ports and Community waters. Similar to the RFMO problems of identification, 'IUU vessels on the RFMOs and Community Lists are rarely ever found within UK regulated ports, with only one pre-IUU regulations force majeure occurrence known to the UK authorities' according to Alistair McDonnell of the Marine Management Organization (A. McDonnell. pers. comm. August, 2011). Illegal vessels tend to stay away from port facilities and instead conduct activities such as transhipments of goods at sea, using alternate shipping methods to get their product to market. Known IUU vessels may be found in Ports of Convenience¹⁰ (Sumaila et al, 2006), however records of these are not kept and the usual method for identifying these vessels has been through surveillance activities by patrol vessels or patrol aircraft. (McDonnell, A. Pers. comm. August, 2011). It is clear from the responses to the questionnaire by the Member States, that no vessel cited on the Community IUU vessel list has been identified within their waters or port facilities within the first year of implementation. It is unclear if this is due to lack of documentation or an inability to identify vessels in port; or as stated in the interview with Mr McDonnell, that IUU vessels may predominantly avoid the risks of entering well controlled EU ports and now land to second choice third country ports and sell into second choice markets, or have found other methods of getting their catches to preferred markets.

5.2 Implementation by the Member States

Based on the responses to the questionnaires, the challenges faced by the Member States appear to be minimal and in most cases dependent on the how much fish is imported by each Member State from third countries. The Member States that responded to our questionnaire reported no issue in the administrative implementation of the Regulation, specifically, pertaining to prior notification and third country vessel inspections with respect to the response from the third country vessels accessing the designated ports.

The one area where there has been a difference in administrative burden is in the **allocation** of personnel and person-hours required to implement the procedural and review sections of the Regulation. This difference is seen clearly in Table 2 and may in part be attributed to the number of vessels landing in the designated ports of these States. Lithuania, which reported only three vessels for the study period from January 1 2010 to January 1 2011, and Sweden, which reported five vessels over the same period, saw no increase in personnel or change in person-hours because of the implementation of the regulation. However, the other Member States sampled, Malta (18 vessels), Germany (nine vessels), and the UK (301)

15

 $^{^{\}rm 10}$ Ports of Convenience are ports which service vessels known for illegal activity.

vessels) all had an increase in personnel/man-hours to implement the legislation over the past year (Estonia is left out here since it has no designated ports).

In the instances of Malta and Estonia, this increase in personnel was minor and both countries stated that most of the movement of fish products entering their countries is not from the landings of third country fishing vessels, but from transport, and re-export of processed product into their states. This means that these Member States needed to increase personnel to validate catch certificates of fish products moving either as imports or as exports through their customs entry points to enter the EU market (Suviste, S. Pers. comm., August 2011). However, once the fisheries products had cleared a point of entry into the EU market, it was in what is termed 'free circulation' within the EU market and is not checked again under the IUU regulations, unless it is in a customs transit procedure to a specific Member State under Article 19 of 1005/2008 (McDonnell, A. pers. comm. August 2011).

Both the UK and Germany noted major increase in personal in order to implement the IUU Regulation. The UK created a specific IUU coordinating unit to oversee the whole IUU scheme and Port State Control of third country fishing vessel imports, and this unit coordinates a delivery partnership with Port Health officers at UK Border Inspection Posts and with UK Customs authorities to deal with 25,000+ freight consignments per annum. Germany required up to five additional people to implement the sections of the Regulations pertaining to Catch Certificates, Vessel Inspections, and Prior Notifications. The reason for the major increase is not only the number of third country vessels landings at the designated ports, but also the level of fish imports into these Member States. Germany recorded nine third country vessels, under the Regulation they are also required to validate the catch certificates of products and shipments entering their customs point of entry.

Germany, Spain, France, and Italy are among the global top importers of fisheries products according to FAO in 2010 (FAO, 2010). Thus, it is understandable that the State would need to increase personnel to implement the Regulation. This is also the reason for the major increase of staff within the UK system. According to FAO, the UK is one of the top five fisheries importers within the EU (FAO, 2008). The UK also had the most third country vessels accessing designated ports (301). The total presented by the UK does not include the UK fishing fleet and vessels flagged with other Member States landing at other ports within the UK. Thus, the need for additional personnel within the UK is expected, as it would be expected for the other major importers of fisheries products within the EU.

Member States responding also highlighted the range of different **institutional or governance arrangements** in place for implementing the Regulation. In Estonia, for example, the coordinating institution responsible for the inspection of fishing vessels and for reporting to the Commission is the Ministry of Environment. While the review and

validation of catch certificates for products imported and re-exported into Estonia is the responsibility of the Customs Board. The issuance of catch certificates for Estonia's flagged fishing vessels falls under the Ministry of Agriculture. These three Departments within Estonia are required to function in coordination to implement the Regulation (Suviste, S. Pers. comm., August 2011). This scenario is similar for several of the other Member States as multiple competent agencies from different sectors are listed in the published List of Competent Authorities for Member States (2009/C 230/07) in the Official Journal of the European Union (European Commission, 2009b). Considering the different sections of the Regulation requiring implementation, it is safe to assume that the concept of multiple departments working together in coordination also applies to the implementation in third countries, although this was not directly explored in this study.

5.3 Preliminary analysis of the impact of the catch documentation scheme

The results of our preliminary analysis into EU imports of fisheries products concluded that trade flows have not changed since the entry into force of the IUU Regulation. Since the quantity of IUU fish products entering the EU market has been conservatively estimated to be the equivalent of 9% of the tonnage imported into the EC (500,000 tons) and 10% of the value of the imports (1.1 billion euros) (European Commission, 2007b), a lack of trade distortions strongly implies that the procedures for limiting entry of IUU vessels onto the EU market (more specifically, the catch documentation scheme) have been ineffective. In order to understand why the scheme has failed to make an impact, it is useful to draw from the experience of the CCAMLR toothfish CDS. In short, the US was aware of several cases of fake catch certificates being used for the importation of illegally caught toothfish into the US market (Dawson-Guynn, K. Pers. comm. August 2011; National Environmental Trust, 2004). This example highlights the possibility of using fake catch documentation to land illegal fisheries products, and indicates that a number of loopholes exist in such documentation/certification schemes creating opportunities for smuggling IUU fish. These loopholes in the CCAMLR system mean that not only has the CCAMLR CDS not prevented trade in illegal toothfish, but it has actually created a system of laundering it (National Environmental Trust, 2004).

