



## 5th International Forum on Illegal, Unreported and Unregulated (IUU) Fishing

14-16 October 2009, Chatham House

### Presentation Abstracts

#### **SESSION 2: EU Regulation on IUU Fishing**

---

##### **Richard Parsons**

*The EC IUU Fishing Regulation – an overview*

This presentation will seek to provide an overview of the new EC IUU Regulation (Council Regulation 1005/2008). This presentation will set out the key requirements under the regulation for third country vessels, processors and national authorities, as well as EU importers and authorities.

##### **Cliff Morrison**

*An Industry perspective on the EU IUU Regulations*

AIPCE-CEP is the principle seafood processing, importing and exporting organisation in the EU, being recognised by the EC Commission and with seats on the Advisory Committee for Fisheries and Aquaculture and the Regional Advisory Councils. The EU is reliant on fishery product imports to the extent of 65% of consumption needs, a figure that has been steadily rising.

AIPCE has initiated a number of initiatives in recent years to ensure that IUU fishery products are not purchased and these were last reported at Chatham House in 2007. These control procedures were first applied to Barents Sea cod and haddock supplies, which in tandem with Governmental controls, saw a massive reduction in IUU. Similar initiatives were undertaken in the Baltic and later in Sri Lanka, although in the latter case, this was to bolster existing good practice in a small scale rather than tackle IUU. AIPCE-CEP supports the IUU Regulations concept, but believe that continued best practice will always be necessary, for example promotion of MSC certification to ensure both sustainable fisheries and whole-chain traceability.

Every effort has been taken though out the IUU Regulation consultation period to ensure that a workable solution to procedures is adopted, thereby reducing the administrative burden on the importing industry without compromising the objectives.

Whilst compromises and improvements have been achieved in terms of small- scale fisheries catch certificates, electronic data exchange and approved economic operator status, a significant administrative burden is still anticipated. There is great concern that with less than 3 months before the legislation comes into force, that the Implementing Regulations are still in draft; that guidance notes are still

awaited, many third countries are still to submit their competent authorities to DG Mare and that it is still not clear who the competent authorities will be across all EU member states.

A degree of pragmatic implementation will therefore be necessary for at least the first 6 months. There will also be a need to keep the effectiveness and working of the Regulations under review.

**Sebastian Losada**

*The new EU regulation on IUU fishing - an NGO perspective*

More than eight years after the completion of the FAO International Plan of Action, IUU fishing remains extremely high. Global assessments indicate between 11-19% of the world fish catches originate from IUU activities. Factors which have contributed to a lack of progress in fighting IUU fishing include: lack of cooperation between states; loopholes in existing national laws; resistance to agree on legally binding instruments and the slow pace at which RFMOs progress in improving control over fishing activities. A key factor continues to be fleet overcapacity, which, combined with diminishing fish resources, exacerbates the problem and will ultimately make it very difficult to address properly.

Some positive steps have been taken recently which help progress towards ensuring fishing activities are conducted in compliance with existing conservation and management measures. The EU Regulation on IUU fishing, together with the upcoming EU control regulation, will be one of the highest standards worldwide. The recently completed FAO agreement on minimum standards on port Control, should improve the situation which has led to the existence of many ports of convenience.

We present cases documented by Greenpeace at-sea in the last few years and point out that effectively fighting IUU fishing will still require enormous efforts. In many instances, progress continues to be too slow. The implementation of the IUU regulation will have to be closely followed to ensure that the expected positive results will be achieved and it should be properly assessed and strengthened on the basis of gained experience. Nationals and companies involved in IUU fishing still remain largely unaddressed.

### **SESSION 3: Development Perspectives on the EU IUU Fishing Regulation**

---

**Ben Milligan**

*Impacts of the EU IUU Fishing Regulation on ACP Countries*

Council Regulation (EC) No 1005/2008 is the most comprehensive and stringent response to IUU fishing that has been developed to date. It is also a potential double-edged sword for ACP countries that are plagued by IUU fishing, but have limited capacity to establish fisheries governance practices that meet the high standards of traceability and documentation that the Regulation demands. The presentation will discuss several specific features of the Regulation and identify how these features have the potential to be both beneficial, and problematic, for the development of fisheries and trade policy in ACP countries.

