

**HIGH SEAS BOARDING
AND INSPECTION OF
FISHING VESSELS:
A DISCUSSION OF GOALS,
COMPARISON OF EXISTING SCHEMES
AND DRAFT LANGUAGE**

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[ANNEX OF REGULATORY LANGUAGE FOR A MODEL HIGH SEAS BOARDING AND INSPECTION SCHEME](#)

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1. Introduction

Fishing is a unique enterprise in the world of maritime commerce. No other legitimate business but the harvest of living marine resources (LMRs), demands on-sight inspections in the most remote regions of the oceans to accomplish regulation. Historically the high seas vessel boarding has led to the most dramatic fisheries incidents of the last three centuries. The intercept of a fishing vessel engaged in business of catching, processing, transferring or transporting its product on the high seas by an authorized officer embarked on a properly commissioned enforcement patrol vessel has always been viewed as a primary method to determine the level of compliance by that vessel with relevant management measures enacted at a national, regional, or even global level. Fishing vessels of one Flag State challenging the jurisdiction of the officers embarked on a patrol craft from a Coastal State to exert its control over fishing activities are fairly common during the last fifty years. Since the end of the Second World War and the dramatic expansion of high seas fishing and the concurrent birth of international conventions and regional fishery management organizations to regulate and control that fishing, there has been a long standing effort to define, harmonize, and quantify high seas fishing vessel boarding and inspection (B&I) schemes.

This paper will examine a number of the B&I schemes that are in place by States and Regional Fisheries Management Organizations (RFMOs) to accomplish the extraordinary goal of monitoring the actions of the modern technologically advanced high seas fishing vessel as operated by the most educated and experienced master hunters ever to put to sea. The examination will also take place in the context of and consistent with relevant international fisheries management instruments.

Fish, as a commodity on the world market, is rich protein source that is universally in demand. The value of the catch and the instant wealth that can be derived from efficiently harvesting and selling that resource provide a great incentive to obtain that resource at any cost, and without regard to laws, regulations, conventions or treaties. This circumstance has given rise in part to the existence of high seas distant water fishing vessels along with their financial backers, beneficial owners, masters and crews known euphemistically as "free riders" flying "flags of convenience" (FOC). Free riders realize that the best tactic to financially profit from commercial fisheries, in the face of an organized effort by Coastal States, Port States and responsible Flag States to regulate high seas fisheries with an environmentally sound and precautionary approach, is to ignore the entire regulatory system. Monitoring Control and Surveillance (MCS) experts have long understood that for compliance to occur the regulated party must choose to comply. Regulatory compliance is a hard won battle on the high seas. Well organized and well financed conspiracies with the goal of filling the cargo holds of free rider fishing vessels are detected by national and regional authorities on a regular basis. During July of 2003 a number of IUU fishing vessels were detected and intercepted in the North Pacific Ocean conducting fleet scale high seas drift netting. The entire operation violated the global conservation measure enacted by the UN resolution 46/215 which placed a moratorium on all large-scale pelagic drift-net fishing on the high seas.

The need for effective MCS programs with the necessary components including boarding and inspection regimes to ensure compliance with conservation and management measures have been on the international agenda on fisheries management for many years. The United Nations Convention on the Law of the Sea (LOSC), the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels

on the High Seas (the Compliance Agreement) the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UN Fish Stocks Agreement) and the Food and Agriculture Organization (FAO) Code of Conduct for Responsible Fisheries and the International Action Plan of Action (IPOA) to prevent, deter and eliminate illegal unreported and unregulated (IUU) fishing (IPOA on IUU Fishing) are a culmination of international efforts in the last two decades to address activities that undermine conservation and management measures which have come to be collectively or conveniently referred to as IUU fishing. The Fish Stocks Agreement is the most forceful and explicit in legal terms in its requirement for a high seas boarding and inspection regime that will be implemented through a RFMO. Article 21 and 22 are relevant references in this respect. Indeed, these articles do not leave anything to chance or for future specification without guidance as can be seen in the provisional scheme set out in article 22 for boarding and inspection to be applied in the event that an RFMO does not establish its own. It is logical to infer also from such a bold move set out in the B & I scheme that the constructors of the instrument did not want remaining pockets of unregulated oceans left to the whims of free riders or IUU fishers.

The existence and activities of "free riders" was discussed at length during the development of the IPOA on IUU Fishing endorsed by the FAO council on 23 June 2001. The parties that built the IPOA on IUU fishing recognized that it is not the compliant fishing vessel and the compliant owner that demands the focus of an effective B&I scheme. The B&I scheme must present pathways that would allow the detection of IUU fishing activities in any population of fishing vessels. The possession of an authorization to fish does not inherently guarantee that the resulting fishing activity will be conducted lawfully. All populations of fishing vessels have vessels under the command of individuals who given the opportunity will disregard any regulatory prohibition to fill the boat quickly and depart the management area. This paper will advance several potential methods to incorporate non-traditional tactics into B&I schemes that would make the business of IUU fishing less profitable and therefore less likely to attract further investment.

The necessity to evolve more technologically advanced B&I schemes is dictated by factors that will be discussed in detail. Control of IUU fishing also means the control of rouge free riding fishing enterprises that do not recognize or respect authority. Case studies have shown that around the world IUU fishing vessels and the masters who operate them will exploit depleted stocks, ignore closed areas, ignore required authorizations to fish, waste by-catch, use prohibited gear and destroy protected resources. When confronted with the possibility of being inspected by authorized officers they run from authority, destroy evidence and endanger those in pursuit. When apprehended, IUU fishing vessel masters will accept punishment and remain tight lipped about their finances and employers. For every IUU fishing vessel apprehended there is a trail of unanswered questions that leaves the scale of their operations open to further investigation. How many trips did they make before detection? How often did they transship? To whom did they transship? How many undetected IUU fishing vessels remain out fishing while this case is investigated?

Is it possible to design a B&I scheme that will have a decisive impact on IUU fishing on the high seas of the convention area under management? Let us explore what is being done and what might be accomplished.

2. Broad Considerations for a High Seas Boarding and Inspection Scheme

2.1 Level of Contact

A patrol vessel is almost invariably a small warship in most parts of the globe. Patrol vessels are by nature expensive to operate and their utility has always been the subject of great debate. This paper has no intention of entering into that debate other than to discuss the efficiency of patrol tactics in reference to the intercept of fishing vessels on the high seas and the subsequent compliance boarding that furthers the goal of fisheries management by curtailing or eliminating IUU fishing. An efficient high seas B&I scheme will achieve a very high *level of contact* with the population of fishing vessels active within the convention area. The accepted *level of contact* must be pre-established much the same as the International Maritime Organization's set goal that 25% of all merchant vessels should be inspected for safety in Port States. Parties to a Convention managing pelagic species of fish must work to construct a high seas B&I scheme with a goal of patrol vessel to fishing vessel contact that will ensure success of the management regime.

The *level of contact* between patrol vessels and fishing vessels in any given convention area is the most critical B&I factor to evaluate. No *high seas* B&I scheme merits consideration if the expected level of contact between patrol vessels and fishing vessels is rare or non-existent. Lets us look at two different examples. In the early 1970s prior to the declaration of many of the 200 nautical mile exclusive economic zones around the globe, an inspection scheme was in place in the Northwest Atlantic Ocean under the guise of ICCNAF, the International Commission on Northwest Atlantic Fisheries, later to become NAFO, the Northwest Atlantic Fisheries Organization. The fisheries being regulated were principally bottom trawl fisheries and the Convention area, while very large, had specific fishing grounds that were suitable for very profitable bottom trawling. There was a concentrated trawling effort on the continental shelf area know as Georges Banks and further to the northwest, on the Grand Banks. Patrol vessels from several nations cooperated to conduct inspections within this area. It was not uncommon for four to six rigorous inspections to be completed in a single day by the crew of one patrol vessel.¹ The level of contact often approached 90 to 100 per cent within the convention area. That translates into 9 out of every 10 fishing vessels inspected while they were engaged in operations within the convention area. In addition, at-sea transshipments were monitored and transport vessels inventoried before they departed the grounds. The high seas B&I program in effect was efficient in maintaining a reasonable *level of contact* with the fishing vessels in that fishery and therefore was able to achieve a reasonable level of compliance with existing regulations governing the fishery. The question as to whether the fishery needed more or different regulations to sustain the resource is entirely separate.

As a contrast, examine the worldwide high seas pelagic long line tuna fishery. Within this fishery, there is a very low *level of contact* between patrol vessels and fishing vessels. On the high seas, that level of contact approaches zero. This fishery is spread over the entire globe between roughly 45 degrees North latitude and 45 degrees South Latitude. It is very difficult for patrol vessels of one Flag State to achieve any level of contact with the individual fishing vessels of a different flag. The fishing grounds are enormous and fishing is governed not by ocean bottom structure but by the temperature- critical presence or absence of a food chain within the water column. If you examine the *level of contact* on the high seas in the Atlantic, the Pacific, or the Indian Oceans within the tuna fishery, you are hard pressed to find any boarding enforcement data. Some Flag States field their own patrol vessels to sail

¹ This is a comment by the author who was for a period of years an authorized ICCNAF inspector with credentials issued by the Government of the United States. Estimates of the boarding percentages are anecdotal, however the author accomplished over 300 foreign fishing vessel boardings on the high seas in the North Atlantic during the years of 1976 through 1979.

with the fleets and inspect their activities around the globe. The utility of this approach guarantees a reasonable level of contact with a single nation's vessels.

The question then presents itself in this fashion; what *level of contact* needs to be achieved between patrol vessels and fishing vessels to gain compliance with the regulatory measures enacted by the RFMOs managing tuna resources within these vast expanses of tropical and temperate oceans? There are those that argue that no high seas inspections are necessary. They insist that if the cargo is inspected at offload points, all management objectives can be achieved. This viewpoint allows every fishing master to go to sea with a guarantee that there will be after the fact reports but there will be no transparent window into their operations at sea. The masters of high seas tuna long line fishing vessels must go to sea with the understanding that there is a realistic chance that their activities will undergo a level of inspection scrutiny appropriate to the fishing activity in which they are engaged. This understanding will temper their fishing activities and allow effective management. Establishing what the realistic chance of boarding must be is the mandate of the MCS authority within the member states of the RFMOs. The issue of establishing a *level of contact* target is critical to the B&I scheme. If this issue is ignored the program will be much less effective in curtailing IUU fishing. If the *level of contact* issue is shunted aside in favor of building individual alleged IUU fishing cases circumstantially, the B&I scheme will be of little value to the management of the fishery.

It is a question of the reasonable expectation of a compliance boarding. If a pelagic tuna fishery has a population of 1000 active fishing vessels working within the convention area, the *level of contact* established must make a determination of the need to board any one vessel at random for a regulatory compliance check of all fishing operations. A starting point of 10% in a new regulatory program is reasonable. For a population of 100 vessels, that would set a goal of 100 compliance boardings within a twelve month period. If after a period of time the regulatory boarding results in a very high level of compliance, the *level of contact* can be reduced.

2.2 Vessel monitoring systems

Beginning in the early 1990's various MCS programs began to integrate *vessel monitoring systems* (VMS) into their regulatory regimes in order to incorporate *remote sensing* into their regulatory program.² The goal of the VMS was not necessarily to identify the location of fishing vessels to patrol vessels as it was to focus on specific ocean areas where spatial violations of closed areas might be occurring. It is interesting to remember that presence of a particular vessel is normally not enough to indict a vessel for violation of a closed area. The MCS authority must also document that the vessel was engaged in fishing. Innocent transit of fishing vessels not engaged in fishing and with stowed fishing gear is rarely prohibited. In any case, the road to total implementation of VMS as a common and accepted form of remote sensing has proceeded at a measured pace. Most RFMOs have or are considering the place of VMS in their management measures. If VMS is incorporated into the overall MCS program and the data can be relayed to a computer screen on the bridge of a patrol vessel or the flight deck of a patrol aircraft then the chances of achieving a high seas intercept with a vessel authorized to fish is greatly increased. VMS will accomplish nothing

² In 1994/95 the Western Pacific Fishery Management Council implemented a comprehensive vessel monitoring program for pelagic long line fishing vessels operating within the U.S. EEZ surrounding the Hawaiian Islands. This was done primarily as a tool to ensure that longline fishing vessels stayed out of large closed areas around the main Hawaiian Islands. VMS programs were initiated in New Zealand, Australia and Chile for spatial control of fishing activity.

for any vessel that is free riding outside the system flying a Flag of Convenience (FOC) or more properly phrased by Terje Lobach (2002) as³ flying a *Flag of noncompliance* (FONC).

