



TRANSHIPMENT AND THE FCWC REGION CASE STUDIES





THE WEST AFRICA TASK FORCE BRINGS TOGETHER THE SIX MEMBER COUNTRIES OF THE FISHERIES COMMITTEE FOR THE WEST CENTRAL GULF OF GUINEA (FCWC) – BENIN, CÔTE D'IVOIRE, GHANA, LIBERIA, NIGERIA AND TOGO – TO TACKLE ILLEGAL FISHING AND STOP THE TRADE IN ILLEGALLY CAUGHT FISH.

The Task Force is facilitated by the FCWC Secretariat and supported by a Technical Team that includes Trygg Mat Tracking (TMT) and Stop Illegal Fishing with funding from Norad. By actively cooperating, by sharing information and by facilitating national interagency working groups the West Africa Task Force is working together to stop illegal fishing.

Transhipment and the FCWC Region: Case Studies has been produced by Stop Illegal Fishing, Trygg Mat Tracking, and the FCWC Secretariat. The case studies have been drawn from the forthcoming report Transhipment: Issues and Responses in the FCWC Region.







The images in this publication appear for the purposes of illustrating fishing and related operations only and are not intended to convey or imply, directly or indirectly, that any illegal, unreported and unregulated (IUU) fishing activities had taken place or were otherwise associated with this image. This report draws on a range of material including West Africa Task Force communications and operations, an analysis of reefer operations conducted by TMT and Global Fishing Watch for the FCWC, base maps from MarineRegions and tracking data from exactEarth and a broad range of vessel identity and compliance data sources. This publication should be cited as Stop Illegal Fishing, Trygg Mat Tracking, FCWC Secretariat (2021) Transhipment and the FCWC Region: Case Studies. Gaborone, Botswana.

TRANSHIPMENT AND THE FCWC REGION: CASE STUDIES

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TRANSHIPMENT AND THE FCWC REGION: CASE STUDIES



IN TRANSHIPMENT

The Food and Agriculture Organization (FAO) definition of a fishing vessel is very broad, which while useful for legal interpretations and application can lead to some challenges in operational use.

The FAO definition of a fishing vessel is 'Any vessel, boat, ship, or other craft that is equipped and used for fishing or in support of such activity. For management purpose, particularly for monitoring and surveillance, may be considered to include any vessel aiding or assisting one or more vessels at sea in the performance of any activity relating to fishing, including, but not limited to, preparation, supply, storage, refrigeration, transportation, or processing (e.g. mother ships)'.

Once fish has been caught by the catching vessel it needs to be transported to a port or landing site. This transport may be conducted by the catching vessel or the fish may be transhipped at sea into a transport vessel. Fish may also be transhipped at sea or in port to a factory vessel. Once the fish is in port or at a landing site, it may be transhipped into another transport vessel either directly or indirectly, following possible processing or re-packaging, and transported onwards.

In this publication, for technical understanding and unless otherwise stated, vessel terms are used to describe the vessels operational use, noting that one vessel may serve several operational uses:

- 'Fishing vessel' is used for the catching vessel, include industrial, semi-industrial and small-scale vessels that catch fish and seafood. Fishing vessels can be of different sizes, construction material and use various fishing gears, such as purse seine, trawl or gill nets, longlines or pole and line.
- 'Support vessel' is used to describe vessels that service the fishing vessel at sea. This includes services such as assistance with FADs, re-fuelling, provision of supplies such as food and bait, changing of crew, and maintenance. A support vessel can also be called a supply vessel.
- 'Transport vessel' is used to describe vessels that transport fish and seafood. They include reefers (refrigerated cargo vessels - which may also be called fish carriers), container vessels, converted fishing vessels operating as transport vessels (also known as mini-reefers), and small transport vessels (often canoes or planked pirogues).
- 'Factory vessel' is used to describe vessels that process fish, usually into fishmeal or different product forms, such as fillets or headed and gutted. They are also known as 'mother ships' supporting their own group of smaller fishing vessels, or they can operate independently obtaining fish from a range of different fishing vessels.





TYPES OF TRANSHIPMENT

This collection of case studies aims to highlight the diverse and complex role that transhipment plays. They illustrate different types of operations and, unless specific non-compliance is mentioned, are not intended to imply non-compliance. The cases provide indications as to which features and factors can be taken into consideration to determine the IUU risk associated with specific operations. Five main types of transhipment have been identified that take place within or impact on the FCWC region.



TRANSHIPMENT TO REEFERS

Reefer vessels frequently make journeys involving several ports. The point of loading or offloading for fish entering and departing the FCWC region will in many cases not be the previous or next port visited, within or outside of the FCWC region. Examples of common operating or voyage patterns for reefers visiting the region are described. Reefers that are dedicated to fish transport are mainly characterised by direct port-to-port transits, or journeys to fishing grounds to conduct at-sea transhipment operations. Whilst vessels can and do change their pattern of operations according to demand and market factors, knowing the expected broad operating pattern of a vessel can provide insights into the type of operations and risk factors that should be taken into consideration.