Trafficking fish products can be done in a number of ways. The criminal operators can disguise the illegal fish either by mislabelling it as a different species or from another origin. It is particularly difficult to distinguish between species of fish when they have been frozen and processed. Alternatively the traffickers can falsify the quantity of fish caught. For example, in a 20 ton shipment the certificate might declare 8 tons of toothfish, for example, and 12 tons of another species, when in reality the quantity of toothfish is much greater. Furthermore, since catch certificates record the quantity of fish caught, once the fish is headed, gutted, filleted and processed in other ways, its weight is likely to be very much less than originally, thereby providing an opportunity to launder excessive catches. Conversion factors between unprocessed and processed weights are being used (see Annex XV of

Regulation 404/2011), they are not sophisticated enough to alert customs of any discrepancies, particularly in instances where fish is heavily processed, such as fish fingers for example.

Operators are able to get away with such ploys through a number of means. Firstly, catch documentation can very easily be forged. This is especially true of paper based CDSs, which are wide-open to photocopying or doctoring. Furthermore, the EU catch certification scheme which relies on paper certificates not e-certificates, actually allows for photocopies to be made, which obviously provides even greater opportunities for fraud (Engelke-Ros, M. Pers. comm. November 2011). Secondly, illegal trade in fisheries products can be made feasible through insufficient enforcement at the port of entry. Catch documentation schemes require rigorous checking by fisheries enforcement or customs officials in the importing countries. However customs and inspectors are frequently understaffed, underresourced, and have multiple priorities (including terrorism and human trafficking). In Europe's most notorious 'Port of Convenience', Las Palmas de Gran Canaria, only five inspectors service the entire port (EJF, 2011). The largest port in Europe, Europoort in Rotterdam, receives around 5 million containers (TEU) per year (Port of Rotterdam, 2010). Considering that the physical inspection of a container can take hours, it is not surprising that illegal produce can slip through. As if this wasn't enough, in reviewing certificates, officials know that certain ports, flag states and fishing areas are questionable, but they often lack the required evidence or legal basis for denying certificates (National Environmental Trust, 2004).

The third major loophole is ineffectual enforcement in flag states. Investigations into the CCAMLR toothfish CDS found that officials in some ports certified whatever the catch documentation or vessel owners claimed, without verifying the validity of the assertions (National Environmental Trust, 2004). Flag state inspectors are supposed to compare vessel monitoring systems (VMS) data previously transmitted by the vessel, to records in the vessel's logbook, as well as consistency between catch documentation, vessel identity, gear (National Environmental Trust, 2004). However VMS data and catch documentation can be falsified or tampered with, and, either through lax enforcement or collusion, illegal operators are able to launder catches and gain access to legitimate and lucrative market places. Again, customs capacity is a significant problem. The resources available to fisheries inspection can be severely constrained in developing flag states, and differ vastly from country to country. Considering that this has been proven to be a significant problem facing the effectiveness of the CCAMLR toothfish CDS (a scheme directed towards two species of fish only), we can only expect it to be a greater issue for the EU IUU Regulation catch documentation scheme (which applies to nearly all marine fishery products –see Article 12).

6 CONCLUSIONS AND RECOMMENDATIONS

In 2008, the EU adopted the IUU Regulation as their response to the global call for international action to address the problem of IUU fishing. The EU IUU Regulation and its associated instruments have the potential to contribute to these global efforts. However, the concerns relating to and limitations of the current Regulation must be acknowledged.

In addition to the EU IUU Regulation, the EU also has the Control Regulation (Regulation 404/2011) which stipulates obligations on Member States as regards the activities of their own vessels wherever they may be and fishing activities in their own waters. This approach (Member State responsibility) is enshrined in the Lisbon Treaty, while Flag State responsibility is enshrined in UNCLOS. This means that the IUU Regulation introduces legal confusion in this regard. Furthermore while the IUU Regulation aims to restrict imports of illegally caught fish into the EU market, there are no objective criteria laid down in the Regulation for taking such decisions. In addition, limiting imports into the EU has to be WTO compatible and can only take place under strict conditions.

The Commission, in designing the EU IUU Regulation failed to learn lessons from experiences outside the EU, for example steps taken by CCAMLR and NEAFC to address IUU fishing in their areas of jurisdiction. In the case of CCAMLR, their initiatives to deter IUU fishing including the recently adopted electronic catch documentation scheme, have contributed to a significant overall decline in IUU fishing since 2003, although some areas remain vulnerable (CCAMLR, 2011). The other example of best practice is the Northeast Atlantic Fisheries Convention (NEAFC) where the port state control scheme aimed at preventing landings of cod and haddock caught illegally in the Barents Sea has resulted in an improvement to stocks to the extent that TACs are at their highest ever, up to 700,000 tonnes for Barents Sea cod (Aalesundfish, 2011).

Our analysis of the first 18 months of implementation suggests that there are a number of areas where the EU IUU Regulation is deficient. Areas that need to be addressed include the flawed catch certification scheme, the unreliability or incompleteness of the Community IUU Vessel List, the insufficient progress towards implementation of the Non-cooperating Third Country List, and the so far unimplemented Community Alert System. A final issue noted throughout the study was a lack of transparency in the Commission's procedures relating to the IUU Regulation and implementation thereof.

6.1 Flawed catch certification scheme

The analysis concluded that the catch certification scheme as it stands is not working to prevent illegally fished products from entering the EU market as the paper certificates are open to fraud. A move towards compulsory electronic certificates may help to reduce opportunities to commit fraud. However without big efforts to inspect and validate consignments and certificates the measure will continue to be ineffective. Lately there have

been enormous advances in DNA sampling technology. The use of such molecular technologies to support traceability, control and enforcement has been well documented, and the arguments for their routine application are strong (Martinsohn, 2011).

The catch certification system falls down largely because of the vast number of products requiring certification and certificates requiring validation. However certain fish species are more prone to illegal exploitation, mainly those which have a higher market price, therefore it would likely be more effective and cost-effective to focus efforts on species more vulnerable to fraudulent trading. Greater efforts should be put into understanding and investigating these lucrative illegal trade flows and closing up the loopholes that allow them to flourish.