**Aquina Kango**

*Implementing Regulation 1005/2008 in Papua New Guinea*

In order to tackle the global issues on IUU, many of the Pacific Island Nations are members and signatories to the regional organisations such as the Fisheries Forum Agency (FFA), Parties to the Nauru Agreement

(PNA) and to the Western and Central Pacific Fisheries Commission (WCPFC). The WCPFC accounts for 54% of the world tuna catch making tuna a key economic resource in the region.

The rich source of tuna in the WCPFC region faces an increasing threat from IUU activities, particularly in the high sea pockets from distant water fishing nations as well as from regionally and nationally licensed vessels. PNG figures indicate that 5,530 instances of IUU fishing occurred on the high sea pockets from 2002-2008.

The EU Regulation 1005/2008 on Illegal, Unregulated and Unreported Fishing poses questions of whether the coastal states are adequately prepared to comply with the legislation when it comes in to force on 1<sup>st</sup> January 2010. Though there seems to be a strong sense of direction in having management and conservation measures that ensure sustainable fishing, there appears to be a lack of clear implementing rules and guidelines that will ensure compliance to the requirements of the regulation. One of the major concerns raised relates to the capability of the flag states to ensure the veracity of the catch certification. The lack of flag state notification to the EU may also pose problems for vessels landing catches for onshore processing or operating 100% in the coastal state under chartered arrangements with fish intended for the EU market.

The EC have indicated that they intend to cooperate administratively with/support third countries in the implementing of the IUU regulation. Thus the need right now for EC commitment in this regard is of paramount importance to the survival of these coastal states, whose livelihood depends on this large fish resource for huge economic returns and job creation.

#### **Roy Bross**

*Council Regulation No. 1005/2008 Catch Certification Scheme for Fishery Products Imported from Third Countries: A Parochial Perspective*

The South African private sector needs a trade neutral Catch Certification Scheme as would the EC itself. It will strive with utmost urgency to ensure a seamless transition on due date but come 1 January 2010 the IUU Regulation in its present form could easily have negative effects on mature exporters who depend heavily on European Trade.

The IUU Regulation stresses a need for catch assurance whereas the all-important Annex seeks comprehensive catch traceability "from net to plate". The ideas, although related, would promote different practical outcomes and, unhappily the Annex seems to prevail. The apparent emphasis on RFMO activities with their relatively simple procedures feeding into straightforward commercial mechanisms and the extension of these ideas to the rest of the world creates a basis for potential problems. It is demonstrated that the organisation of commercial fishing, in South Africa alone, is so diverse that it will be most difficult to capture the envisaged standard in an undemanding scheme.

Many factors in combination militate against an easy catch certification scheme if third countries exporting to Europe are made to adhere rigidly to Annex II. In particular, the role foreseen for fishing vessel skippers needs to be moderated or eliminated. Conventional food safety traceability already in force under European laws would provide a better basis for a functional product tracking system.

The possibility of legal complication for client nations constitutes another potential problem area. EC1005/2008 will interact perversely with the South African fisheries management system. A solution may lie in allowing selected Competent Authorities similar discretion to that presently permitted to Member States. On balance a certification scheme best serves the purpose, but it would be better to accentuate assurance that fish entering the Community is the product of legal, regulated and reported fishing rather than the generally irrelevant catch details of Annex II.

European Authorities have erred in the face of unexceptionable intent. Inattention to the systems of third country clients and prescriptive attitudes will raise the cost of trade, promote commoditisation and likely have negative international repercussions.

## **SESSION 4: Economic implications of IUU fishing**

---

### **John Pearce**

#### *Estimating the Worldwide Extent of Illegal Fishing*

Illegal and unreported fishing contributes to overexploitation of fish stocks and is a hindrance to the recovery of fish populations and ecosystems. The study presented here was the first to undertake a world-wide analysis of illegal and unreported fishing. Reviewing the situation in 54 countries and on the high seas, we estimate that lower and upper estimates of the total value of current illegal and unreported fishing losses worldwide are between \$10 billion and \$23.5 billion annually, representing between 11 and 26 million tonnes. The data collected are of sufficient resolution to detect regional differences in the level and trend of illegal fishing over the last 20 years, and we can report a significant correlation between governance and the level of illegal fishing. Developing countries are most at risk from illegal fishing, with total estimated catches in West Africa being 40% higher than reported catches. Such levels of exploitation severely hamper the sustainable management of marine ecosystems. Although there have been some successes in reducing the level of illegal fishing in some areas, these developments are relatively recent and follow growing international focus on the problem. This study provides a baseline against which successful action to curb illegal fishing can be judged.