TRANSHIPMENT TO FACTORY VESSELS

Over the past ten years a number of vessels have operated in West Africa as factory vessels that provide fish and fishmeal into both local and international markets. Frequently these vessels are ex-fishing vessels converted to factory vessels. These vessels may be sourcing fish from industrial fishing vessels, or from local small-scale fisheries (sometimes acting as 'mother-ships' to a fleet of canoes).



TRANSHIPMENT TO CONVERTED FISHING VESSELS

In recent years a new type of transhipment vessel has appeared in the broader West Africa region. Fishing vessels are switching operations from fish catching to fish transport operations and are sometimes referred to as 'mini-reefers'. Visually these vessels can be difficult to distinguish from active fishing vessels. They may be reconfigured to have larger cargo and freezing capacity, as well as deck cranes and booms to conduct at-sea transhipment operations and they may carry Yokohama fenders to enable them to come safely alongside another vessel at sea. Or they may, at the simplest, have the fishing gear removed or stowed, and the holds are used to store transhipped fish.



TRANSHIPMENT TO SMALL TRANSPORT VESSELS

Transhipment of fish from industrial fishing vessels to smaller vessels started as a means of 'bartering' fish for goods. In recent years this has, in some fisheries, developed into a lucrative business, providing a way for industrial fishing vessels to land unwanted, damaged, undersized or illicit catch outside of a port, while evading controls. In trawl fisheries in particular, the practice is considered to have a devastating impact on stocks as it creates a demand for undersized fish.



TRANSHIPMENT TO CONTAINERS

The growth in use of containers to transport fish has taken place over the last twenty years. Fishing vessels and reefers offload direct into containers in ports in the FCWC region, and containers and container vessels are a significant means for the import of fish into and export out of the FCWC region. These vessels generally operate outside of the remit of fisheries authorities, generally visiting areas of port that are not accessible to fisheries personnel.



CASE STUDY VOLTA GLORY and VOLTA VICTORY

Tuna reefers supplying canneries in Tema and Abidjan



In port At sea (suspected) Fishing vessel to reefer Reefer to port

Tuna

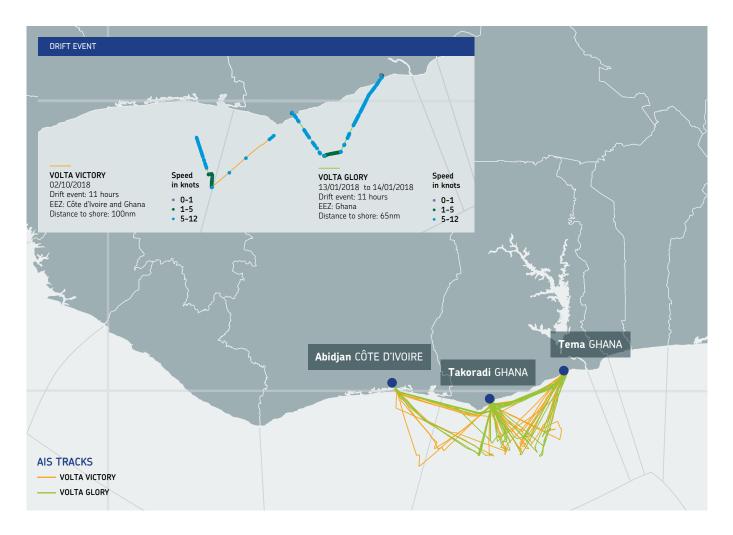


Compliance Loitering Drift events

Ghana-flagged reefers VOLTA GLORY and VOLTA VICTORY are part of the fleet operated by the company PANOFI CO. LTD.; a joint-venture established in Ghana in 2002 by Korean group SILLA CO. LTD. The company currently operates six tuna purse seiners operating in the waters of Benin, Côte d'Ivoire, Ghana, Liberia, Sierra Leone, and in the high seas. The fleet lands fish in Tema and Abidjan or tranship their catch to the two affiliated reefers. In port (at anchorage) transhipments are reported to regularly take place in Tema and Takoradi, between the PANOFI seiners and the two reefers. The VOLTA GLORY and VOLTA VICTORY regularly land tuna in Tema where the catch is sorted, transferred to cold storage facilities and sold to local processing plants, including the cannery operated by COSMO SEAFOOD CO. LTD., another affiliate of the SILLA group established in 2011.

The reefers also land catch in Abidjan, when prices paid by the canning sector there are higher than prices in Ghana. As Côte d'Ivoire is a neighbouring country, shipping costs are kept low. Transhipment operations between the PANOFI seiners and the two reefers are also reported to take place in the Abidjan port area.