2.3 High Seas Inspections Stations

In order to maximize the utilization of available patrol hours from patrol vessels of member States to a convention, a B&I scheme needs to be constructed that provides for a constant background *level of contact* with fishing vessels with valid authorizations to fish. Properly constructed, this scheme will allow adequate time to target the true IUU fishing vessels.

Thought needs to be given to defining when an authorized vessel is required to be inspected. How can the boarding be accomplished with minimum interference to the schedules of the fishing vessel and the patrol vessel? If a RFMO defines its area of competence as a vast portion of one of the worlds' oceans and a number of distant water fishing member States send their fleets into that area, how can the compliance inspections proceed most efficiently? One method to consider is the concept of establishing *High Seas Inspection Stations* along corridors of egress from the RFMO regulatory area. A *High Seas Inspection Station* could be an area of the ocean two nautical miles square in which distant water fishing vessels might report after a qualifying number of fishing days in the regulatory area for an inventory of the catch on board, a review of fishing positions while in the regulatory area, and the remainder of the inspection process. The inspection would provide the vessel with a certification that the fishery products removed from the regulatory area were harvested in accordance with all applicable management measures.

An inspection performed on an authorized vessel could be triggered by a minimum number of operational days within the regulatory area, or the departure from the regulatory area to return to port and offload. Just as there are weigh stations that require large trucks to have their tonnage, cargo and safety equipment periodically checked while on major overland highways, a RFMO could set up mutually agreed upon locations for inspections that would be minimally disruptive for both vessels and patrol craft.

Each geographic area has its own challenges but a RFMO covering an area such as the central and western Pacific Ocean, and hosting distant water fleets that number in the hundreds of vessels, a large portion of which do not utilize port facilities within the region, might be well served to set up *High Seas Inspection Stations*. The responsibility for inspections conducted within those designated areas could be divided amongst all of the member states fielding authorized officers. There would be an additional advantage to such a scheme in that the inspection stations could serve as a valuable training ground for authorized officers to harmonize and standardize their investigative procedures.

The overwhelming theme of an effective high seas B&I scheme has to focus on efficiently inspecting authorized fishing vessels and leaving as many patrol hours as possible to focus on the larger threat of IUU fishing by FONC fishing vessels. The establishment of *High Seas Inspection Stations* may at first seem radical but if the parties to a convention agree to a *level of contact*, then they must necessarily agree to measures that will ensure that the level of contact goal is met. Fishing vessels follow relatively regular routes to and from the fishing grounds. Geographically efficient locations could be located for *High Seas Inspection Stations* just as locations for transshipment are agreed upon by the parties involved in that transshipment. The addition of a vessel monitoring system would further aid the goal of efficiently bringing the patrol vessel and the fishing vessel together.

³ FAO legal papers on line #29 "Port State Control of Foreign Fishing Vessels" at page 8. See internet site: <http://www.fao.org/Legal/prs-ol/paper-e.htm>

2.4 High Seas Vessel Authorization Record

One more benefit of the Compliance Agreement and the UN Fish Stocks Agreement as reemphasized by the IPOA on IUU fishing is the requirement for the creation of the *High Seas Vessel Authorization Record (HSVAR)*.⁴ This is an excellent beginning to a comprehensive database of the worlds authorized fishing vessels. The B&I scheme of the future should rely on this database in conjunction with lists of IUU fishing vessels compiled by the RFMO and national databases to allow the inspecting officer to immediately determine if the intercepted vessel has a valid authorization to fish.

There are often interesting puzzles to be solved on IUU fishing with regard to establishing the identity of the Captain/Master of the vessel. On an IUU fishing vessel, it is not uncommon to have no one step forward and identify themselves as the person responsible for the vessel. The principle conspirators in an IUU fishing scheme may have made arrangements with crewmembers to conceal their identity if boarded by authorities. The B&I scheme must emphasize that the goal of the boarding is to find the person materially responsible for the movements and business of the fishing vessel. To this end it is advisable for the B&I scheme to recognize that false representation and production of fraudulent documentation are within the toolbox of the IUU fishing enterprise.

A major way to augment the B&I scheme is to expand on the HSVAR and build a *High Seas Personnel Authorization Register*. If the authorized vessels register were accompanied by the creation of the *High Seas Personnel Authorization Register (HSPAR)* then authorized officers would have another tool with which to identify individuals that are authorized to fish. This need not require the creation of a separate registry but would include the listing of Captains and Fishing Masters with each submission to the HSVAR. The HSPAR would be a sub-directory of the HSVAR. It must always be remembered that the fishing vessels are not remotely operated. Specific individuals make conscious decisions on board the fishing vessels and the B&I scheme must seek to influence those individuals to make decisions which comply with the existing management measures.

There is a very successful movement within several national MCS and RFMO authorities to devalue vessels which have been employed in IUU fishing around the world. This is accomplished by denying authorizations to fish to any IUU fishing vessel even if it has have been sold to new owners. The same philosophy, sanctioned by the Compliance Agreement, could be assigned to the IUU fishing vessel captains and fishing masters working within pelagic fisheries around the world. Just as Interpol tracks criminals internationally RFMO conventions should maintain data bases of individuals in the IUU fishing business worldwide.

2.5 The Business Plan of the Fishing Vessel

An often overlooked goal for a comprehensive B & I scheme is to document the *business plan* of the vessel under scrutiny. Before any high seas fishing vessel departs on a trip there is agreement between the owners or financial backers and the vessel master on how the business of fishing will be conducted. MCS authorities must ascertain the nature of the business plan because it changes the complexity and magnitude of the violations that may have been committed by the IUU fishing enterprise. The *business plan* may be to depart, fill the boat with fish and return to sell it at the same port but it should be realized and understood by the B & I scheme and MCS authorities that the most profitable scenario would

⁴ See Article IV of the Compliance Agreement, Article 18 of the UN Fish Stocks Agreement and paragraphs 42 to 43 of the IPOA on IUU Fishing (see the FAO International Plan of Action to prevent, deter and eliminate illegal, unreported and unregulated fishing, Rome, 2001).

be much different. That plan might be to contract a boat with no flag, conscript a crew of laborers, depart and fish with illegal gear until the holds are full and then meet at a high seas rendezvous and transship, refuel and re-supply. This sequence of activity could be repeated several times, until the crew is worn out. At that point, the expendable crew could be paid and dropped off and the vessel could return to port with no evidence of IUU fishing and no person that could relate the events.

The legitimate fishing enterprise should have no problem revealing to management authorities the basic nature of the *business plan* under which the fishing vessel is operating. The B&I scheme should require that each authorized vessel make available to an authorized officer the *business plan* of the vessel at the appropriate point in the inspection process. The details of the *business plan* should contain at a minimum the market to which the catch will be delivered and the port at which the catch will be offloaded, the intended duration of the fishing trip and any plans for transshipment. Requiring the posting or eventually an electronic filing of a *business plan* may seem somewhat radical but it is not significantly different from requiring a flight plan from a commercial airliner. Appropriate authorities within the RFMO and the member states have a right to understand the nature of the business of the fishing activity occurring within the RFMO.

3. Investigative Goals of a High Seas Boarding and Inspection Scheme

Let us examine the *investigative goals* of the high seas boarding and inspection of a foreign flag fishing vessel by an authorized officer. In order to construct a B&I scheme that meets the threat and challenges posed by IUU fishing we must take the time to examine and discover the expected investigative outcome from the boarding. There exists the general misconception that the patrol vessel comes over the horizon and discovers illegal fishing going on and in the course of thirty minutes or so, collects the necessary evidence and apprehends the violators. This view of the actions of the patrol boat and the authorized officers in the boarding team is badly flawed. Authorized officers acting under a well constructed B&I scheme must be well educated and clever finders of critical facts surrounding the fishing enterprise that has been intercepted. During the boarding, the authorized officer must discover a great many things and do so in a timely and professional manner. The compliance boarding that detects and documents some form of IUU fishing is not, as it is sometimes looked upon, a clipboard exercise in which the authorized officer merely checks off one item after another on a list of particulars. It is instead an organized route through the physical and electronic documentation on board the fishing vessel which will eventually lead the authorized officer to a determination of the geographical origin of the fish on board, and their method of capture, processing and marketing. The investigative outcome should also yield a transparent view of the responsible persons, business entities and national affiliations that surround the fishing enterprise on the vessel boarded.

3.1 Name of Fishing Vessel Boarded

Establishing the identity of the vessel being boarded is a critical first step. There is not yet a world wide convention concerning the manner of naming and identification of fishing vessels.⁵ On the high seas the authorized officer is faced with the real possibility that the vessel being boarded is not in fact on any international register such as the HSVAR. The authorized officer can record the name of the fishing vessel from the stern of the vessel but in the case of an IUU fishing vessel the paint on the lettering may not be dry. The authorized officer must be attuned to the reality that the vessel may have changed its name many times

⁵ The FAO Standard Specifications for the Marking and Identification of Fishing Vessels is the most cited reference for marking of fishing vessels but it remains largely a recommendation or guideline.

over the course of the trip. Vessel identification issues can be investigated by carefully coordinating a sweep of the vessel and comparing the findings from evidence collected in the process. It is very difficult to erase all evidence of the previous names that have been altered when a vessel re-flags to a FOC or FONC open register. The principle benefit to establishing the identity of the fishing vessel conclusively is to link that identity to the port of origin and the likely port of return when the trip is complete. In order to completely expose the business plan of the IUU fishing vessel the port to which the vessel will return must be conclusively established. Documented IUU fishing cases during the past ten years have shown there is a link between IUU fishing and specific ports that support IUU fishing around the globe.⁶ Those ports are almost never within the borders of the nation whose flag is being flown from the mast head of the IUU fishing vessel.

The requirement for vessel marking specifications to be applied to vessel operators in a management area to facilitate swift identification would greatly compliment a B & I scheme. MCS authorities have had a great deal of experience with numbering schemes that identify vessels to their national authorities but there is a need to harmonize these schemes to make that more useful to the authorized officer on the high seas.

IUU fishing vessels are very often purchased from the used and abused inventories of distant water fishing companies who have updated their fleets. Once sold into the international market by brokers, the vessel, if used in the IUU fishing trade may never have a true identity again. Flags and names mean nothing if not accompanied by valid documentation. The authorized officer must recognize that layers and layers of false and misleading documentation may accompany a completely fictitious assertion of name and flag.

3.2 Ownership and Financial Responsibility

Ownership and financial responsibility are issues of particular importance to the authorized officer. To whom does the master of the fishing vessel report the activities of the fishing vessel? One interesting source of information is the method of long distance communication employed by the Captain. If a satellite telephone is employed, numbers can be traced and billing records can be obtained. Authorized vessels are usually traced back to legitimate owners. A resource often overlooked by authorized officers is the ability to make voice contact with the owners of the vessel. Very early in the boarding it is advisable to make contact from the bridge of the target vessel to the owners back in the distant water fishing nation's company headquarters to ask for complete cooperation in the boarding process. Any hesitation on the part of the Master to offer voice contact with the owners is often an indication of an illegitimate fishing operation.

3.3 The Electronics Plan for Conducting and Recording Fishing Activity

The *electronics array* on the bridge of a modern fishing vessel holds position critical data of the recent fishing history of the vessel. Authorized officers arriving on the bridge of a fishing vessel on the high seas are confronted with the very real possibility of losing the case related electronic evidence if they cannot quickly comprehend the *electronics plan for conducting and recording fishing activity*. Successful pelagic fishing demands oceanographic data that is provided by sensors that can be remotely accessed by the fishing vessel. IUU fishers working in a fleet may get their information from one central source and then follow the leader to the specific location of fishing activity. Bottom fisheries key on bottom structure. In both cases the fish may be located within an area under the national jurisdiction (e.g. the exclusive economic zone) of a coastal state, or in a convention closed area. The challenge

⁶ Refer to the U.S. Coast Guard News releases dated 9 August 2003 describing intercept of oriental long line vessels in the North Pacific Ocean available at www.uscg.mil/d14/news_release.

to authorized officers is to be well enough educated in the function of the electronic equipment to be able to quickly access the databases contained within the memory of the electronics. Most distant water fishing nations have fishing academies that train officers to enter the fishing business. B & I schemes should coordinate the training of authorized officers in the academies of member States. Also many electronics manufactures will assist MCS authorities in the function and capabilities of the equipment designed for commercial fishing.