6.2 Unreliability of the Community Black list

The review discovered that the system of adding vessels to the Community Black list is overly dependent on the procedures and decisions of RFMOs. RFMO vessel black lists are known to be slow, cumbersome and political (European Parliament, 2011b). It is highly unlikely that RFMO's will improve their systems for listing vessels to an appropriate standard in the near future. Therefore it is recommended that the Commission follows a robust system of listing vessels itself (as is the intention in the Regulation –see Article 27), which is updated frequently as opposed to annually as in most RFMOs. This is critical to avoid the issues of political interference which are reported to occur during negotiations over the initial black listing of IUU vessels, despite procedures for establishing provisional and definitive lists in RFMOs, for example, NEAFC, NAFO and CCAMLR.

6.3 Insufficient progress towards the implementation of the Community Alert System and the Non Cooperating Third Country List

A year and half after implementation of the Regulation the Community Alert System and the Non-cooperating Third Country List have not been published. The reason, based on the Commission response to the questionnaire, for the delay in the Non-cooperating Third Country List is that the Commission is still investigating potential countries. It is allowing the countries the appropriate time needed to address the allegations as part of the notification process, before establishing the first list. This is a justifiable delay; however, it is recommended that a timeframe for the release of either the first non-cooperating third country list, or a progress report on the development of the list, be established. This would provide valuable information for assessing the effectiveness of the potential sanctions (trade restrictions) which may follow the establishment of the Non-cooperating Third Country List. The full force of the Regulation involves the use of trade restrictions on fisheries products from third countries listed as non-cooperative. Since the Non-cooperating Third Country List is pending future action, no country has been sanctioned using the trade measures component of the Regulation. Until the EU sanctions a nation with trade measures will the full force of the Regulation be tested.

While the reason for the delay in publishing the Non-cooperating Third Country List is clear, the delay in implementing the Community Alert System is not. The objective of the system is to track, identify, and investigate possible IUU vessels, and without it, Member States have one less tool for combating IUU fishing. Therefore, it is recommended that the Commission implement the system as soon as feasible. Additionally the Commission may investigate the reason why the system is not established, and rectify the problem within a specified timeframe. This would ensure the implementation of the system and commence the reporting of possible vessels to the Commission for investigation.

6.4 General lack of transparency

In response to the questionnaire, the Commission indicated that all information is available on its website. However, a review of the website has shown that only documents published in the Official Journal of the European Union required by the Regulation are available. While this technically complies with the legal requirements of the Regulation, it does not offer any aid to an independent party or a member of the public wishing to review the Commission's actions and implementation of the Regulation so far, or the successes/measures taken by Members States against third country vessels. Indeed, the Commission indicated in its response to the questionnaire that information pertaining to the identification of non-cooperating states is confidential. In contrast, the United States publishes a biannual document listing not only countries it has identified as being involved with IUU fishing, but also stating additional countries which were reviewed during the time period, and listing the reasons and criteria used for investigating these countries as well as its actions in addressing IUU activities within its territory. Hence this document provides a valuable source of information, enabling independent review and public scrutiny. From this investigation it became clear that the Commission needs to improve its communication on the implementation process on all aspects. The Regulation specifies the Commission shall provide a review report every three years on the implementation process. However, during these first few years of implementation, it is recommended that progress reports/summaries of actions taken by all relevant parties are published. This allows for transparency and provides both the Commission and relevant stakeholders an opportunity evaluate the implementation and provide suggestions for possible changes/improvements to the system.

6.5 Areas for further investigation

Although this study has highlighted some important problems with the Regulation and gaps in its implementation, a full comprehensive assessment of the Regulation's implementation and effectiveness is still required. Three broad areas would merit further investigation: the impact of the Regulation on EU and third country businesses; the implementation by, and impacts on, third country fishing authorities; and the full impacts of the Regulation on trade flows The 2011 Finfish Study reports that the Regulation -or rather, the catch certificateshave caused an increase in the administrative burden and ultimately placed costs on

businesses (AIPCE-CEP, 2011). Anecdotal evidence supports this, but the full extent of this apparent burden and cost requires further study. Indeed, in light of our findings discrediting the catch certification scheme, any added burden to legitimate fishing businesses would only increase the unfair competition from illegal operators. The same principles apply to third country businesses.

With respect to third country administrations it would be beneficial to explore the positive and negative impacts that the EU IUU Regulation may have had. There is evidence to suggest that the implementation of the Regulation within third countries has led to an increase in monitoring, control and surveillance of fishing activities, as well as increased implementation or enforcement of domestic legislation against IUU (Gorez, B. Pers. comm., August 2011). Since adoption, the Commission has been actively working with third countries to increase their capabilities to meet the Regulation requirements, in the hope that this assistance will have a direct benefit in increasing the ability of third countries to address IUU fishing. Therefore, via these outreach missions, the Regulation may have provided an opportunity to raise awareness on IUU fishing and the necessary measures to combat the problem globally. These potential positive effects of the Regulation, and any concerns over the costs of implementing the Regulation, need to be explored in greater depth.

A simple analysis of the impact of the Regulation on imports, looking at total imports of fisheries products before and after the entry into force of the Regulation, was done as part of this study. However, further analysis of global trade data is required to full understand the impact of the Regulation. Trade flows between countries need to be analysed in depth to establish whether there have been any changes in movements of fish products previously imported into the EU. Although the paper-based catch certificates are open to forgery the Regulation does present a unique opportunity, in that international fisheries experts in the Competent Authorities of Member States now have data on what flags catch the fish we eat, where it is processed, how it gets to us, who exports it, who imports it, and what it is. An in-depth investigative trade analysis of this data would add great value by highlighting where further improvements to the Regulation could be made, and thereby help to ensure that it contributes to deterring, eliminating and preventing global IUU fishing.

7 REFERENCES

Aalesundfish (2010) Bilateral quotas for cod and haddock. Updated 10.11.2010; retrieved 21.11.2011. http://www.aalesundfish.no/default.asp?menu=8&id=42

Agnew, D. (2000) The illegal and unregulated fishery for toothfish in the Southern Ocean, and the CCAMLR catch documentation scheme. *Marine Policy*, *24*, 361-374.