### **Kieran Kelleher**

#### *The Sunken Billions: The Economic Justification for Fisheries Reform*

The Sunken Billions shows that the difference between the potential and actual net economic benefits from marine fisheries is in the order of \$50 billion per year – equivalent to more than half the value of the global seafood trade. The cumulative economic loss to the global economy over the last three decades is estimated to be in the order of two trillion dollars. In many countries the catching operations are buoyed up by subsidies, so that the global fishery economy to the point of landing (the harvest sub-sector) is in deficit.

The focus on the declining biological health of the world's fisheries has tended to obscure the even more critical economic health of the fisheries. When fish stocks are fully exploited in the biological sense, the associated fisheries are almost invariably performing below their economic optimum. In some cases, fisheries may be biologically sustainable but still operate at an economic loss. The poor economic performance is an underlying driver of illegal fishing.

With effective economic incentives, rather than being a net drain on the global economy, sustainable fisheries can create an economic surplus, be a driver of economic growth and a basis for livelihood opportunities. Illegal fishing is seen as a symptom of poor governance requiring a broad-based reform process to replace pernicious incentives with incentives, which foster improved governance and responsible stewardship.

A reform process requires political will and leadership based on a clear consensus vision of a healthy fishery economy and steps towards this vision. Strengthened tenure and fishing rights and phasing out of subsidies are important ingredients of reform. Regular public reporting on the state of nation's fish stocks

and their contribution to national wealth promotes accountability and good governance. Transparency in the allocation of rights and benefits can combat corruption and illicit practices.

**Ian Dickie**

*The Costs of IUU Fishing in EU Fisheries: a report by eftec for the Pew Trust*

The main benefits from control of IUU fishing are the potential reduction in the costs that are caused by IUU activity today and which will affect the future of European fish stocks and fishing industries. IUU fishing is reasonably well understood on a theoretical level but hard data are generally lacking. However, in some specific cases – notably for cod and tuna stocks – good estimates of IUU fishing rates exist. More generally, IUU fishing levels of 30–40% of total catch, and sometimes more, appear to be commonplace.

In order to make some broad-scale estimations, we first used stock and landings data to model stock growth rates, then transferred the estimated parameters to models of whole commercial groups of fish at the scale of Large Marine Ecosystems (LMEs). From single-species surplus-production models, estimated for individual stocks, we estimate stock growth rates and develop a method for simulating the impacts of IUU activities in fisheries. The results of the simulations show that IUU fishing can have very substantial costs and also that this is dependent on the underlying management structure.

We estimate total cost to EU Member States from 2008 to 2020 of lost catches of €10.7 billion and over 27,800 lost job opportunities in fishing and processing industries. These costs, though substantial, do not represent the full costs of IUU activity for several reasons as our model omits some stocks, makes conservative assumptions, and looks at a short-time horizon (2020). Therefore, we conclude that the cost figures presented here can fairly be interpreted as a lower bound on the possible costs of IUU activity in EU fisheries.

## **Session 5: Addressing IUU fishing in Africa**

---

**Duncan Copeland**

*IUU Fishing in West Africa*

IUU fishing levels in the West African region have been recently assessed as the highest in the world. Post-conflict nations such as Liberia and Sierra Leone and those with current political instabilities such as Guinea are particularly vulnerable, both as targets for IUU fishing operations and to the significant environmental, social and economic impacts of these activities.

Using Sierra Leone as a specific case study, the presentation summarises the findings of EJF investigations over the past 18 months documenting the extent and impacts of IUU fishing in the region. Key issues including both numbers and identification of IUU vessels, fishing methods and an examination of the exploitation of Flags of Convenience and DG Sanco numbers by illegal operations are discussed.

The wider impacts of IUU fishing, in particular the social and economic impacts on artisanal fishing communities, are presented (incl. livelihoods, food security, conflicts, migration). The existence and drivers of local IUU fishing is examined, along with an assessment of the limitations of government fisheries capacity, in particular in regards to monitoring, control and surveillance.