3.4 The Catch Log and the Processing Log

The B&I scheme must also examine the fishing vessel *catch log and processing log*. Traditional inspection was an exercise in physical bookkeeping. The log that was maintained on the fishing vessel was examined, copied and sometimes seized as evidence by the boarding officer. Logs from authorized vessels are still open books that can be readily inspected. Logbooks record fish in numbers and can usually be understood by the authorized officer. On the IUU fishing vessel, the true log of fishing activity is hidden. For years it was found under the sleeping mattress of the master and is still sometimes found in that location. Positions within the log of an IUU fishing vessel are often altered in some rather fundamental way such as adding or subtracting one or more whole degrees from the recorded co-ordinates. The cleverest of authorized officers can make the link between the recorded electronic data and the captain's private log of positions to establish the position of the fishing events in the vessel's recent past. The value of making this jump in understanding is to discover and quantify all of the illegal acts committed during the IUU fishing enterprise. The authorized officer who can only document the fishing event that was ongoing when the patrol craft arrived on scene is missing a great deal of the complete story.

3.5 The Catch and Gear System

The *catch and gear system* utilized by the fishing vessel is a necessary focus of the authorized officer. On authorized vessels, it is not usually a problem to inspect fishing gear except in the rare case of negligent operation, such as lost trawl nets or fowled gear. On the directed and dedicated IUU fishing vessel, the question is often, "Where is the fishing gear?" The B&I scheme must be prepared to deal with deployed pelagic gear that the subject vessel does not claim as its own. If an IUU fishing vessel has deployed forty kilometers of long line just hours before boarding it will usually deny any connection to that gear. The authorized officer will have to match the deployed gear to the remaining gear remaining on board the IUU fishing vessel and then prevail on the master to retrieve it properly. An associated and important requirement to facilitate gear identification is a development of an adequate gear marking specifications scheme which is also underscored in the IPOA on IUU Fishing.⁷

3.6 Photographic log of the Inspection

Creation of a *photographic log of the inspection* is particularly important with the advantage of digital photography. MSC professionals from member States to an RFMO are beginning to maintain digital databases of IUU vessels that can be shared world wide shortly after the images have been taken. IUU fishing vessels move within various regulatory areas taking advantage of opportunities as they present themselves. B&I schemes must allow for the rapid dissemination of images of IUU fishing vessels and their Captains and masters as

⁷ See paragraph 47.8 of the IPOA on IUU Fishing supra note 4.

required by the IPOA on IUU Fishing.⁸ Internationally there exists an affiliation of MCS professionals referred to as the MCS network.⁹ This network is an excellent place to share information concerning IUU fishing vessel intercepts. Ultimately IUU fishing vessel databases should contain the most recent photos of that vessel along with photos of the configuration of the fishing gear being utilized. B&I schemes must stress across the board cooperation between the MCS authorities in various RFMO.

3.7 Transshipment

The issue of *transshipment* rarely gets the focus of MCS authorities if the transshipment occurs on the high seas. IUU fishing vessels are operated for fast and repeatable profits. If it is possible to transship a cargo of tuna or salmon on the high seas and continue to employ, or in some case hold captive, the deck crew of the IUU fishing vessel, it means a doubling of the return on investment for the beneficial owners and operators. Careful examination of the production logs and the fishing logs can yield clues that indicate if transshipment has taken place on the fishing trip. During extended voyages replenishment of fuel and food are essential. It only makes good business success to arrange transshipment concurrently with at-sea replenishment. There is also much to be gained by merely computing the volume of fish in the hold and the days that a vessel has been fishing. Many fishing days with an empty hold can indicate that there has been a transshipment event.

3.8 Documentation of the Boarding and Inspection

Documentation of the boarding and inspection is often not done well. This is primarily due to the failure to automate and harmonize the data resulting from the boarding. This shortcoming has downstream effects when trying to gather intelligence on the IUU fishing effort over the "horizon". Lists of IUU fishing vessels that will eventually assist the control of IUU fishing around the globe must be supported by data and that data must come from the boarding process. A world class high seas B&I scheme would provide for the automated collection of data from the boarding office that the sharing of that data where appropriate to create *Be On the Lookout* or *BOLO* notices that can be distributed to MCS authorities.

4. Existing High Seas Boarding and Inspection schemes or the lack thereof

As we begin to examine of some of the regulatory regimes of RFMOs with regard to their programs of high seas boarding and inspection let us review the points of comparison. The significance of these comparison factors is that global fisheries are moving from unregulated high seas harvest to a world where global fisheries resources are regulated for purposes of sustainability and shared economic benefit. The comparison factors are in place to allow us to view which RFMO are moving toward a more detailed system of checks and balances between the individuals that harvest the resource and the authorities that agree to manage the resource.

⁸ Ibid. Paragraph 28.3 requires States to allow and enable their respective MCS practitioners or enforcement personnel to cooperate in the investigation of IUU fishing, and to this end States should collect and maintain data and information relating to such fishing.

⁹ The International MCS Network is an arrangement of national organizations/institutions in charge of fisheries-related MCS activities, which have been authorized by their States to coordinate and cooperate in order to prevent IUU fishing. The objectives of the International MCS Network are to improve the efficiency and effectiveness of fisheries-related MCS activities through enhanced cooperation, coordination, information collection and exchange. The International MCS Network arose out of a meeting in Santiago, Chile, in January 2000. Membership in the International MCS Network is voluntary.

Not every factor applies to each RFMO. If there is no high seas boarding and inspection program some of the factors cannot apply.

The comparison factors are as follows:

- Level of at-sea contact between patrol assets and fishing vessels. - Are patrols actually conducted? Do they succeed in making fishing vessel sightings and compliance boarding of both the permitted vessels and IUU fishing vessels? Can the level of contact be quantified in terms of the percentage of active vessels boarded and inspected in a given time period?;
- Inspection authority – Can Authorized Officers from one RFMO Member State board and inspect the fishing vessels of other States (flags), both member States of the RFMO and non-member States of the RFMO on the high seas within the convention area?;
- Detail of Inspection Procedures – Level of refinement to the high-seas Boarding and Inspection;
- Size of the fleet authorized to fish within the geographic area of the RFMO and probable degree of IUU fishing within that area;
- Shared data bases of IUU fishers, authorized vessels, violations, etc. integrated within the B&I scheme;
- Register of Certified Authorized Officers and level of training of authorized officers conducting boarding activities at sea;
- Integration of the High Seas Boarding and Inspection scheme with the remainder of the MCS program within the RFMO;
- Record of significant IUU fishing cases detected and prosecuted.

4.1 The Convention on the Conservation of Antarctic Marine Living Resources CCAMLR¹⁰

This convention and the IUU fishing activity that occurred within the convention area are part of the driving force behind the creation of the IPOA for IUU fishing. The boarding and inspection scheme is well developed. The following is the text of their system:

TEXT OF THE CCAMLR SYSTEM OF INSPECTION¹

1. Each Member of the Commission may designate Inspectors referred to in Article XXIV of the Convention.

(a) Designated Inspectors shall be familiar with the fishing and scientific research activities to be inspected, the provisions of the Convention and measures adopted under it.

(b) Members shall certify the qualifications of each Inspector they designate.

¹⁰ The Convention on the Conservation of Antarctic Marine Living Resources came into force in 1982, as part of the Antarctic Treaty System, in pursuance of the provisions of Article IX of the Treaty

(c) *Inspectors shall be nationals of the Contracting Party which designates them and, while carrying out inspection activities, shall be subject solely to the jurisdiction of that Contracting Party.*

(d) *Inspectors shall be able to communicate in the language of the Flag State of the vessels on which they carry out their activities.*

(e) *Inspectors shall be accorded the status of ship's officer while on board such vessels.*

(f) *Names of Inspectors shall be communicated to the Secretariat within fourteen days of designation.*

¹ As adopted at CCAMLR-VII (paragraph 124) and amended at CCAMLR-XII (paragraphs 6.4 and 6.8), CCAMLR-XIII (paragraph 5.26), CCAMLR-XIV (paragraphs 7.22, 7.26 and 7.28), CCAMLR-XV (paragraph 7.24) and CCAMLR-XVI (paragraph 8.14) and CCAMLR-XVIII (paragraph 8.25)

II. The Commission shall maintain a register of certified Inspectors designated by Members.

(a) *The Commission shall communicate, each year, the register of Inspectors to each Contracting Party within a month of the last day of the Commission meeting.*

III. In order to verify compliance with conservation measures adopted under the Convention, Inspectors designated by Members shall be entitled to board a fishing or fisheries research vessel in the area to which the Convention applies to determine whether the vessel is, or has been, engaged in scientific research, or harvesting, of marine living resources².

(a) *Inspection may be carried out by designated Inspectors from vessels of the designating states.*

(b) *Ships carrying Inspectors shall carry a [special flag or pennant](#) approved by the Commission to indicate that the Inspectors on board are carrying out inspection duties in accordance with this system.*

(c) *Such Inspectors may also be placed on board vessels, with the schedule of embarkation and disembarkation of Inspectors subject to arrangements to be concluded between the designating State and the Flag State.*

² *The Commission stated its understanding that they System of Inspection applied to flag vessels of all Members of the Commission and where appropriate, Acceding States (CCAMLR-XIV, paragraph 7.25).¹¹*

Boarding and Inspection Scheme factor summary for CCAMLR

- Level of at-sea contact -The level of contact between patrol vessels and fishing vessels appears to be adequate to meet the needs of the Toothfish fishery. Most of the fishing occurs within specific exclusive economic zones as the toothfish fishery is tied to bottom structure. The B & I scheme for at-sea boarding is well defined and succeeds in policing the active fleet. Most significant violations are detected during in-port inspections. At-sea cases seem to be generated most often with the help of active authorized fishing vessels owners and operators who have organized themselves into an effective policing unit that routinely passes on intelligence information to authorities and in some case has actually followed IUU fishing vessels until the authorities arrived.

¹¹ See the CCAMLR System of inspection on the internet site: <http://www.ccamlr.org/pu/E/pubs/bd/pt9.htm>

- Inspection Authority – There is broad authority to board within CCAMLR commission area. The Inspection Pennant and gear tags are published in regulations. Inspectors are certified and identified with credentials issued by member States. Boarding activity occurs in areas under national jurisdiction of a Coastal State.
- Detail of Inspection Procedures – There is reasonable latitude for inspectors to conduct inspections on fishing positions, catch, catch processing, protected resources consideration (sea birds), and gear. There are no specific time limits on inspections. Copies of inspection documentation are provided to the master.
- Size of the fleet – 30 to 40 vessels are active at any given time. IUU fishing activity was thought to have been extremely large in the past with some estimates of unlawful take in excess of a doubling of the total allowable catch for toothfish. The level of IUU fishing is generally thought to be decreasing but still significant. .
- Shared Data bases - The utilization of databases is very well developed at CCAMLR and this is reflected in the Catch Documentation Scheme. IUU fishing database is an ongoing project
- Register of Certified Authorized Officers - Authorized Officer called “Inspectors” are formally designated and registered, and their training certified by the Member State. Authorized officers are well trained and have dealt with electronic storage of data on IUU fishing vessels.
- Integration of B&I Scheme – The at-sea/high seas B&I scheme is complimentary to the port inspection and catch documentation schemes.
- Record of significant IUU fishing cases – Routine authorized vessel inspections at-sea do not usually result in significant cases however, the most dramatic violations developed against dedicated IUU fishing vessels continue to occur at sea and require a law enforcement boarding usually after a long period of hot pursuit. The record of significant cases can be viewed at the CCAMLR web site and at the COLTO website. A high seas chase of an IUU vessel was underway at this was being written, with two member states involved in the attempted apprehension of the fleeing IUU vessel.¹²

4.2 The International Commission for the Conservation of Atlantic Tunas - ICCAT¹³

ICCAT has never seen the need for a high seas boarding and inspection scheme. At their annual meeting in November 2003, contracting parties will present their final lists of vessels authorized to fish in the Commission area. This will include the cooperating non-contracting parties of Taiwan, and the Philippines. After that the IUU fishing list will be constructed. ICCAT favors a port state inspection regime but may develop a high seas scheme during the next two years. The Following is an excerpt from the [General Outline of Integrated Monitoring Measures adopted by ICCAT](#) on compliance and enforcement:

¹² See also note 21 infra.