Agnew, D., & Barnes, C. T. (2004) The Economic and Social Effects of IUU/FOC Fishing: Building a framework. In O. (2004), *Fish Piracy. Combating Illegal, Unreported and Unregulated Fishing.* (pp. 19-49). Paris: OECD.

Agnew, D. J., Pearce, J., Pramod, G., Peatman, T., Watson, R., Beddinton, J. R., et al. (2009) Estimating the Worldwide Exent of Illegal Fishing. *PLoS One*, *4*(2), e4570.

AIPCE-CEP (2011) Finfish study 2011. Brussels. http://www.fiskbranschen.se/FinFishStudy2011.pdf

CCAMLR (n.d.) Illegal, unregulated and unreported fishing. Updated n.d.; Retrieved 21.11.2011. www.ccamlr.org Cullis-Suzuki, S., & Pauly, D. (2010) Failing the high seas: A global evaluation of regional fisheries management organizations. *Marine Policy*, 34, 1036-1042.

Doulman, D. (2000) A general overview of some aspects of illegal, unreported and unregulated fishing. *Report of and Papers Presented at the Expert Consultation on Illegal, Unreported and Unregulated Fishing.* Rome: FAO. Retrieved April 11, 2011: http://www.fao.org/DOCREP/005/Y3274E/y3274e04.htm#bm04

Environmental Justice Foundation (n.d.) *Impacts of IUU Fishing*. Accessed 18 November 2011 from http://www.ejfoundation.org/page163.html

European Commission (2007a) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a new strategy for the Community to prevent, deter and eliminate Illegal, Unreported and Unregulated fishing, COM/2007/0601 final. Retrieved August 15, 2011, from EUR-Lex Access to European Union Law: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52007DC0601:EN:NOT

European Commission (2007b) Accompanying document to the Proposal for a Council Regulation establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing - Impact Assessment. Commission staff working document, SEC/2007/1336. Retrieved November 17, 2011, from http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52007SC1336:EN:HTML

European Commission (2009a) Handbook on the practical application of Council Regulation (EC) No. 1005/2008 of 29 September 2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing (The IUU Regulation). Retrieved April 22, 2011, from European Commission Fisheries: Queries on IUU Regulation: http://ec.europa.eu/fisheries/cfp/illegal fishing/info/handbook original en.pdf

European Commission (2009b) *List of member states and their comptent authorities concerning Article 15(2), 17(8) and 21(3) of Council Regulation EC No 1005/2008.* Retrieved June 24, 2011, from European Commission Fishieres: http://ec.europa.eu/fisheries/cfp/illegal fishing/info/ms authorities en.pdf

European Commission (2011) Europa-Press Release-Fisheries: European Union and United States agree to strengthen cooperation to combat illegal fishing. Retrieved September 11, 2011, from Europa: http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/1007&format=HTML&aged="http://europa.eu/rapid/pressReleasesAction.do">http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/1007&format=HTML&aged="http://europa.eu/rapid/pressReleasesAction.do">http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/1007&format=HTML&aged="http://europa.eu/rapid/pressReleasesAction.do">http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/1007&format=HTML&aged="http://europa.eu/rapid/pressReleasesAction.do">http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/1007&format=HTML&aged="http://europa.eu/rapid/pressReleasesAction.do">http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/1007&format=HTML&aged="http://europa.eu/rapid/pressReleasesAction.do">http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/1007&format=HTML&aged="http://europa.eu/rapid/pressReleasesAction.do">http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/1007&format=HTML&aged="http://europa.eu/rapid/pressReleasesAction.do">http://europa.eu/rapid/pressReleasesAction.do?

European Parliament (2011a) Parliamentary questions 19 August 2011- Answers given by Mrs. Damanaki on behalf of the Commission on New additions to the list of non-cooperating third countries with regard to the fight against illegal fishing, E-007149/2011: http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+WQ+E-2011-007149+0+DOC+XML+V0//EN

European Parliament (2011b) Working Document on Combating illegal fishing at the global level - the role of the EU. Committee on Fisheries, Rapporteur: Isabella Lövin, 4.1.2011

FAO (2001) International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing. ROME: FAO. Retrieved April 11, 2011:from FAO: http://www.fao.org/DOCREP/003/y1224E/Y1224E00.HTM

FAO (2002) Implementation of the International Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported and Unregulated Fishing. FAO Technical Guidelines for Responsible Fisheries 9. Rome: Food and Agriculture Organization, FAO. Retrieved April 11, 2011: from FAO: http://www.fao.org/docrep/005/y3536e/y3536e00.HTM

FAO (2007) *The State of World Fisheries and Aquaculture 2006.* Rome: FAO. Retrieved April 11, 2011: http://www.fao.org/docrep/009/a0699e/a0699e00.htm

FAO (2008) *The State of world fisheries and aquaculture 2008.* Rome: FAO. http://www.aquabounty.com/documents/press/2008/FAO-2008AquacultureUpdate.pdf

Gallic, B.L. (2008) The use of trade measures against illicit fishing: Economic and legal considerations. *Ecological Economics*, *64*, 858-866.MRAG and the Unversity of British Columbia (2008) The global extent of illegal fishing. A report prepared by MRAG and the

Fisheries Center at University of British Columbia. http://www.mrag.co.uk/Documents/ExtentGlobalIllegalFishing.pdf

National Environmental Trust (2004) Black Market for White Gold: the Illegal Trade in Chilean Sea Bass, Washington, US. http://www.illegal-fishing.info/uploads/Black-mkt-for-white-gold-csb-report.pdf

OECD/FAO (2011) Fish. In OECD/FAO, *OECD-FAO Agricultural Outlook 2011-2020* (pp. 147-158). OCED Publishing and FAO.

Pitcher, T. J., Watson, R., Forrest, R., por Valtysson, H., & Guenette, S. (2002) Estimating illegal and unreported catches from marine ecosystems: a basis for change. *Fish and Fisheries*, *3*, 317-339.

Tsamenyi, M., Palma, M., Milligan, B., & Mfodwo, K. (2009) The New EC Regulation on Illegal Fishing: Implications for ACP Countries. (D. M. Razzaque, Ed.) *Commonwealth Trade Hot Topics*(56), pp. 1-5.

U.S. Department of Commerce (2011) Report to Congress Pursuant to Section 403(a) of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act 2006. Washington D.C.: U.S. Department of Commerce

Watson, R., & Pauly, D. (2001) Systematic distortions in world fisheries catch trends. *Nature*, 414, 534-536.