The need for national and regional approaches and support to end IUU fishing is discussed. Current and developing EJF programmes that integrate both top-down and bottom-up approaches are presented. These include collaborations with Sierra Leone government agencies and the direct engagement of artisanal fishing communities on initiatives to both address IUU fishing, and achieve wider sustainable management of fisheries.

**Sandy Davies and Peter Manning**

*African cooperation to stop illegal fishing*

Illegal fishing is a widespread problem in Africa that is robbing the continent of food, jobs and cash as well as undermining good governance and efforts to improve or reform governance of fisheries. This presentation will explain some of the approaches and activities in relation to regional and continental cooperation to overcome IUU fishing and the incorporation of this into the overall efforts to improve fisheries management in Africa. Specifically we will present an update on the latest work of the Stop Illegal Fishing campaign in Africa; some success stories that have come from the forming of a well-argued African Voice; international cooperation to support capacity building in African fisheries; the success of a joint surveillance patrol and the ensuing arrests; and regional considerations in relation to implementing the forthcoming Port States Measures Agreement.

**Munesh Munbodh**

*Combating IUU fishing - Mauritius and Regional Cooperation*

Mauritius is fully committed to the sustainable development of marine living resources and responsible fishing and has taken several measures in line with the FAO Code of Conduct for Responsible Fisheries and the FAO International Plan of Action to combat IUU fishing.

Mauritius has adhered to the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas and the Agreement related to the Conservation and Management of Straddling and Highly Migratory Fish Stocks of the United Nations Law of the Sea (Fish Stocks Agreement) of 1995. Furthermore, as a responsible port state we have also adhered to the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR), in spite of our limited resources, in order to contribute to the struggle against IUU fishing in the Southern Ocean. Mauritius is a member of the Indian Ocean Tuna Commission (IOTC), the South West Indian Ocean Fisheries Commission (SWIOFC) and signed the Southern Indian Ocean Fisheries Agreement (SIOFA)

Mauritius participates actively in regional initiatives to combat IUU fishing such as projects under the aegis of the Indian Ocean Commission which have provided assistance to review its fisheries legislation, train officers and put in place port inspection procedures and extending assistance for fisheries surveillance and capacity building in at sea vessel inspection. Mauritius is also party to the SADC Statement of Commitment by SADC Ministers Responsible for Marine Fisheries on Illegal, Unreported and Unregulated Fishing.

Mauritius is implementing a vessel monitoring system since 2005 and has put in place port state control measures based on the FAO Model Scheme and all fishing vessels calling in its port are subject to monitoring, control and inspection accordingly. A National Plan of Action to combat IUU fishing has also been finalised and a number of measures embodied in it are already being implemented.

---

**SESSION 6: Addressing IUU fishing in the Asia-Pacific region**

**Frank Meere**

*IUU fishing in the Asia-Pacific region*

The Pacific Ocean is a source of more than 60% of global marine capture production and fishing makes a significant economic and social contribution to many economies in the Asia-Pacific region. However, the status of a number of economically important fish stocks in the Pacific Ocean is of concern. Overfishing

has caused significant declines of some stocks in waters under national jurisdiction and of some migratory and straddling stocks. Illegal, unreported and unregulated (IUU) fishing is one of a range of interrelated factors that is putting these stocks at risk. It is estimated that 3.4 – 8.1 million tonnes of fish is taken by IUU fishing each year in the Asia-Pacific region. This represents between 8 and 16% of the reported 51 million tonnes of catch from the Pacific Ocean in recent years.

There is, therefore, both a regional and global imperative to address IUU fishing in the Asia-Pacific region. Asia-Pacific Economic Cooperation (APEC) Ministers recognised this need through elements of the 2005 Bali Plan of Action and through their 2006 direction to the APEC Fisheries Working Group to develop programs to assess: the impacts of IUU fishing; to enforce management measures; and to reduce excess fishing capacity.

This study responds to that direction by reviewing the impacts of IUU fishing with reference to published literature, responses to questionnaires and four case studies. The report aims to provide APEC economies with a better understanding of the scope of the IUU fishing problem in the region and to provide a basis for action to minimize IUU fishing and mitigate its impacts. The analysis has focused on IUU fishing by foreign vessels within exclusive economic zones (EEZs) and IUU fishing on the high seas.