¹³ The International Commission for the Conservation of Atlantic Tunas is responsible for the conservation of tunas and tuna-like species in the Atlantic Ocean and adjacent seas. The organization was established in 1969, at a Conference of Plenipotentiaries, which prepared and adopted the International Convention for the Conservation of Atlantic Tunas which was signed in Rio de Janeiro, Brazil, in 1966. The official languages of ICCAT are English, French and Spanish.

3. Compliance and enforcement

The Contracting Parties, through the Commission, should establish an observation and inspection program to ensure compliance with ICCAT conservation and management measures.

The program may inter alia comprise the following elements

i. High seas inspection.

ii. Procedures for an effective investigation of an alleged violation of ICCAT conservation and management measures, and for reporting to the Commission on the actions taken, including procedures for exchanging information.

iii. Provisions for appropriate action to be taken when inspections reveal serious violations as well as the expedient and transparent follow-up of such actions in order to uphold the Flag State's responsibility within the intended program.¹⁴

Boarding and Inspection Scheme factor summary for ICCAT

- Level of at-sea contact – None
- Inspection authority – There is no high seas B & I program currently in effect, but there is a program under development/implementation for port state enforcement
- Size of the fleet – A registry is under development. The registry should be complete by November 2003 annual meeting.
- Register of Certified Authorized Officers – None

4.3 Northwest Atlantic Fisheries Organization - NAFO¹⁵

The Northwest Atlantic Fisheries Organization has a very well developed scheme of joint international enforcement.¹⁶

Boarding and Inspection Scheme factor summary of NAFO.

- Level of at-sea contact – Adequate
- Inspection authority – A scheme of joint international enforcement in effect

¹⁴ See the [General Outline of Integrated Monitoring Measures adopted by ICCAT on the ICCAT internet site: http://www.iccat.es/](http://www.iccat.es/)

¹⁵ The Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries, signed on 24 October 1978 in Ottawa, came into force on 1 January 1979 following the deposit with the Government of Canada the instruments of ratification, acceptance and approval by seven signatories: Canada, Cuba, the European Economic Community (EEC), German Democratic Republic (GDR), Iceland, Norway, and the Union of Soviet Socialist Republics (USSR). This Convention, establishing the Northwest Atlantic Fisheries Organization (NAFO), replaced the 1949 International Convention for the Northwest Atlantic Fisheries and the International Commission for the Northwest Atlantic Fisheries (ICNAF). The prime objective of NAFO has been to contribute through consultation and cooperation to the optimum utilization, rational management and conservation of the fishery resources of the Convention Area. NAFO promotes contemporary ideas for international collaboration in the high seas based on the scientific research fundamentals.

¹⁶ Details of the Boarding and Inspection program are contained NAFO/FCDOC.03/1a Conservation and Enforcement Measures, Part IV Scheme of Joint International Inspection and Surveillance pages 29 thru 53. In particular see page 37 Sightings/Inspection on Non-Contracting Party Fishing Vessels.

- Size of the fleet – A registry is fully developed with a fleet in the hundreds of vessels.
- Shared data bases of IUU fishers – There is a well developed data
- Register of Certified Authorized Officers – This is compiled by each member State
- Record of significant IUU fishing cases detected – There is a fully integrated MCS program including observers, VMS and at sea patrol and boarding coordination.

4.4 The Indian Ocean Tuna Commission - IOTC¹⁷

The Indian Ocean Tuna Commission is a young RFMO. There is no high seas B&I scheme in place at this time, however the IOTC has developed a list of authorized vessels greater than 24 meters in length and published that list. At a recent meeting a control and inspection committee was established.¹⁸

Boarding and Inspection Scheme factor summary of IOTC

- Level of at-sea contact – None
- Inspection authority – Not as yet defined
- Shared data bases of IUU fishers – A list of authorized fishing vessels is available on line.
- Register of Certified Authorized Officers – None

This brief look at the range of schemes, or in some cases the lack of schemes, with which to accomplish high seas inspections of fishing vessels should illustrate that high seas inspections are not yet a commonly used enforcement tool worldwide despite the specific language contained within Articles 21 and 22 of the 1995 UN Fish Stocks Agreement. General trends tend to favor the less onerous options of Port State inspections and trade related measures. The sophistication of any high seas B&I scheme is a reflection of the willingness of the members to tolerate this form of enforcement.

5. **Major Issues within the High Seas Boarding and Inspection Scheme and a draft scheme**

As we begin to develop a model High Seas Boarding and Inspection scheme, the major issues surrounding the creation, implementation and review of the scheme will be identified and discussed. Model options will then be presented in suggested regulatory paragraphs. The assumptions in the creation of the draft paragraphs is that we are creating a high seas

¹⁷The Agreement for the Establishment of the Indian Ocean Tuna Commission was adopted by the FAO Council at its Hundred and Fifth Session in Rome on 25 November 1993. The Agreement entered into force on the accession of the tenth Member on 27 March 1996. The [Financial Regulations](#) were adopted at the First Special Session of IOTC in Rome on 21-24 March 1997 and [the Rules of Procedure](#) were adopted at the Second Session held in Victoria on 22-25 September 1997. The Indian Ocean Tuna Commission (IOTC) is an intergovernmental organization established under Article XIV of the FAO constitution. It is mandated to manage tuna and tuna-like species in the Indian Ocean and adjacent seas.

¹⁸ The Commission agreed to establish a Control and Inspection Committee and adopted seven resolutions. These concern observer [programmes \(Resolution 01/01\)](#), control of fishing activities [\(Resolution 01/02\)](#), a scheme to promote compliance by non-contracting party vessels [\(Resolution 01/03\)](#), limitation of fishing effort by Non-Members of IOTC [\(Resolution 01/04\)](#), a modification of mandatory statistical requirements for IOTC [\(Resolution 01/05\)](#) and a recommendation concerning a Bigeye Tuna Statistical Document Programme [\(Resolution 01/06\)](#). The Commission adopted by consensus a resolution concerning support to the IPOA-IUU [\(Resolution 01/07\)](#).

boarding and inspection program for a regional fisheries management organization such as that established by the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPFC).¹⁹ That developing Commission has a vast geographic area of application for the rules it will establish to manage stocks of pelagic fish. A large portion of the area is outside the exclusive economic zones of the Coastal States within the region. The same situation, requiring the eventual implementation of a High Seas B&I scheme exists in the Atlantic and Indian oceans with regard to the IATTC and the IOTC managing stocks of pelagic fish in those regions.

The proposed language is guided by and intended to satisfy the language contained in Articles 21 and 22 of the 1995 UN Fish Stocks Agreement. While staying within the language of Article 21 and 22, there is still opportunity to create efficiency within the scheme that will hopefully succeed in making the inspection procedure more attainable for the patrol vessel and less burdensome for the compliant fishing vessel.

For the purpose of the discussion in this section, "Convention" means the constituent instrument of an RFMO, "member States" refers to the members of the Convention (and therefore the RFMO), "non contracting parties" means non-members of the Convention/RFMO and "Organization" or "Commission" refers to the RFMO or the principal governing body of the RFMO.

5.1 Statement of Purpose of the High Seas Boarding and Inspection Program

A concise statement as to the reasons behind initiation of a high seas boarding and inspection program is essential for the program to gain respect and support by all member States and eventually non-member States. There are three general reasons for enacting such a scheme;

- to combat IUU fishing within the convention area;
- to promote compliance by non contracting parties to the Convention; and,
- to promote regulatory compliance from the authorized fishing activities of member States' fishing vessels active within the Convention area

These reasons then support the overall goal of ensuring that the MCS scheme allows the fishery management plans enacted succeed in their conservation and sustainable use objectives.

The first purpose, combating IUU fishing, has recently resulted in new articles amending earlier B&I schemes in RFMO around the world. The IPOA on IUU fishing brought focus to the impact of IUU fishing worldwide. A new B&I scheme should include a statement that IUU fishing within the convention area will not be tolerated. It should also state that the scheme will be designed to identify and interdict the IUU fishing enterprises.

The second goal is particularly important to the growth and acceptance of the management program within the convention. Non-contracting parties with active fishing vessels exist within all convention management areas and every effort should be made to seek contact

¹⁹ A Preparatory Conference is in place to prepare the work of the Commission so that it can be fully operational when the Convention enters into force. This Preparatory Conference has established three major working groups to discuss the important issues for the work of the Commission. One of the working groups (on MCS) is developing a draft boarding and inspection scheme.

and voluntary boarding of non-contracting parties in order to determine their impact on the fishery.

With regard to the third goal of regulatory compliance, the statement of purpose should reference specific “*level of contact goals*” of the High Seas Boarding and Inspection Program (the scheme). The “*level of contact goals*” may be set for long periods of time or may shift due to the implementation of new management initiatives in a particular area. For example a level of contact goal might be that patrol vessels and authorized officers conduct inspections on five percent of all pelagic long line fishing trips of member State flag fishing vessels within the first year of the implementation of the scheme. Another example might be that the level of contact with flagless IUU fishing vessels using prohibited gear known to be active in a particular area is established at one hundred per cent. Yet another example might be that the established level of contact for high seas transshipment activities is one hundred percent.

Achieving the “*level of contact goals*” should be a responsibility of both the patrol vessel and the fishing vessel. For example the Commission might mandate in support of a “*level of contact goal*” that when a fishing vessel has conducted thirty days of fishing activity or more within the Convention area, it will advise the commission through the MCS authority of its flag the willingness and availability to be inspected.

This regulatory paragraph is reflective of Paragraph 2 of Article 21 of the 1995 UN Fish Stocks Agreement which states that “States shall establish, through sub-regional or regional fisheries management organizations of arrangements, procedures for boarding and inspections pursuant to Paragraph 1.” The theme established here is that the high seas inspection should be routine. The issue of level of contact issue is emphasized in order to ensure that high seas inspections become routine.

Sample paragraph:

The High Seas Boarding and Inspection scheme (hence forth called the scheme) is established for the purpose of achieving a sufficient level of contact with fishing vessels operating in the convention area to verify compliance with Conservation measures (rules, regulations) enacted by the Commission. Recognizing that some elements of the fishing enterprise can only be verified at sea where the take of resources is occurring and recognizing that certain management measures are spatial (closed areas/marine reserves) and temporal (closed seasons) in nature the scheme will achieve equitable levels of contact with member State fishing vessels, non-contracting state fishing vessels and stateless fishing vessels as directed by the commission.

5.2 Obligations of the Commission Members to the High Seas Boarding and Inspection Scheme

The creation of the scheme is viewed differently by the member states of the Convention. Distant water fishing nations have been inspecting their own vessels on the high seas for decades without the inconvenience of tolerating an inspector on board their vessel from another state. Coastal states have long wanted the ability to get inspectors onto the decks of high seas fishing vessels engaged in fishing activities to determine firsthand their impact on highly migratory fishery resources. A statement here must attempt to unify the goal of well regulated and sustainable fishing through reasonable, efficient, and competent inspection at sea. To that end a multilateral approach is recommended within each qualified boarding team fielded on a patrol vessel. Inspectors from two or more flag states could easily make up an inspection party that would have greater assets in terms of experience,

language and training. Of particular significance would be any arrangement that would allow the integration of inspectors from distant water fishing nations into the inspection teams on coastal state patrol vessels. Inspectors who have graduated from fisheries academies in distant water fishing states have expertise that is difficult to create elsewhere. The goal of inspection should be fair, balanced, and transparent inspections that yield data that truly reflects the level of compliance within the fleet.