EU Legislation

Council Regulation (EC) No 404/2011 of 8 April 2011 laying down detailed rules for the implementation of Council Regulation (EC) No 1224/2009 establishing a Community control system for ensuring compliance with the rules of the Common Fisheries Policy

Commission Regulation (EU) No 395/2010 of 7 May 2010 amending Commission Regulation (EC) No 1010/2009 as regards administrative arrangements on catch certificates. Retrieved June 10, 2011, from EUR-Lex Access to European Union Law: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32010R0395:EN:NOT

Commission Regulation (EU) No 468/2010 of 28 May 2010 establishing the EU list of vessels engaged in illegal, unreported and unregulated fishing. Retrieved July 15, 2011, from EUR-Lex Access to European Union Law: http://eur-

lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32010R0468:EN:NOT

Council Regulation (EC) 1010 /2009 of 22 October 2009 laying down detailed rules for the implementation of Council Regulation (EC) No 1005/2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing

Council Regulation (EC) No 1005/2008 of 29 September 2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing, amending Regulations (EEC) No 2847/93, (EC) No 1936/2001 and (EC) No 601/2004 and repeal: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008R1005:EN:NOT

1 ANNEX 1. ELEMENTS OF THE EU IUU REGULATION

1.1 Port Control of Third Country Vessels

Articles 4 to 12 of the Regulation pertain to port state control measures. Article 4 refers to the limitation of access to port facilities and services within the Member States based on conditions set forth in the Regulation, except in cases of *force majeure*¹¹. Article 5 specifically pertains to the designation of specific ports by Member States for the purposes of landings and transhipment of fish products within EU Member States by third country fishing vessels. Articles 4 and 5 identify where fishing vessels can land within Member States, and Article 6 sets out the requirements, the conditions, that masters of these fishing vessels must meet before docking at the designated port. In order to gain authorisation to access the port (Article 7), prior notice documentation (Article 6) in accordance with the requirements and a validated catch certificate needs to be submitted to the port. Based on these Articles, the third country flagged fishing vessel is approved to land, offload its shipment, and use the services of the port facility only after the submitted documentation, in accordance with Article 8, is verified. This includes verification of both the prior notification documentation and the catch certificate (European Commission, 2009a).

The provisions in Article 9 and 10 address port inspections of third country vessels. Under the Regulation, Member States are required to inspect at least 5% of third country fishing vessels operating in the port facility annually. Included in this number is the inspection of any vessel sighted conducting IUU activity, and/or identified on the Community IUU Vessel List, through the Community Alert System, or on an RFMO IUU vessel list. In the event that a vessel is found during the inspection process to have evidence of IUU fishing activities neither the landing nor the transhipment of the catch is allowed at the port facility. In the instance that the IUU activity has taken place on the High Seas or in a third state's jurisdiction, the provisions a set out for the Member State to work with the flag state of the vessel to investigate the incident. Under Article 11, notifications of the IUU vessel is sent to the Commission and the measures/sanctions set forth in Articles 37, and 41 to 47 are implemented.

1.2 Catch Certification

E

The catch certificate components are found within Articles 12 through 22. According to the Regulation, fisheries products will only be imported into EU market with a validated catch certificate (Article 12). This certificate follows a pre-approved format by each flag state (Article 20), or the country, and/or RFMO of origin of the fish product, and is completed by the master of the vessel. Also accepted as catch certificates are the documentation schemes and catch certificates used by RFMOs (Article 13). The importation and exportation of the fish product is dependent on the validation of the certificate by both the

¹¹ Force Majeure- Article 18(2) of UNCLOS pertains to the necessary stopping/anchoring of the passage of a vessel in cases of emergency or distress to render assistance services

flag state of the vessel (Article 15) and the competent authority of the port state (Article 16). The Commission does not validate these catch certificates, but instead leaves the validation to the discretion of the competent authority of the Member States. In some Member States, this may be an authority from the government services in the fisheries sector, customs sector, or port facility. Thus, a designated competent authority list is established under this regulation, and published in the Official Journal of the European Union (European Commission, 2009b). The designated competent authorities of the Member States determine the verification of the catch certificates under Article 17 and the criteria used for that validation. Article 18 provides a list of measures to be taken if the vessel fails to provide an adequate catch certificate. The validated catch certificate from the flag states must comply with the requirements set forth in Article 20. In addition, the flag state must assure the EU that mechanisms are in place for the monitoring, surveillance, control, and enforcement of national and regional laws, and fisheries conservation and management measures by fishing vessels flying its flag. All records pertaining to catch certification, vessel inspection and prior notification are forwarded to the Commission.

1.3 Community Alert System

In accordance with Articles 23 and 24, the community alert system is to be established and coordinated by the Commission upon the Regulation entry into force. The alerts are to be published in the EU Commission website and the Official Journal of the European Union. The overall objective of the system is to warn operators and Member States of potential fishing vessels, which may not be complying with the Regulation, and should be monitored, and inspected if found within EU jurisdiction.

1.4 Community IUU Vessel List

A main component of the Regulation is the creation of a Community IUU Vessel List, which is covered in Articles 25 to 30. Using the principles behind the establishment of vessel lists by RFMOs, the EU has established mechanisms under Articles 25, 26 and 27 for the creation of the list, and the procedures for identifying vessels that have conducted IUU fishing activities and should be placed on the list. Included in this section of the Regulation are procedures for requesting assistance from and notification of flag states, be it a Member State or a third country. In addition to vessels identified by the Commission and Member States, vessels cited on already existing RFMO IUU vessel lists are also included in the community IUU vessel list (Article 30) with no further verification. Furthermore, Article 28 of the Regulation stipulates the provisions necessary for the removal of vessels from the IUU vessel list. The responsibility for developing, creating, and identifying vessels to be place on the community IUU vessel list rests with the Commission (Article 29). Member States are only required to forward names and relevant information on vessels suspected of IUU activities to the Commission for further investigation.