#### **Max Herriman**

##### *Drivers and impacts of IUU fishing: a case study of Malaysia*

For the east coast of Peninsular Malaysia, the cumulative impacts of such a wide array of IUU fishing activities are likely to be considerable for the economic and social well-being of coastal communities, the health of fish stocks, and the environment. Incompleteness and inconsistencies in fisheries catch data, the informal nature of traditional harvesting and fishing activities, and a rudimentary understanding only of fishing boat behaviour in the absence of a fully developed vessel monitoring system or observer program, combine to hinder a proper understanding of the issue by authorities and researchers alike.

Nevertheless, certain practices are well recorded in the public literature, and were known to occur off the east coast of Peninsular Malaysia by those fisheries officials and industry representatives interviewed for this study. A number of factors, including a lack of resources, politics, lack of evidence, the scale and historically entrenched nature of the activities, and cultural acceptance of certain practices were all cited as obstacles to curbing IUU fishing in the area.

The financial loss to local communities from IUU fishing in the east coast of Peninsular Malaysia is difficult to calculate, but can reasonably be demonstrated to be considerable. The financial loss from smuggled subsidised fuel alone is estimated conservatively to cost more than RM6 million per year. The smuggling of fish caught in Kelantan waters to Thailand is likely to represent a direct loss of at least RM72m per year (possibly much more) plus additional losses through wasted subsidised fuel, artificially inflated fish prices in local markets, lost fishing boat provisioning business, and unproductive capital expenditure on idle fish cold-store facilities. Other losses through ecosystem harm caused by IUU over-fishing and the use of inappropriate gear in delicate environments would involve extensive observational data and complex models to quantify; nevertheless, such losses can be accepted as occurring at a certain level.

#### **Shelley Clarke**

##### *Tracking Fish: China in the Global Supply Chain*

A pair of studies conducted for the United Kingdom's DEFRA and DFID examined China's role in the global fish trade and in distant water fishing fleets. Based on these analyses, this presentation explores whether the tracking of fish products, an essential element of efforts to combat IUU fishing, is difficult in China

because of the sheer volume of its fisheries and trade, or because of intrinsic properties of China's systems.

The presentation will focus on four key characteristics relevant to tracking fish products: traceability systems, trading structure, vessel registry and catch reporting. In terms of traceability, China has world-class, existing systems which if fully implemented satisfy current international standards. However, problems may arise if sanitary (quality) and customs (quantity) systems are not completely integrated. Most trade of fish through China is structured either as custom processing or pure trading. The latter type of trade allows fish to change hands several times while in China with obvious implications for traceability. The large number of small workshops in China may also be problematic. China has at least 1,955 distant water fishing vessels but tracking them is complicated by the lack of unique and permanent vessel identifiers as well as by problems with romanisation of Chinese names for English-based recordkeeping. China's catch reporting system appears ill-suited to capturing the full extent of catches by Chinese vessels, particularly with regard to distant water vessels which in many cases appear to report only those catches they bring back to China.

While all of these issues have critical implications for global fisheries management, it is essential to note that most countries are dealing with similar problems, and many of these have less capacity to resolve them than does China. Thus, while the scale of operations in China highlights and magnifies existing shortfalls, it also provides an opportunity and an impetus for both China and the international community to work toward resolving them.

## **SESSION 7: Controlling & monitoring IUU fishing**

---

### **David Doulman**

*FAO update on IUU fishing: State-of-play on port State measures and flag State performance*

The presentation provides background to the development of the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing including the process, the Agreement's structure, the role of flag States and provisions to assist developing countries implement the Agreement. Some of the more contentious issues encountered in the negotiations process are also noted. The presentation also discusses the background to the Expert Consultation on Flag State Performance and possible follow up work in 2010.

### **Kristín von Kistowski**

*Do RFMO IUU vessel lists work? An assessment of compliance and effectiveness*

Port State measures have been identified as a desirable and cost-effective tool in the fight against IUU fishing. Pew's port State performance research investigates the impact of port State measures on the operations of vessels that have been listed on IUU vessel lists maintained by eight Regional Fisheries Management Organisations (RFMOs): CCAMLR, NAFO, NEAFC, SEAFO, IATTC, ICCAT, IOTC, and WCPFC. This ongoing research consolidates five years of movement data on IUU-listed vessels, tracking their port visits globally to evaluate port States' performance in combating IUU fishing. From January 2004 to March 2009, 176 vessels were on the combined IUU vessel list, and port visits made by 55 IUU-listed vessels were recorded in 71 countries all over the world. This updated combined IUU vessel list, together with the preliminary results and conclusions are currently open for review on [www.portstateperformance.org](http://www.portstateperformance.org).