This paragraph is reflective of paragraph 1 of Article 21 of the 1995 UN Fish Stocks Agreement. Paragraph 1 States "In any high seas area covered by a sub- regional or regional fisheries management organization, a State Party which is a member of such organization or a participant in such arrangement may, through its duly authorized inspectors, board and inspect, in accordance with paragraph 2....". The only addition attempted here is to foster the concept on multi-lateral, multi-national inspection teams.

Sample paragraph

The responsibility for, and the entitlement of, the scheme shall be jointly shared by all members of the Commission. Each member of the Commission shall first and foremost ensure that their fishing vessels operating on the high seas of the convention area are at all times in compliance with all conservation measures enacted by the Commission and that when called upon, co-operate with the scheme. Each member of the Commission will have the right to participate in the scheme by training and fielding qualified inspectors and by conducting patrols under the scheme with certified patrol vessels. In order to promote consistency, transparency and high ethical standards within the scheme, teams of inspectors will, as a rule be multi-national in makeup.

5.3 Issues relating to the creation of the authority and jurisdiction to Board and Inspect fishing vessels on the High Seas

This section has to address the empowerment of inspector and the obligations of the member state fishing vessel. Is it the goal of the Commission to force high seas boarding or to encourage high seas boarding of member State fishing vessels? Within an exclusive economic zone of a Coastal State there is a mandate to accept boarding when engaged in fishing or the support of fishing activities. On the high seas, despite the powerful statement within Article 21 paragraph 1 of the UN fish Stocks Agreement, boarding/inspections are rare worldwide.

To achieve credibility, the scheme should be able to articulate a tactical MCS rationale for boarding any fishing vessel on the high seas. The inspection has to have both individual value to the compliance program and a cumulative contribution that will allow managers and ultimately member states to make informed fishery management decisions over the stocks of fish they attempt to regulate.

To ensure that the scheme is not compromised in its ability to conduct the kind of verification that is necessary to achieve compliance, the reason should not rise to the level of *probable cause* to believe that a serious violation has taken place. Inspectors on the high seas cannot know, and cannot develop a program to know if a particular fishing vessel master is maintaining a false set of logs on the bridge and a true set of logs under his stateroom bunk in order to conceal his true positions of fishing activity within several closed ocean areas. Requiring a threshold of probable cause before boarding defeats the concept of inspection and replaces it with investigation.

The overriding principle of the scheme should be that inspection boarding is accomplished to the greatest extent possible with member State consensus, participation and support. The results of the boarding activity should disclose minor infractions that do not threaten the resource at one end of the scale, and major departures from the rules that rise to the level of IUU fishing at the other end of the scale. All “alleged violations” great and small then get referred to the member State whose flag is flown by the fishing vessel and the Commission consistent with article 21 paragraphs 4,5,6,7,8,9 and 10 of the UN Fish Stocks Agreement.

Outside of the High Seas B&I scheme but firmly embedded in the articles of the Convention should be several paragraphs detailing that member States are required to provide “authorizations to fish on the high seas” to fishing vessels flying their flag. These Authorizations to fish must be registered both with the Commission and within the FAO database entitled High Seas Vessels Authorization Record.

Sample paragraph

The scheme will establish a registry of commissioned, credentialed, inspectors that will patrol onboard vessels that are certified by the Commission for that purpose. The actions taken by the inspectors on the high seas within the Convention area are initiated to determine compliance with Commission conservation measures. The data from High Seas boarding is expected to provide member States with factual information on the degree to which fishers follow Commission rules as they engage in the fishing enterprise. All infractions detected, both minor and major are actionable by the member State whose flag is flown by the fishing vessel alleged to have violated the rules. Boarding activity authorized by the Commission within this scheme will be guided by a level of patrol boat to fishing vessel contact. The level of contact desired to achieve compliance will be under continual review by the commission for

- ***balance and equity among the population of all member States’ fishing vessels***
- ***focus on action of fishing vessels from non-member states***
- ***focus on deterring IUU fishing activity from FONC vessels active with the Convention area***
- ***focus on rules that can only be enforced at-sea***
- ***focus on critical management measures***

5.4 Issues relating to the Inspectors authorized to enforce the Commission Rules

The dedicated work of well trained multi-national inspector registry can be a major force in eliminating IUU fishing as a threat to any management plan enacted by the Commission. As examples review the excellent work done under the CCAMLR scheme to deter, prevent, and eliminate IUU fishing, as well as the recent interception of high seas drift netters in the North Pacific.²⁰ Conversely, an untrained and ill-prepared inspector can do nothing but cause problems for the Commission, the State from which the inspector originates, and the fishing vessels the inspector contacts. It is possible one unfortunate incident by an inspector not up

²⁰ Toothfish Pirates (AAP) august 18, 2003 – “Caught The captain and crew of a ship chased for three weeks and caught today in the Southern Oceans with \$1.5 million worth of Patagonian toothfish on board could face fines imposed by Australian courts of up to \$550,000 each and forfeit their catch.

They could also face jail terms for failing to obey an Australian fisheries officer, federal Fisheries Minister Ian Macdonald said, adding he was hoping for a similar tough stance on illegal poaching from other countries at an international fishing forum to be held in Hobart in October.

The long pursuit of a trawler across the Southern Ocean was worthwhile despite its cost, he said.

The chase after the Uruguayan-registered Viarsa I was the longest in Australia’s maritime history, Senator Macdonald said.”

to the task could result in a serious downstream threat to the entire scheme. The registry of Commission inspectors should be constructed to guard against that threat and to promote high standards of ethics, conduct and professional bearing. Member States should forward names of proposed inspectors to the Commission along with a resume of their qualifications and experience. Persons proposed should be accredited Law Enforcement Officers of the National MCS authority from which they hail.

The Commission should form an inspector accreditation committee. The committee should control the inspector registry through the issuance of Commission Credentials. The credentials must be materially more sophisticated than a photo and a signature between two pieces of plastic laminate. Credentials should be numbered, electronically imprinted and difficult to alter. Since the technology to create such a credential is in use world-wide in the form of photo bank debit cards, no lesser standard should be accepted.

This paragraph is reflective and supportive of paragraphs 4 of the 1995 UN Fish Stocks Agreement. The paragraph deals with establishing accreditation for the credentialed inspectors. This will serve to increase their acceptance amongst all member states ensure a high level of training and performance.

Sample paragraph

Member States shall dedicate the services of inspectors to the scheme. The Commission will establish an Inspector register. The responsibility for submitting qualified persons to the Commission inspector register belongs to the member States. The list of qualifications for submission to the register is as follows;

- ***The inspector should be an accredited credential carrying employee of the fisheries monitoring control and surveillance enforcement authority of the flag state (i.e. Ministry of Fisheries, Coast Guard)***
- ***The inspector should have continuing training in all aspects of high seas fishing***
- ***The inspector should be proficient in fisheries related electronics use***
- ***The inspector should be capable of making a high seas boarding safely***

The Commission will issue numbered, unalterable photo credentials to all inspectors. The photo credentials will contain printed and electronically embedded identification data pertaining to the inspector.

The Commission register of Inspectors shall be constantly updated and available on a secure database to member States and their fishing vessels.

The Commission will make the member State of the inspector responsible for the proper control and use of credentials issued under the scheme.

The Commission will establish an accreditation committee to review the qualifications of all inspectors to ensure consistence of training, ongoing professional development, and periodic review of inspector issues.

5.5 Issues relating to Commission Patrol Vessels

Thirty years ago the author conducted his first high seas regulatory boarding on a series of bottom trawl vessels operating in the Western North Atlantic. The boarding was initiated from a Coast Guard patrol vessel in excess of 100 meters in length and identified by an orange stripe two meters wide and twenty meters long. The patrol vessel was unquestioned in its identity by all who viewed her including the fishing vessels of three different national flags visited that day. Consider the differences in the world from 1973 through 2003 and the

issue of patrol vessel identity becomes even more critical. The nightmare of having someone attempt to stop ships on the high seas under the color of Commission authority only to reveal themselves at a later point as something other than legitimate fishery inspectors must be avoided by the construction of safeguards within the scheme. To this end, adequate vessel marking and identifications specifications, including specifications for authorized patrol vessels, should be established to compliment the B & I scheme.

Patrol vessels around the world vary in size in direct proportion to the distance they are expected to operate offshore. High Seas boarding requires a Patrol vessel that can work comfortably at distances of 200 nautical miles and further from shore. The vessel must have the speed, range, maneuverability, communications sophistication, and surveillance technology to accomplish the patrol function efficiently. In total, this equates to the description of a naval vessel. The problem is that not all member States have large Coast Guard or Naval vessels and the crews to run them. While all member States should participate in the scheme by training and fielding inspectors, not all member States should invest in a high seas patrol vessel. The paragraph on Commission Patrol vessels operating under the scheme should be careful to ensure that vessels are commissioned in continuous and exclusive service to the member State. In addition, a record of certified Commission patrol vessels should be established. This will discourage any thought of chartering a fishing vessel, or transport, or out-of-work research vessel and attempting to mount a less than qualified high seas patrol effort.

This paragraph is consistent with the intent of the language found in paragraph 4 of the UN fish Stocks Agreement which states "The vessels used for boarding and inspection shall be clearly marked and identifiable as being on government service." The intent of the requirement is expanded on to ensure there are checks and balances in the process of designating patrol vessels that will preclude any question of the identity or validity of a designated patrol vessel.

Sample paragraph

The Commission will maintain a register of patrol vessels authorized to fly the flag of Commission while working under the scheme. The commission flag is described in Annex xx of the scheme. Member States wishing to participate in the scheme by registering one or more patrol vessels should;

- ***ensure that the vessel submitted for registry is in continuous government service under the flag of the member State and not utilized for any purpose outside of the patrol function***
- ***ensure that the vessel submitted for registry is capable in all aspects to operate for extended periods of time on the high seas including the ability to follow an intercepted target vessel at full speed for up to three days***
- ***ensure that the vessel submitted for registry has sufficient communications capability to conduct real time simultaneous satellite transmitted voice communications with its parent state, the member State of the vessel being boarded and the Commission***
- ***ensure that the vessel submitted for registry is in all ways painted and marked as a Coast Guard or Naval patrol vessel and should not, by any reasonable person, be mistaken for any other type of vessel.***
- ***ensure that the vessel submitted for registry is monitored by satellite for position and speed(VMS) at the member State MCS authority and that this information could be transmitted to the commission or any other member state in real time if the need arises***
- ***ensure that the vessel submitted for registry is capable of satellite transmission of data received as a result of boarding activity in real time to it***

member State, the member State of the flag of the fishing vessel and the commission

- **ensure that the vessel submitted for registry has completed all sea trials and has been in government service for a period of no less than six months**
- **ensure that the vessel submitted for registry is equipped with video recording equipment for the documentation of all fishing vessel intercepts**

5.6 Issues relating to the Commission flag and Commission number pennant

Sample paragraph

In order to promote the integrity of the scheme the Commission will design a flag which will be flown from the mast of all registered patrol vessels engaged in patrol activities under the scheme. Each patrol vessel will also be provided with a second flag having the commission background and a prominently displayed number or letter sequence corresponding to the assigned number or letter sequence in the Commission patrol vessel registry for that patrol vessel.

5.7 Issues relating to the Use of Force

The issue of the use of force is always a contentious discussion which balances the need of the inspectors and their patrol vessels to remain safe during the conduct of their duties and the need to avoid escalating what should be a peaceful and routine inspection into something else.

Patrol vessels and inspectors are generally authorized to use whatever minimal force is necessary to keep them safe in the face of assault or other sudden danger. Some RFMO, such as NAFO, specifically stipulate that fishery inspectors will be unarmed during routine inspections. This policy can be accepted if the subject of the boarding is a member State fishing vessel with registry on the HSVAR, shown to have a valid authorization to fish from the flag State. The policy of unarmed inspectors should have limits however, such as the boarding of a non-cooperative stateless fishing vessel fleeing from contact with the patrol vessel and abandoning its gear in the water. Lawfully operating fishing vessels are fearful of extortion on the high seas, and that fear is understandable and must be acknowledged by the scheme. Inspectors want to stay safe in their work and must avoid being held hostage or otherwise threatened on IUU fishing vessel. This concern must also be acknowledged by the scheme. Advocates of unarmed boarding parties point to the presence of the patrol vessel to ensure the safety of the boarding party.