1.5 Non-Cooperating Third Countries

The Regulation Articles 31 to 36 allow for the creation of a list of non-cooperating third countries. As previously mentioned, in the context of the Regulation a third country refers to a non-Member State of the EU. Under Article 31, a State may be identified as a non-cooperating third country if it fails to comply with its obligations under international law as a flag state, port state, coastal state, or market state in combating, preventing, and eliminating IUU fishing activities. The Commission based on specific criteria stated in Article 31 determines the placement of a State on the non-cooperating list. These criteria include the State's compliance to international obligations, the exiting record of IUU fishing activities conducted by vessels flying the State flag, its operators, and its nationals. Also included as a measure, is the IUU fishing enforcement record of the State and its willingness to cooperate with the EU in investigating potential IUU vessels.

Based on the criteria a State may be identified as a non-cooperating state, however, prior to its placement on the list, the State is allowed the opportunity to refute the claims of its non-cooperation. Under Article 32, the Commission is required to inform the State of its possible placement on the list and allow a chance for the State to respond to the evidence presented in reasonable time. Under Article 35, the Commission is required to publish the non-cooperating list in the Official Journal of European Union and ensure publicity of the list on its website. Subsequent to publication of the list, the EU shall enact actions cited in Article 36 and Article 38, to encourage the non-cooperating state to address the issues of IUU fishing brought forth by the Commission.

1.6 Enforcement Measures and Sanctions

Articles 37 and 38 pertain to actions that the EU can take in respect of vessels published in the community IUU vessel list and states in the non-cooperating third country list, respectively. Actions taken under Article 37 of the Regulation include measures for ceasing Member State activities with the vessels. These include the removal or cancellation of fishing licenses, removal of assistance in joint operations, and limiting access to Member State port facilities and services to the vessel, except in the cases of *force majeure*. The actions stated within Article 37 apply to both vessel flying the flags of third countries and those flying the flags of Member States, this points to the non-discriminatory nature of the Regulation.

In accordance with Articles 38, an action in respect to States identified on the non-cooperating third country list, which the EU could take, is to cease the importation of the fishery products from vessels flying the flag of the non-cooperating country. In the instances where the issue relates to a specific species of significance or endangered fisheries stock, the EU could cease the importation of that species as an action. Furthermore, under the actions allowed in Article 38, the most severe is the denunciation of a bilateral fisheries

agreement or fisheries partnership agreement with the non-cooperating country (Article 38.8).

More specific enforcement sanctions and measures are listed in Articles 41 to 47 of the Regulation. These include but are not limited to the following measures:

- (a) Denying access to ports and associated facilities such as fuel, provisions, and other services, except in cases of force majeure, to vessels.
- (b) Removal of fishing permits, licenses and authorization for fishing activities to be conducted in community waters.
- (c) Confiscation of the catch, fishery product, and fishing gears found on board vessels. In some instances, this confiscation can also include the vessel involved in the IUU activity itself and further action can be the scrapping of the vessel.
- (d) The prohibition of processing activities, exportation, and re-exportation of the fishery product within EU jurisdiction

The above actions are carried out concerning fishing vessels identified as IUU vessel regardless of the flag state, meaning that vessels flagged by either Member States or non-cooperating third county. Majority of these measures are implemented by Member States at the point of entry, for the fisheries product into the EU, usually the designated ports. The Commission implements the enforcement sanctions and measures that pertain to trade restrictions.

1.7 Mutual Assistance Mechanism

Article 51 pertains specifically to the cooperation and assistance between Member States and third countries in the implementation and compliance of this Regulation. The article speaks to the support and cooperation of third countries and the EU, to ensure the effectiveness of the Regulation and improve the ability of the third country to comply. The mechanism emphasizes the establishment of a legal structure for addressing IUU fisheries within the third country, and developing the administrative measures to address these issues, such as flag state validation of catch certificates. The inclusion of informing, requesting assistance in investigations, and cooperating with the third country in the tracking of the IUU vessels and activities is found throughout the Regulation. This specific requirement, especially those pertaining to the catch certification verified by the flag states, sets the stage for making the third countries responsible for the activities of their vessels. Although these obligations are already included in other international agreements, the Regulation sanctions, for failure to comply with these obligations, leaves the third country susceptible to trade restrictions for the importation of their fishery product into the EU market. This trade restriction would have serious ramifications on the economy a third country dependent on the EU market for the export of their fisheries.

2 ANNEX 2. QUESTIONNAIRE FOR DG MARE

Please place an 'X' inside the bracket where appropriate or type in the space provided to show your response to the questions.

Section 1: Community IUU Vessel Lists

1)	Is the Community IUU vessel list updated every three months?)	
	YES NO		
2)	Has the Community IUU vessel list and its updates been circula	ated to Me	ember
	States? YES NO		
3)	How is the Community IUU Vessel List and updates circulated?)	
	CIRCULATION	YES	NO
	MAIL TO COMPETENT AUTHORITIES		
	ITE, ONLINE INFORMATION SYSTEM		
	IAL JOURNAL OF THE EUROPEAN UNION		
IUU IN	IFORMATION SYSTEM		
4)	Is the Community IUU Vessel List and updates publicly available	le?	
	YES NO		
	If YES, please provide access information:		
5)	Have any vessels been placed on the Community IUU Vessel Li	st since Ja	inuary
	2010, outside of those cited by Regional Fisheries Managemer	nt Organis	ations
	(RFMOs)? YES NO		
	· · · · · · · · · · · · · · · · · · ·		
6)	Is there a Community Alert System in place for notification of	non-comp	liant
	vessels flying flags of third countries? YES	NO	
	(If NO, please move to Question 8)		
	(i, ive) predict move to Question of		
7)	Are alerts from the Community Alert System publically availab	le?	
·	YES NO		
	If YES, please provide access information:		
	., . 20, p. case provide access injoiniation.		