A primary finding was the low visibility of IUU-listed vessels: Vessel movements could only be recorded for one-third of the IUU-listed vessels. Although data quality of IUU vessel lists varied considerably between

RFMOs, the major reason for this low visibility can be attributed to the significant gaps in documenting and communicating information of the vessels, making it difficult for the relevant authorities to identify and track them. The research, supplemented by information received from 16 port States, suggests that port State measures, if well implemented, can be effective in contributing to combat the mounting pressure of IUU fishing on increasingly vulnerable fish stocks. There is a need however to improve the data quality on IUU vessel lists, to establish an effective information sharing system, and to expand and harmonize port State measures from regional to a global level.

**Adam Jarrett and Chris Rowland**

*VMS technologies in operation*

This talk is an overview of the UK Monitoring Control and Surveillance (MCS) systems and how they support the enforcement and management tasks on land and at sea. It is not a UK blueprint. It will describe how current MCS components have grown up over many years in response to the increasing power of available technology, the EU mandated regulatory environment, and the spread of cooperative relationships. These pressures have forced system designers to make UK MCS systems talk to each other in order to provide different users with integrated data that suits their particular purposes. That could be for joint enforcement plans, for management reports, for regulatory audits, fishing effort monitoring, scientific applications, quota management and marine spatial planning to name but a few.

We hope the talk will illustrate how these relative priorities must prescribe what is needed from evolving systems especially where countries are starting out on a path of MCS capacity building. Teething problems associated with the development of the UK satellite Vessel Monitoring Systems will be outlined (the mistakes to be avoided). It will cover some of the alternative bespoke VMS solutions that the London Fishery Monitoring Centre have provided for the Isle of Man and for central government fishery management research projects. Finally we hope there will be time to cover the opportunities for regional cooperation that MCS technology opens up for different countries at different stages of development.

**SESSION 8: Fisheries governance**

---

**Arthur E. Neiland**

*The Effectiveness of Foreign Aid to Combat IUU Fishing*

African fisheries have received substantial aid, amounting to US \$4.6 billion between 1973 and 2001. Many of the associated fisheries projects have been considered to be successful. By contrast, it is difficult to discern a generalised and sustained improvement in the performance of the fisheries sector. African fisheries are widely characterised by weak fisheries management systems and remain threatened by IUU and overexploitation. In the following presentation, the results of recent and on-going research undertaken by IDDRA for the World Bank and the UK Department for International Development, focusing on Africa, will be used to identify recent fisheries aid trends (donor and recipient countries, types of project), to compare these trends with fisheries performance, and to examine the issues affecting the performance realised. The implications for future fisheries aid investment including those to combat IUU in Africa will be highlighted.

**Andrew J Dyck**

*The extent and effectiveness of subsidizing fisheries management worldwide*

This talk will present the state of subsidies to fisheries worldwide and introduce new research that

explores the efficacy of subsidies provided in support of fisheries management by governments around the world. Economic theory suggests that many forms of subsidies to the fisheries sector can negatively influence the sustainability of fish stocks by reducing the costs of fishing and/or artificially increasing the revenues from fishing (the so-called 'bad' subsidies). Conversely, several forms of subsidies can positively enhance fish stock sustainability ('good' subsidies). Currently, subsidies to the fisheries sector are estimated at more than US\$ 30 billion annually, which is roughly 35 percent of the value of annual landings. Of this amount, roughly US\$ 7 billion is categorised as 'good', US\$ 21 billion as 'bad', and US\$ 4 billion are defined as 'ugly' subsidies, where the net of positive or negative impacts may be ambiguous. Using collected data concerning 'good' subsidies as an indicator of management expenditure, Mr Dyck will test its explanatory power over cross-country differences in the sustainability of ocean fish populations, for which maritime countries are responsible under the United Nations Law of the Sea (1982). The presentation also explores the role of management expenditure in altering IUU incentives using economic theory and offers some preliminary work showing a relationship exists between governance and illegal fishing.