Another question here is whether or not force will ever be authorized to stop a fleeing fishing vessel. The scheme should address this concern and not leave it open to question.

This paragraph is consistent with Article 22 paragraph 1.(f) which states; "(f) avoid the use of force except when and to the degree necessary to ensure the safety of the inspectors and where the inspectors are obstructed in the execution of their duties. The degree of force used shall not exceed that reasonably required in the circumstances"

Sample paragraph

During the conduct of their duties inspectors and the Captains of patrol vessels will limit their use of force to situations where jeopardy to the personal safety of the inspectors or the safety of the patrol vessel is present. In that extreme circumstance, the use of force is authorized to ensure the safety of the inspectors and

the patrol vessel. The use of force incident must then be reported to all member states involved in the incident and the commission.

Inspectors conducting routine boarding duties on the high seas from registered patrol craft on board member State fishing vessels will not be armed with firearms.

Inspectors conducting boarding duties on the high seas on stateless fishing vessels or flag of convenience fishing vessels or flag of non-compliance fishing vessels may be armed with firearms to ensure personal safety.

The use of force is not authorized to stop a fleeing fishing vessel from a member State which refuses boarding on the high seas within the Convention area.

5.8 Issues relating to the intercept of a Fishing Vessel by a Patrol Vessel

The technology of conducting high seas patrols from patrol vessels has advanced during the past thirty years. Any new schemes should incorporate advancement in long range surveillance. The old or traditional patrol tactic was to sail to the likely fishing grounds and board everything in sight. This was the tactic utilized to patrol the Georges Bank bottom fish fisheries in the Northwest Atlantic under ICNAF the predecessor to NAFO in the period from 1960 thru 1976. It is not a tactic that should or could succeed in patrolling the vast expanses of a high seas pelagic fishery.

Several RFMOs worldwide are charged with the management of pelagic resources and are considering implementation of a High seas B&I scheme. The scheme should be supported by fleet position data from a variety of sources. The scheme will likely be supported by vessel monitoring data and submitted position reports. Since these sources will not reveal the positions of IUU fishing vessels flying FOC or FONC, the utilization of long range satellite based surveillance assets is advised. Such data is commercially available. A wiser policy for the boarding scheme might involve the announcement by a patrol vessel that it is a position relatively close to the operating fleet and in a position to conduct consensual boarding in furtherance of the level of contact agreed upon by the commission members. Member State fishing vessels might have a threshold number of fishing days within the Convention area that would trigger the need to be inspected. In any case the boarding of member State fishing vessels is an entirely different evolution from approaching flagless of FOC vessels.

Article 21 paragraphs 1, 2, 3, 4 and 5 of the 1995 UN Fish Stocks Agreement authorizes the high seas boarding to proceed to the point where a suspected violation is discovered. Paragraph 5 states "Where following a boarding and inspection there are clear grounds for believing that a vessel has engaged in an activity contrary to the conservation and management measures referred to in paragraph 1 the inspecting party shall,....". This approach does not conflict with the following proposed language. To some extent all high seas boarding and inspection actions involving fishing vessels are consensual. The proposed language relies on the obligation off the fishing vessel to accept the boarding in recognition of the obligation to maintaining the level of contact goals established by the commission members. The language is a reasonable way to proceed. Throughout the process the necessary notifications to national MCS authorities are maintained. Transparency in the process is assured.

Sample paragraph

Any patrol vessel operating under the Commission flag shall announce its presence to member State fishing vessels at the earliest convenience in the vicinity of the fishing operations. In addition the patrol vessel

- ***will announce its intention to conduct consensual boarding of member state vessels in accordance with the “level of contact goals” of the Commission***
- ***will state its intention to conduct consensual compliance boarding inspections***
- ***will announce the multi-national makeup of the inspection team onboard including the identity and credential numbers of the inspectors***
- ***will advise the Commission of its intention to conduct consensual boarding inspections***
- ***will advise the MCS authority of the member State fishing vessel of its intention to conduct consensual boarding inspections***

The obligation of the member State fishing vessel upon approach of a commission patrol vessel is to

- ***acknowledge the presence of the patrol vessel and establish voice communications***
- ***advise the patrol vessel of the fishing activity ongoing at the time of the contact including onboard processing***
- ***advise the patrol vessel of the number fishing days the fishing vessel has been active in the convention area***
- ***advise the patrol vessel of the inspection history of the vessel in the convention area***
- ***announce without delay the decision to accept the inspection team or deny the inspection team***

The patrol vessel will evaluate all database information on the intercepted fishing vessel, including HSVAR registry, flag state authorization to fish, VMS transmitted data on the vessel, boarding history on the particular fishing vessel, and the number of days the fishing vessel has been active in the convention area. Providing that this analysis continues to meet the level of contact targets set by the commission the patrol vessel will renew its request to conduct a consensual inspection boarding.

If the patrol vessel is denied permission to conduct consensual inspection of the fishing vessel by the fishing vessel master or the MCS authority of the fishing vessel it will log the denial and proceed on patrol. A denial of boarding report will then be filed with the member State of the fishing vessel, the member state of the patrol vessel and the Commission.

5.9 Issues relating to the conduct of authorized inspectors during the boarding

This proposed language is reflective of Article 22 paragraph 1 of the 1995 UN Fish Stocks Agreement. There is an attempt to further define the responsibilities of the inspectors based upon errors the author has witnessed during eight years of high seas patrols. It may seem odd to mention physical fitness as a qualification of an inspector, but accidents are more likely to occur to those to whom the rigors of the boarding procedure present a challenge.

Sample Paragraph

The obligations of the authorized inspectors conducting a consensual boarding on a member state fishing vessel under the scheme shall be as follows. Inspectors shall

- ***be physically fit enough to conduct a fishing vessel boarding without endangering themselves or others***

- ***once safely onboard introduce themselves to the fishing vessel master using their official credential and present a small duplicate card to the master***
- ***be properly equipped to conduct the boarding in the most efficient manner possible***
- ***discuss with the Master the consensual inspection routine***
- ***proceed with an efficient inspection without t interrupting ongoing fishing, processing or hold packing operations***
- ***observe professional and ethical standards at all times accepting nothing but refreshments when necessary for civil interaction***
- ***do not restrict or interfere with any communications the master of the fishing vessel may care to make***
- ***provide electronic or physical paper copies of the inspection record***
- ***provide the master of the fishing vessel opportunity to make official comment on the inspection record of any matter***
- ***provide the master of the fishing vessel a blank standard “complaint of conduct form” against the actions of the inspectors that can if he so chooses be filed at a later date***
- ***depart the vessel without delay at the conclusion of the inspection***

5.10 Issues relating to the conduct of the Master of the Fishing Vessel accepting boarding

The elements of article 22 paragraph 3 of the 1995 UN Fish Stocks Agreement is embodied within the proposed language of this paragraph. The somewhat expanded language is there to guarantee that the spirit of cooperation is extended to all the particulars of the boarding process by the Master of the fishing vessel.

Sample paragraph

The obligations of the member State fishing vessel master accepting a consensual boarding under the scheme shall be as follows. The master shall

- ***direct the approaching small boat transferring the inspectors to the safest quarter for boarding***
- ***when possible, without interrupting ongoing fishing activity, maneuver the vessel to provide a lee for the approaching small boat***
- ***facilitate the transfer of the inspectors by providing an accommodation ladder of the type used to embark harbor pilots***
- ***examine the credentials of the inspectors, and provide the inspectors with the masters identity***
- ***advise the inspectors they will be accorded the status of officers on board the fishing vessel for the duration of the consensual boarding***
- ***introduce to the inspectors the principle ships officers necessary to conduct the consensual boarding routine***
- ***facilitate the conduct of the consensual boarding routine which will include access to logbooks, electronic gear and processing logs***
- ***allow the inspectors access to communications gear as necessary to facilitate the consensual boarding routine***
- ***note any complaint concerning the conduct of the inspectors or the inspection procedure as provided in the scheme***
- ***facilitate the safe departure of the inspectors***

5.11 Issues relating to consensual inspection routine

The essential elements to gain acceptance and trust in the conduct of consensual boarding under the scheme are standardization, transparency, and consistency. The Commission must ensure through construction of the scheme that the actions of the inspectors focus on a routine of information collection from the vessel being boarded that is well known and established to both sides. Just as fishing companies require their fishing vessel masters to report position, catch and processing data in a standard fashion the Commission through the scheme should require their inspectors to collect standard data during a consensual boarding.

- (1)Issues relating to the inspection of logbooks onboard the fishing vessel;
- (2)Issues relating to the inspection of electronic gear onboard the fishing vessel;
- (3)Issues relating to the inspection of processed fish onboard the fishing vessel; and,
- (4)Issues relating to the inspection of fishing gear onboard the fishing vessel

The proposed language in this section is an expansion of paragraph 2 of article 22 of the 1995 UN Fish Stocks Agreement. Every item mentioned below is reflective of the need to cover in detail broad categories mentioned in that paragraph.

Sample paragraphs

During the conduct of the consensual boarding under the scheme the inspectors will follow the “consensual inspection routine”.

With regard to the identity of the vessel, the master, and fishing authorizations standard documentation will be accepted and recorded

With regard to the inspection of logbook data

- ***date of entry into the Convention area will be provided***
- ***positions of all fishing activity within the convention area will be recorded***
- ***daily and total fishing effort within the convention area will be recorded***
- ***daily and total catch will be recorded***
- ***daily and total by-catch and discard will be noted***
- ***recorded interactions with seabirds will be noted***
- ***recorded interactions with marine mammals and marine reptiles will be noted***

With regard to the inspection of electronic gear aboard the fishing vessel

- ***identification of the function of each piece of electronic gear***
- ***standard download or data review of that piece or pieces of electronic gear which records the positions of the fishing vessel during the period in which it was active within the convention area***

With regard to the inspection of processed fish onboard the fishing vessel

- ***copy of the hold plan of the vessel***
- ***description of the amount of processed fish in each hold***
- ***catch conversions factor used for the processing of fish on board***
- ***examination of the contents of each hold in use***
- ***nondestructive examination of a sampling of packaged or processed fish***

With regard to the inspection of fishing gear onboard the fishing vessel

- ***physical examination of the gear in use for compliance with Commission rules***
- ***emphasis on examination of gear in use at time of boarding***

- ***special emphasis of gear or practices used to reduce fishing impact on sea birds, marine mammals or marine reptiles***

5.12 Issues relating to the documentation of violations of the commission rules

The Commission rules will differentiate between minor violations of a technical or administrative nature and more serious violations that threaten the management plan and carry greater consequences including the IUU fishing label. This draft considers four different categories of violations based on cases that the author experienced during the past thirty years. The result still complies with Article 21 paragraph 11 of the 1995 UN Fish Stocks agreement describing “serious” violations.

Minor violations of departures from the Commission rules have to be treated as discrepancies that can for the most part be corrected on scene by the fishing vessel or through communication with their flag state.

Major or serious violations usually involve fishing without authorization, fishing in fraudulent manner, maintaining false documentation, failing to maintain any record of fishing at all, or trying to conceal the identity of the fishing vessel.

A separate form of serious fishing violation, which is essentially a closed area violation, occurs when a fishing vessel authorized to fish in the high seas area of the Convention then violates the exclusive economic zone of a Coastal State in which the vessel does not have authorization to fish. This scenario is probably the most common type of closed area case occurring in the world today and the one of greatest concern to developing coastal states. The resultant investigation must involve the coastal state whose zone was violated and must establish the amount and value of resources taken with authorization.

The final form of serious violation is the assault or attempted assault or endangerment that threatens the lives and safety of authorized officers and is most often treated as a criminal act.

Paragraph 11 of Article 21 of the 1995 UN Fish Stocks Agreement delineates nine sub paragraphs of “serious violations”. The suggested language presented below compliments and expands those subparagraphs with language that supports the classification of categories of violations. There is a logical expansion of definitions.