8)	_	ation has entered into force, has the nat any flag state investigate and/ or ctivities?		
	YES	NO		
Section 2: I	Non-cooperating Third C	Country Lists		
	YES	rating Third Countries been establish		
10)		Cooperating Third Countries list circu stablished, how will it be circulated to		
METHOD OF	CIRCULATION		YES	NO
ELECTRONIC	MAIL TO COMPETENT AUTHO	ORITIES	1	
WEBSI	TE, ONLINE INFORMATION S	YSTEM		
OFFICI	AL JOURNAL OF THE EUROPE	EAN UNION		
IUU IN	FORMATION SYSTEM			
11)		Third Countries list publicly available adde publically available?) NO	∍? (If not y	et
12)	Article 32, notified any as non-cooperating thir	ation has entered into force, has the countries concerned of the possibilited countries in accordance with the countries with the	y of being riteria laid	identified
Section 3: S	Sanctions since the EU IL	JU Regulation has entered into force	е	
13)	• .	ures in accordance with Article 36 of third country? YES NO _	_	ition been
14)	•	oposed the denunciation of any bilat partnership with any non-cooperatir		
If you have		tion, please provide below		

THANK YOU FOR YOUR PARTICIPATION

3 ANNEX 3. QUESTIONNAIRE FOR MEMBER STATES

Name	of State:
Positio	on:
Organi	ization:
show y include pertain amend	place an 'X' inside the bracket where appropriate or type in the space provided to your response to the questions. If your answers are longer than the space provided, e your additional responses on attached sheets. Please note that all questions in to the implementation of Community Regulation (EC) No 1005/2008 and associated diments to address illegal, unreported and unregulated (IUU) fishing since it entered arce on 1 January, 2010.
Section	n 1: Legislative
1)	Has the Council Regulation (EC) No 1005/2008 commonly referred to as the EU IUU Fishing Regulation been transposed into national legislation? YES NO
Sectio	n 2: Administrative
2)	Has there been any issue with the implementation of the Prior Notice requirement for entry into ports? YES NO If YES, please explain:
3)	Was there a need for increasing personnel to implement the prior notification process? NO YES, minor increase YES, major increase
	If possible, please elaborate on the extent of increase:
Sectio	n 3: Inspections
4)	Has a scheme for the inspection of fishing vessels flying flags of third countries been implemented? YES NO
5)	Was there a need for increasing personnel to conduct vessel inspections since the implementation of the regulation in January 2010? NO YES, minor increase YES, major increase
	If possible, please elaborate on the extent of increase:

) Has any fishing vessel been denied access to port services for purposes of landing								
	and/ o	r transhipment of fish	ery products base	d on this Regulatio	n since January				
	2010?	YES	NO						
	If YES, please provide:								
	a. Number of vessels from member states (if known)								
	b. Number of vessels from third countries (if known)								
_,									
•		s the total number of	_	•	•				
	access	ing the designated por	rt facilities for the	purposes of landin	gs and/or				
	transh	ipment of fishery prod	luct?	-					
	Please	provide the total num	ber of fishing ves	sels from:					
	a.	Member States (if kn	own)						
	b.	Third Countries (if kn	own)						
			_						
8)	What	is the total number of	fishing vessels in:	spected between Ja	nuary 2010 and				
		y 2011 as a result of:	Ü	•	,				
		, ==== == =============================							
VESSEL II	NSPECT	ON WAS A RESULT OF THE	E VESSEL BEING:	VESSELS FLYING THE	FLAGS OF				
				THIRD MEMBER					
				COUNTRY	STATE				
		A ENGAGED IN ACTIVITI J FISHING	IES THAT MAY BE						
	CONSIDERED IUU FISHING REPORTED UNDER THE COMMUNITY ALERT SYSTEM								
RE	EPORTE	D UNDER THE COMMUNIT	Y ALERT SYSTEM						
		D UNDER THE COMMUNIT D UNDER THE COMMUNIT							
ID									
ID	ENTIFIE								
O.	ENTIFIE THER								
O.	ENTIFIE THER	D UNDER THE COMMUNIT							
ID O	THER	D UNDER THE COMMUNIT	TY IUU VESSEL LIST						
ID O	THER	D UNDER THE COMMUNIT	TY IUU VESSEL LIST						
Section	THER If OTH 4: Cat	D UNDER THE COMMUNIT	ry IUU VESSEL LIST	to implement the C	atch Certificate				
Section 9)	THER If OTH 4: Cat Has th	ER, please list: ch Certification Schenere been a need to income	ne crease personnel t	to implement the C	atch Certificate				
Section 9)	THER If OTH 4: Cat Has th Schem	ER, please list: ch Certification Schenere been a need to income within the designate	ne crease personnel to	·					
Section 9)	If OTH 4: Cat Has th Schem	ER, please list: ch Certification Schenere been a need to inceed within the designate YES, minor inceed to inceed t	ne crease personnel to the ports? crease	YES, major in					
Section 9)	If OTH 4: Cat Has th Schem	ER, please list: ch Certification Schenere been a need to income within the designate	ne crease personnel to the ports? crease	YES, major in					
Section 9)	If OTH Has th Schem NO If poss	ER, please list: ch Certification Schenere been a need to inceed within the designate YES, minor inceible, please elaborate	rease personnel to the crease on the extent of i	YES, major in ncrease:	crease				
Section 9)	If OTH 4: Cat Has th Schem NO If poss Has th	ER, please list: ch Certification Schen ere been a need to ince e within the designate YES, minor ince ible, please elaborate ere been any fishing ve	ne crease personnel to ed ports? crease on the extent of interest which has no	YES, major in ncrease: ot provided a valida	crease				
Section 9)	If OTH 4: Cat Has th Schem NO If poss Has th	ER, please list: ch Certification Schenere been a need to inceed within the designate YES, minor inceible, please elaborate	ne crease personnel to ed ports? crease on the extent of interest which has no	YES, major in ncrease: ot provided a valida	crease				
Section 9)	If OTH 4: Cat Has th Schem NO If poss Has th Certific	ER, please list: ch Certification Schen ere been a need to ince e within the designate YES, minor ince ible, please elaborate ere been any fishing verse since implementa	rease personnel ted ports? crease on the extent of i	YES, major in ncrease: ot provided a valida 010?	crease ated Catch				
Section 9)	THER If OTH 4: Cat Has th Schem NO _ If poss Has th Certific	ER, please list: ch Certification Schen ere been a need to ince e within the designate YES, minor ince ible, please elaborate ere been any fishing ve	ne crease personnel to ed ports? crease on the extent of interest which has no	YES, major in ncrease: ot provided a valida	crease				

Section 5: Measures and Sanctions

11) Has any fishery product been refused importation into the EU since implementation of the regulation as a result of:

REASON FOR IMPORTATION REFUSAL OF FISHERY PRODUCT	YES	NO
FAILURE TO PROVIDE CATCH CERTIFICATE		
FISHERY PRODUCTS DOES NOT MATCH CATCH CERTIFICATE		
CATCH CERTIFICATE WAS NOT VALIDATED BY FLAG STATE		
CATCH CERTIFICATE WAS INCOMPLETE		
IMPORTER CANNOT PROVE THAT THE FISHERY PRODUCT COMPLIES WITH		
ARTICLE 14 OF THE REGULATION PERTAINING TO THE INDIRECT		
IMPORTATION OF FISHERY PRODUCT		
FISHING VESSEL LISTED ON THE CATCH CERTIFICATE IS LISTED ON THE		
COMMUNITY IUU VESSEL LIST		
CATCH CERTIFICATE WAS VALIDATED BY A FLAG STATE IDENTIFIED AS A		
NON-COOPERATING COUNTRY		

12) Has any shipment, fishery product in transit inside the EU, been refused entry into the Member State, as a result of one or more of the reasons mentioned in Question
11 above? YES NO
If YES, please state the reason for refusal to import the product into the state:
13) Has any person appealed the decision of the Member State to confiscate the fishery product without a valid catch certificate and/or found to be in violation of EU IUU Regulation? YES NO
14) Have any vessel cited on the Community IUU Vessel list been identified within port? YES NO
If YES, was the vessel identified using the Alert Notice System from the Commission? YES NO

15) For fishing vessels identified as involved in IUU fishing on the Community IUU Vessel list, has the state ever carried out the following measures and/or sanctions:

SANCTION AND/OR MEASURES	YES	NO
DENIED ACCESS TO PORTS AND ASSOCIATED FACILITIES SUCH AS FUEL,		
PROVISIONS AND OTHER SERVICES, EXCEPT IN CASES OF FORCE MAJEURE		
WITHDRAWAL OF PERMITS/AUTHORIZATION FOR FISHING IN		
COMMUNITY WATERS		

CONFISCATED CATCH, FISHERY PRODUCTS, AND FISHING GEAR FOUND ON		
BOARD VESSELS WITHIN ITS PORTS		
DROUBLIED THE DROCESSING EVENDENTATION AND OR DE EVENDETATION		
PROHIBITED THE PROCESSING, EXPORTATION, AND/OR RE-EXPORTATION		
OF FISHERY PRODUCTS		
CONFISCATED AND/OR SCRAPPED THE VESSEL		
· ·		
CONFISCATED AND/OR SCRAPPED THE VESSEL ++		
TEMPORARY OR PERMANENT EXCLUSION FROM THE RIGHT TO OBTAIN		
NEW FISHING RIGHTS **		
NEW FISHING RIGHTS		
SEQUESTRATION AND/OR IMMOBILISATION OF FISHING VESSEL **		
RE-ROUTING OF FISHING VESSEL TO HOME, PORT OF ANOTHER MEMBER		
STATE **		

Sanctions/Measures taken against vessels regardless of flag state

- ++ Sanctions/Measures taken against vessels flying flags of third countries ONLY
- ** Sanctions/Measures taken against vessels flying flags of member states ONLY

If you have any additional information, please provide below:

Thank You for Your Participation.

4 ANNEX 4. CONTACT LIST OF COMPETENT AUTHORITIES

Country	Name of Organization	Telephone	Email
Cyprus	Department of Fisheries and	(+357)	gioannou@dfmr.moa.go
	Marine Research	22807820	<u>v.cy</u>
Denmark	Fisheries Department		zafd2kt@fum.dk
Finland	Ministry of Agriculture and	(+358) 40	maija.mela@mmm.fi
	Forestry, Department of	523 7695	
	Fisheries and Game		
Germany	Bundesanstalt fur		wolfgang.bornschein@bl
	Landwirtschaft and Ernahrung		<u>e.de</u>
Latvia	Ministry of Agriculture		zm@zm.gov.lc
Lithuania	International Affairs and Market	(+370-5)	Eugenija.Bukiene@zum.l
	Division, Fisheries Service under	2398425	<u>t</u>
	the Ministry of Agriculture of		
	the Republic of Lithuania		
Malta	Fisheries Control Directorate		marvin.seguna@gov.mt
Netherlands	Food and Consumer Product	(+31) 88	info@vwa.nl
	Safety Authority (VWA)	2233333	
Portugal	Fisheries and Aquaculture	(+351) 21	tcoelho@dgpa.min-
		303 57 00	agriculture.pt
Republic of	Ministry of Environment,	(+372)	aare.tuvi@envir.ee
Estonia	Fisheries Department	6260712	
Slovak	Imports and Exports	(+421) 2	hacko@svssr.sk
Republic	Department, State Veterinary	60257126	
	and Food, Administration of the		
	Slovak Republic		
Spain	Fisheries and Aquaculture	(+34) 91	mmcastaneda@mapa.es
		3476136	
United	Marine Management	020 7238	alistair.mcdonnell@mari
Kingdom	Organization	5945	nemanagement.org.uk
Greece	Management O.P. Fisheries	(+30) 210	infoalieia@mou.gr
	Sector	866 5631	
Bulgaria	National Agency for Fisheries		www.nafa-bg.org
	and Aquaculture		
Czech	General Directorate of Customs	(+420)	podatelna@ca.mfcr.cz
Republic		261331111	or informace@cs.mfcr.cz
Ireland	IUU Office	(+353) (0)	iuuoffice@sfpa.ie
		23 88	
		59300	

Romania	Ministerial	Agriculturi	Si	(+40)634	anpa@anpa.ro	or
	Dezvoltavil Ru	ırale		44 29	inspectie@anpa.ro	
Slovenia	Customs General Administration			(+386) 478	carina@gov.si	
	of the Custom	s Office		3800		
Sweden	Swedish Boar	d of Fisheries		(+4631)	www.fiskeriverket.se	
				7430300		

5 ANNEX 5. LIST OF INTERVIEWEES

Estonia

a) Alistair McDonnell
District Marine Officer
Head of Illegal, Unreported Unregulated Fishing
Marine Management Organization
United Kingdom
b) Beatrice Gorez
Director
Coalition for Fair Fisheries Agreements (Non-governmental Organization)
Brussels
c) Kim Dawson Guynn
Fisheries Biologist
National Seafood Inspection Lab
National Oceanic and Atmospheric Association
United States of America
d) Sandra Suviste
Department of Fisheries Economics
Ministry of Agriculture