Sample paragraph (not necessarily codified in this case within the scheme, this paragraph could appear elsewhere in the Commission rules as it applies to all violations regardless of where detected)

Violations of the rules of the Commission under the scheme are divided into four broad categories;

1 – minor violations that are technical and administrative in nature (faded vessel or gear markings, brief delays in required reporting) and best referred to as infractions

2 -major violations that constitute evidence of falsified reporting (fraud), violations of closed areas/closed seasons, undeclared transshipments and other such matters that seriously undermine the conservation measures of the Commission

3 – violations that while occurring within the Convention area also occurred within the exclusive economic zone of a coastal member State within the Convention area and therefore require the further intervention/investigation from that coastal member State

4 – violations that involve the safety of inspectors, observers, and patrol vessels and are aggravated in nature such as assaults, attempted assaults or threats of assault

Should an inspector discover an apparent and alleged violation or contravention of the Commission rules during the conduct of consensual high seas boarding, the obligation of the inspector is to investigate and document the matter as fully as possible on-scene. In order to best accomplish this task the inspector will conduct an initial investigation of the alleged violation by the following means;

- **where possible download electronic evidence**
- **if down load is not possible photograph the data displays**
- **where possible photograph log entries**
- **place Commission evidence tags on questionable documents or logs**
- **place Commission evidence on fishing gear which is prohibited**
- **place Commission evidence tags on prohibited species found within holds**
- **photograph the placement of all evidence tags**
- **write a narrative description of the alleged violation**
- **where possible transmit the narrative description, relevant photos, and an inventory of all evidence tags placed to the MCS contact within the member State of the fishing vessel**
- **where possible transmit the same material to the Commission**
- **where possible transmit the same material to the MCS contact with the member State of the patrol vessel**
- **provide copies of the same material to the master of the fishing vessel and conclude the boarding activity**
- **no electronic gear or logbooks should be removed from the member State fishing vessels as evidence unless so directed by the member State MCS contact. Such evidence can be fully embodied in the media without jeopardizing the operation of the fishing vessel**

A determination should be made by the inspectors documenting the violation if the condition causing the violation can be corrected on scene. If the condition causing the violation can be corrected, the inspectors should specifically request the master of the fishing vessel to make that correction.

Following the completion of the boarding in which a violation was detected and a review of the evidence supporting the allegation the inspector should file a final report within 7 days and forward that report to all parties.

The MCS authority of the member State fishing vessel should make the review of such violation reports the highest priority and report their findings and actions to the Commission within 45 days of their receipt.

Failure to take action on a report of violation naming a member State fishing vessel should result in Commission action up to and including removal of the authorization for that vessel to fish in the Convention area.

5.13 Issues relating to the Report of Inspection

This report of inspection must collect the correct data. It must also be made immediately available to all parties concerned. Before the current computer age, boarding reports often were filed away in the drawers of an MCS authority until they were disposed of years later. MCS authorities and Commissions should be working toward a report of inspection that is

almost entirely automated. The report must also be as standard in what it collects. The purest form of a boarding report would be comprised of a standard download from the computerized logbook on the member State fishing vessel complemented by a navigational fishing track, also digital, from the navigational computer. If data were captured in a standard format on the fishing vessel, it could be reported in a standard format in the boarding report.

To start the process, authorized officers should all be equipped with a standard computerized boarding report program that prompts them for data input. At the present time when you enter a hospital in much of the world, the data concerning your vital signs is immediately fed into a computerized format and your health profile is available for later study and diagnosis. The same should be true of the boarding report utilized by the Commission. If the data is not captured in a computerized format as it is initially recorded, it will not in some cases ever make it into the statistics vital to manage the fishery from an MCS perspective. If boarding reports are worth doing, they are worth doing correctly and completely.

sample paragraph

Concerning the report of boarding under the scheme

- ***Authorized officers will collect boarding data in the form and manner prescribed by the Commission under the scheme.***
- ***One copy of the boarding report will be left with the master of the member State fishing vessel boarded.***
- ***The boarding report will be transmitted to the Commission and the MCS authority of the member State fishing vessel within 12 hours of the completion of the boarding.***
- ***Upon review, supplementary reports may be filed to amend the original report up to 72 hours after the boarding if an error or omission is discovered.***
- ***The Master of fishing vessel boarded may also file a comment report or a rebuttal report up to 72 hours after the completion of the boarding.***

5.14 Issues relating to High Seas Patrol Coordination

A convention area may have over twenty coastal member States. A number of patrols may be underway at any given time. There may be unnecessary duplication of effort or very large geographic areas that get no coverage at all. Poorly planned patrol efforts benefit the IUU fishing vessel active within the convention area.

Sample paragraph

Patrols conducted under the scheme should be coordinated efforts of a multi-national character that have as their goal achieving the levels of contact established by the Commission. Patrols conducted under the scheme should file daily patrol reports with the Commission and share the vessel monitoring position of the patrol vessel with the Commission. The Commission should in turn ensure that the patrol vessel has the most up to date data base information available on prior boarding activity and sightings of fishing vessels. The Commission should also notify the MCS authorities of member States that the vessel will be on patrol within the high seas area of the Convention and the dates of that patrol.

5.15 Issues relating to the Sharing of Intelligence and Sightings of Interest

The fishing vessels active in the Convention area make it their business to know what is occurring in the area of the ocean in which they are fishing. Significant IUU fishing cases

have been documented world wide with the assistance of the fishing fleet active in the Convention Area. Two such examples have been mentioned in this report. The scheme should have a plainly stated obligation for fishing vessels to report sightings of interest.

Sample paragraph

There shall be established in furtherance of the effectiveness and efficiency of the scheme a protocol for the sharing of intelligence and the proper channeling of sightings of interest. The interdiction of IUU fishing activity within the Convention area is the responsibility of the member States, their MCS authorities and their fishing vessels active in the convention area. In order to assist the patrol effort member States should encourage and instruct their fishing vessels to

- ***Immediately report the sightings of fishing vessels which are apparently stateless***
- ***Immediately report the sightings of fishing vessels which are conducting operations with prohibited gear***
- ***Immediately report any observed high seas transshipments***

Reports should be made from the fishing vessels to their member state MCS authority and from there to the Convention MCS authority. The Convention MCS authority should maintain a mechanism to pass such sightings to the patrol vessel.

6. Final thoughts and conclusion

The first successful compliance boarding on the high seas from a well trained multi-national inspection team onto a welcoming member State fishing vessel three hundred nautical miles from the nearest point of land will mark a major turning point against IUU fisheries activities within the Convention area . It is a question of responsibility. If the scheme is well run and provides an adequate and balanced level of contact with all member State vessels, a resultant flow in intelligence information will develop that will lead authorized inspectors and their patrol vessels to the IUU fishing enterprises that are doing damage to the pelagic resources being managed. This has already been proven by an organization called the "Coalition of Legal Tooth fish Operators"²¹ or COLTO which conducts fishing within the CCAMLAR area.

Inspection on the high seas is a necessary component of the overall management, control and surveillance activities necessary to police an ocean fishery. The fishing event only occurs on the fishing grounds and the true nature of that commercial enterprise can only be fully understood by documenting it firsthand. The data that is recorded in the traditional or electronic logbooks is generated in real time as the fishing event dictates. Decisions about where fishing takes place, how it takes place and what is retained and processed from the resultant catch ultimately belong to the master of the fishing vessel despite the intentions of the owner or of the flag state authorities. Insulating the fishing vessel master from inspection at sea is not going to contribute to more compliant behavior from that master.

Contributions to the high-seas boarding and inspection scheme must come from all member States. Train the inspectors properly. Standardize the report format. Automate the report format. Incorporate high seas inspection zones. Set inspection triggers based on days-on-grounds within the Convention area. Provide a secure pathway for the transfer of

²¹See COLTO website at www.colto.org. Mission quote " Most importantly, and the primary focus of COLTO at this stage, is that COLTO members are keen to work with governments, conservation groups and the general public to provide information and evidence that can be used to apprehend and prosecute those involved in IUU fishing for toothfish."

intelligence information. Build the sophistication of the data bases that are available for authorized inspector reference. Make the necessary arrangements for inspectors to work in multi-national teams.

Significant intercepts of IUU fishing enterprises continue to occur around the world. The fiscal incentive to ignore all existing regulations and fill the boat with fish has not changed in the last three millennia. What has changed is the willingness by states organized into RFMOs to examine the conduct of high sea fishing with a regulatory eye. Inspection on the high seas will provide the factual base to the monitoring scheme that is vital for successful regulation of a pelagic fishery.

Annex of Regulatory Language for a Model High Seas Boarding and Inspection Scheme

Paragraph 5.1

Statement of Purpose –

The High Seas Boarding and Inspection scheme (hence forth called the scheme) is established for the purpose of achieving a sufficient level of contact with fishing vessels operating in the convention area to verify compliance with Conservation measures (rules, regulations) enacted by the Commission. Recognizing that some elements of the fishing enterprise can only be verified at sea where the take of resources is occurring and recognizing that certain management measures are spatial (closed areas/marine reserves) and temporal (closed seasons) in nature the scheme will achieve equitable levels of contact with member State fishing vessels, non-contracting state fishing vessels and stateless fishing vessels as directed by the commission.

Paragraph 5.2

*Obligations of the Commission Members to the High Seas
Boarding and Inspection Scheme –*

The responsibility for, and the entitlement of, the scheme shall be jointly shared by all members of the Commission. Each member of the Commission shall first and foremost ensure that their fishing vessels operating on the high seas of the convention area are at all times in compliance with all conservation measures enacted by the Commission and that when called upon, co-operate with the scheme. Each member of the Commission will have the right to participate in the scheme by training and fielding qualified inspectors and by conducting patrols under the scheme with certified patrol vessels. In order to promote consistency, transparency and high ethical standards within the scheme, teams of inspectors will, as a rule be multi-national in makeup.

Paragraph 5.3

*Issues relating to the creation of the authority and jurisdiction
to Board and Inspect fishing vessels on the High Seas –*

The scheme will establish a registry of commissioned, credentialed, inspectors that will patrol onboard vessels that are certified by the Commission for that purpose. The actions taken by the inspectors on the high seas within the Convention area are initiated to determine compliance with Commission conservation measures. The data from High Seas boarding is expected to provide member States with factual information on the degree to which fishers follow Commission rules as they engage in the fishing enterprise. All infractions detected, both minor and major are actionable by the member State whose flag is flown by the fishing vessel alleged to have violated the rules. Boarding activity authorized by the Commission within this scheme will be guided by a level of patrol boat to fishing vessel contact. The level of contact desired to achieve compliance will be under continual review by the commission for

- **balance and equity among the population of all member States' fishing vessels**
- **focus on action of fishing vessels from non-member states**

- **focus on deterring IUU fishing activity from FONC vessels active with the Convention area**
- **focus on rules that can only be enforced at-sea**
- **focus on critical management measures**

Paragraph 5.4

Inspectors authorized to enforce the Commission Rules –

Member States shall dedicate the services of inspectors to the scheme. The Commission will establish an Inspector register. The responsibility for submitting qualified persons to the Commission inspector register belongs to the member States. The list of qualifications for submission to the register is as follows;

- **The inspector should be an accredited credential carrying employee of the fisheries monitoring control and surveillance enforcement authority of the flag state (i.e. Ministry of Fisheries, Coast Guard)**
- **The inspector should have continuing training in all aspects of high seas fishing**
- **The inspector should be proficient in fisheries related electronics use**
- **The inspector should be capable of making a high seas boarding safely**

The Commission will issue numbered, unalterable photo credentials to all inspectors. The photo credentials will contain printed and electronically embedded identification data pertaining to the inspector.

The Commission register of Inspectors shall be constantly updated and available on a secure database to member States and their fishing vessels.

The Commission will make the member State of the inspector responsible for the proper control and use of credentials issued under the scheme.

The Commission will establish an accreditation committee to review the qualifications of all inspectors to ensure consistence of training, ongoing professional development, and periodic review of inspector issues.

Paragraph 5.5

Issues relating to Commission Patrol Vessels –

The Commission will maintain a register of patrol vessels authorized to fly the flag of Commission while working under the scheme. The commission flag is described in Annex xx of the scheme. Member States wishing to participate in the scheme by registering one or more patrol vessels should;

- **ensure that the vessel submitted for registry is in continuous government service under the flag of the member State and not utilized for any purpose outside of the patrol function**
- **ensure that the vessel submitted for registry is capable in all aspects to operate for extended periods of time on the high seas including the ability to follow an intercepted target vessel at full speed for up to three days**
- **ensure that the vessel submitted for registry has sufficient communications capability to conduct real time simultaneous satellite transmitted voice communications with its parent state, the member State of the vessel being boarded and the Commission**

- ensure that the vessel submitted for registry is in all ways painted and marked as a Coast Guard or Naval patrol vessel and should not, by any reasonable person, be mistaken for any other type of vessel.
- ensure that the vessel submitted for registry is monitored by satellite for position and speed(VMS) at the member State MCS authority and that this information could be transmitted to the commission or any other member state in real time if the need arises
- ensure that the vessel submitted for registry is capable of satellite transmission of data received as a result of boarding activity in real time to its member State, the member State of the flag of the fishing vessel and the commission
- ensure that the vessel submitted for registry has completed all sea trials and has been in government service for a period of no less than six months
- ensure that the vessel submitted for registry is equipped with video recording equipment for the documentation of all fishing vessel intercepts

Paragraph 5.6

The Commission flag and Commission number pennant –

In order to promote the integrity of the scheme the Commission will design a flag which will be flown from the mast of all registered patrol vessels engaged in patrol activities under the scheme. Each patrol vessel will also be provided with a second flag having the commission background and a prominently displayed number or letter sequence corresponding to the assigned number or letter sequence in the Commission patrol vessel registry for that patrol vessel.

Paragraph 5.7

Use of Force –

During the conduct of their duties inspectors and the Captains of patrol vessels will limit their use of force to situations where jeopardy to the personal safety of the inspectors or the safety of the patrol vessel is present. In that extreme circumstance, the use of force is authorized to ensure the safety of the inspectors and the patrol vessel. The use of force incident must then be reported to all member states involved in the incident and the commission.

Inspectors conducting routine boarding duties on the high seas from registered patrol craft on board member State fishing vessels will not be armed with firearms.

Inspectors conducting boarding duties on the high seas on stateless fishing vessels or flag of convenience fishing vessels or flag of non-compliance fishing vessels may be armed with firearms to ensure personal safety.

The use of force is not authorized to stop a fleeing fishing vessel from a member State which refuses boarding on the high seas within the Convention area.

Paragraph – 5.8

The intercept of a Fishing Vessel by a Patrol Vessel –

Any patrol vessel operating under the Commission flag shall announce its presence to member State fishing vessels at the earliest convenience in the vicinity of the fishing operations. In addition the patrol vessel

- **will announce its intention to conduct consensual boarding of member state vessels in accordance with the “level of contact goals” of the Commission**
- **will state its intention to conduct consensual compliance boarding inspections**
- **will announce the multi-national makeup of the inspection team onboard including the identity and credential numbers of the inspectors**
- **will advise the Commission of its intention to conduct consensual boarding inspections**
- **will advise the MCS authority of the member State fishing vessel of its intention to conduct consensual boarding inspections**

The obligation of the member State fishing vessel upon approach of a commission patrol vessel is to

- **acknowledge the presence of the patrol vessel and establish voice communications**
- **advise the patrol vessel of the fishing activity ongoing at the time of the contact including onboard processing**
- **advise the patrol vessel of the number fishing days the fishing vessel has been active in the convention area**
- **advise the patrol vessel of the inspection history of the vessel in the convention area**
- **announce without delay the decision to accept the inspection team or deny the inspection team**

The patrol vessel will evaluate all database information on the intercepted fishing vessel, including HSVAR registry, flag state authorization to fish, VMS transmitted data on the vessel, boarding history on the particular fishing vessel, and the number of days the fishing vessel has been active in the convention area. Providing that this analysis continues to meet the level of contact targets set by the commission the patrol vessel will renew its request to conduct a consensual inspection boarding.

If the patrol vessel is denied permission to conduct consensual inspection of the fishing vessel by the fishing vessel master or the MCS authority of the fishing vessel it will log the denial and proceed on patrol. A denial of boarding report will then be filed with the member State of the fishing vessel, the member state of the patrol vessel and the Commission.

Paragraph 5.9

The conduct of authorized inspectors during the boarding –

The obligations of the authorized inspectors conducting a consensual boarding on a member state fishing vessel under the scheme shall be as follows. Inspectors shall

- **be physically fit enough to conduct a fishing vessel boarding without endangering themselves or others**

- once safely onboard introduce themselves to the fishing vessel master using their official credential and present a small duplicate card to the master
- be properly equipped to conduct the boarding in the most efficient manner possible
- discuss with the Master the consensual inspection routine
- proceed with an efficient inspection without interrupting ongoing fishing, processing or hold packing operations
- observe professional and ethical standards at all times accepting nothing but refreshments when necessary for civil interaction
- do not restrict or interfere with any communications the master of the fishing vessel may care to make
- provide electronic or physical paper copies of the inspection record
- provide the master of the fishing vessel opportunity to make official comment on the inspection record of any matter
- provide the master of the fishing vessel a blank standard “complaint of conduct form” against the actions of the inspectors that can if he so chooses be filed at a later date
- depart the vessel without delay at the conclusion of the inspection

Paragraph 5.10

The conduct of the Master of the Fishing Vessel accepting boarding –

The obligations of the member State fishing vessel master accepting a consensual boarding under the scheme shall be as follows. The master shall

- direct the approaching small boat transferring the inspectors to the safest quarter for boarding
- when possible, without interrupting ongoing fishing activity, maneuver the vessel to provide a lee for the approaching small boat
- facilitate the transfer of the inspectors by providing an accommodation ladder of the type used to embark harbor pilots
- examine the credentials of the inspectors, and provide the inspectors with the masters identity
- advise the inspectors they will be accorded the status of officers on board the fishing vessel for the duration of the consensual boarding
- introduce to the inspectors the principle ships officers necessary to conduct the consensual boarding routine
- facilitate the conduct of the consensual boarding routine which will include access to logbooks, electronic gear and processing logs
- allow the inspectors access to communications gear as necessary to facilitate the consensual boarding routine
- note any complaint concerning the conduct of the inspectors or the inspection procedure as provided in the scheme
- facilitate the safe departure of the inspectors

Paragraph 5.11

Consensual inspection routine –

During the conduct of the consensual boarding under the scheme the inspectors will follow the “consensual inspection routine”.

With regard to the identity of the vessel, the master, and fishing authorizations standard documentation will be accepted and recorded

With regard to the inspection of logbook data

- **date of entry into the Convention area will be provided**
- **positions of all fishing activity within the convention area will be recorded**
- **daily and total fishing effort within the convention area will be recorded**
- **daily and total catch will be recorded**
- **daily and total by-catch and discard will be noted**
- **recorded interactions with seabirds will be noted**
- **recorded interactions with marine mammals and marine reptiles will be noted**

With regard to the inspection of electronic gear aboard the fishing vessel

- **identification of the function of each piece of electronic gear**
- **standard download or data review of that piece or pieces of electronic gear which records the positions of the fishing vessel during the period in which it was active within the convention area**

With regard to the inspection of processed fish onboard the fishing vessel

- **copy of the hold plan of the vessel**
- **description of the amount of processed fish in each hold**
- **catch conversions factor used for the processing of fish on board**
- **examination of the contents of each hold in use**
- **nondestructive examination of a sampling of packaged or processed fish**

With regard to the inspection of fishing gear onboard the fishing vessel

- **physical examination of the gear in use for compliance with Commission rules**
- **emphasis on examination of gear in use at time of boarding**
- **special emphasis of gear or practices used to reduce fishing impact on sea birds, marine mammals or marine reptiles**

Paragraph 5.12

Documentation of violations of the commission rules –

Violations of the rules of the Commission under the scheme are divided into four broad categories;

1 – minor violations that are technical and administrative in nature (faded vessel or gear markings, brief delays in required reporting) and best referred to as infractions

2 -major violations that constitute evidence of falsified reporting (fraud), violations of closed areas/closed seasons, undeclared transshipments and other such matters that seriously undermine the conservation measures of the Commission

3 – violations that while occurring within the Convention area also occurred within the exclusive economic zone of a coastal member State within the Convention area and therefore require the further intervention/investigation from that coastal member State

4 – violations that involve the safety of inspectors, observers, and patrol vessels and are aggravated in nature such as assaults, attempted assaults or threats of assault

Should an inspector discover an apparent and alleged violation or contravention of the Commission rules during the conduct of consensual high seas boarding, the obligation of the inspector is to investigate and document the matter as fully as possible on-scene. In order to best accomplish this task the inspector will conduct an initial investigation of the alleged violation by the following means;

- **where possible download electronic evidence**
- **if down load is not possible photograph the data displays**
- **where possible photograph log entries**
- **place Commission evidence tags on questionable documents or logs**
- **place Commission evidence on fishing gear which is prohibited**
- **place Commission evidence tags on prohibited species found within holds**
- **photograph the placement of all evidence tags**
- **write a narrative description of the alleged violation**
- **where possible transmit the narrative description, relevant photos, and an inventory of all evidence tags placed to the MCS contact within the member State of the fishing vessel**
- **where possible transmit the same material to the Commission**
- **where possible transmit the same material to the MCS contact with the member State of the patrol vessel**
- **provide copies of the same material to the master of the fishing vessel and conclude the boarding activity**
- **no electronic gear or logbooks should be removed from the member State fishing vessels as evidence unless so directed by the member State MCS contact. Such evidence can be fully embodied in the media without jeopardizing the operation of the fishing vessel**

A determination should be made by the inspectors documenting the violation if the condition causing the violation can be corrected on scene. If the condition causing the violation can be corrected, the inspectors should specifically request the master of the fishing vessel to make that correction.

Following the completion of the boarding in which a violation was detected and a review of the evidence supporting the allegation the inspector should file a final report within 7 days and forward that report to all parties.

The MCS authority of the member State fishing vessel should make the review of such violation reports the highest priority and report their findings and actions to the Commission within 45 days of their receipt.

Failure to take action on a report of violation naming a member State fishing vessel should result in Commission action up to and including removal of the authorization for that vessel to fish in the Convention area.

Paragraph 5.13

The Report of Inspection –

Concerning the report of boarding under the scheme

- **Authorized officers will collect boarding data in the form and manner prescribed by the Commission under the scheme.**

- **One copy of the boarding report will be left with the master of the member State fishing vessel boarded.**
- **The boarding report will be transmitted to the Commission and the MCS authority of the member State fishing vessel within 12 hours of the completion of the boarding.**
- **Upon review, supplementary reports may be filed to amend the original report up to 72 hours after the boarding if an error or omission is discovered.**
- **The Master of fishing vessel boarded may also file a comment report or a rebuttal report up to 72 hours after the completion of the boarding.**

Paragraph 5.14

High Seas Patrol Coordination –

Patrols conducted under the scheme should be coordinated efforts of a multi-national character that have as their goal achieving the levels of contact established by the Commission. Patrols conducted under the scheme should file daily patrol reports with the Commission and share the vessel monitoring position of the patrol vessel with the Commission. The Commission should in turn ensure that the patrol vessel has the most up to date data base information available on prior boarding activity and sightings of fishing vessels. The Commission should also notify the MCS authorities of member States that the vessel will be on patrol within the high seas area of the Convention and the dates of that patrol.

Paragraph 5.15

Sharing of Intelligence and Sightings of Interest –

There shall be established in furtherance of the effectiveness and efficiency of the scheme a protocol for the sharing of intelligence and the proper channeling of sightings of interest. The interdiction of IUU fishing activity within the Convention area is the responsibility of the member States, their MCS authorities and their fishing vessels active in the convention area. In order to assist the patrol effort member States should encourage and instruct their fishing vessels to

- **Immediately report the sightings of fishing vessels which are apparently stateless**
- **Immediately report the sightings of fishing vessels which are conducting operations with prohibited gear**
- **Immediately report any observed high seas transshipments**

Reports should be made from the fishing vessels to their member state MCS authority and from there to the Convention MCS authority. The Convention MCS authority should maintain a mechanism to pass such sightings to the patrol vessel.

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