The two reefers are also known for landing non-target species as well as small size or low-quality tuna, called *faux poisson* or *faux thon*, to be sold on the local market in Abidjan.



Vessel name	VOLTA GLORY	VOLTA VICTORY
IMO number	8323604	9140102
Flag	Ghana	Ghana
Year of build	1983	1996
GT	2,829	2,716
Insulated capacity	3,957	4,276
TEU	0	0

Compliance history

In 2012 a potential illegal at-sea transhipment was identified to have taken place in the Liberia EEZ between Ghana-flagged purse seiner PANOFI VOLUNTEER and VOLTA VICTORY. ICCAT regulations prohibit purse seiners from transhipping at sea and transhipment at sea was banned in Liberia at the time of the incident.

This incident triggered further analysis of the movements of the VOLTA VICTORY and its sister ship the VOLTA GLORY, which indicated that the reefers conducted frequent at-sea transhipments in 2011 and 2012 in the Liberia EEZ and in large parts of the Central Atlantic. Liberia issued fines for the two reefers, and the company PANOFI was later subject to investigations in Ghana. Ongoing monitoring suggests a change of operating pattern with fewer voyages to high seas fishing grounds and more port-to-port operations between Tema, Takoradi and Abidjan. The two reefers often take indirect routes between port calls, with frequent drift behaviour suggesting that operations still take place at sea, mainly inside the Ghana EEZ. In 2018, 15 of these 'drift events' were identified for VOLTA GLORY, and 16 were identified for VOLTA VICTORY. Some may correspond with legitimate operations, such as authorised bunkering operations or transfer of supplies to fishing vessels, others may indicate transhipment operations.

In 2019 and 2020, likely in response to increased scrutiny of their activities, both vessels have generally maintained port to port voyages.



CASE STUDY MENG XIN YU YUN 369

Shuttle reefer linking Sierra Leone and Ghana



At-sea

Fishing vessel to reefer Fishing vessel to small transport vessel



Small pelagics Demersal



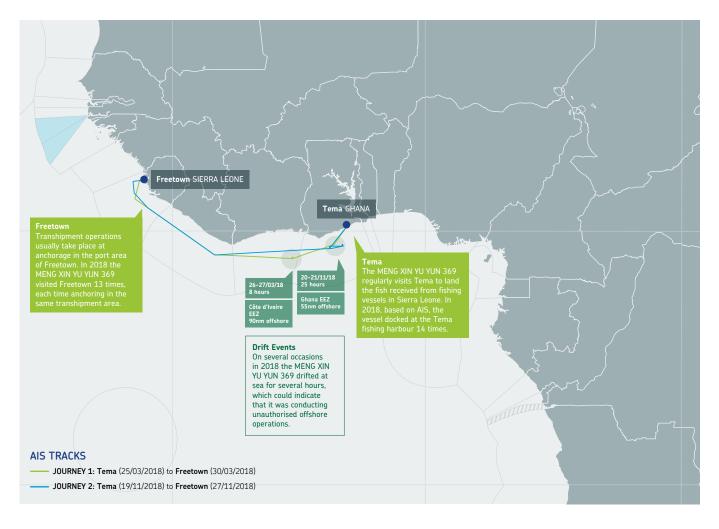
Loitering AIS gaps Compliance Flagging issues

The reefer MENG XIN YU YUN 369 supports the fishing fleet owned by DALIAN MENGXIN YUANYANG FISHERY CO., LTD.¹, a Chinese state-owned enterprise authorised in 2008 by China to operate as a distant water fishing company. The fleet is comprised of about 30 trawlers built around 2012, with about two thirds operating in Ghana and the remaining vessels operating in Sierra Leone.

Transhipment operations usually take place at anchorage in the port area of Freetown. They involve different fishing vessels coming alongside the reefer, simultaneously or sequentially to tranship catch. At the same time, the vessels can also transfer frozen fish cartons to canoes. Although in-port transhipment is allowed in Sierra Leone, these operations have limited oversight, raising the risk of illegally caught fish being mixed, or whitewashed, with legally caught fish. Under Ghanaian law all vessels must be registered and flagged to Ghana and beneficially owned by Ghanaian citizens to be licensed to fish there. Nine local front companies have been established as the registered owners of the MENG XIN fleet, although the vessels are still beneficially owned by DALIAN MENGXIN YUANYANG FISHERY CO LTD. This set up enables the fishing vessels to fly the Ghana flag and fish in Ghanaian waters whilst concealing their true ownership.

In Sierra Leone, the vessels are allowed to operate under the Chinese flag through a local company. There are indications that the whole fleet operating there, including those flagged in Ghana, remain part of China's registered distant water fleet, according to China's 2018 official offshore fishing vessel overseas inspection list, which allows them to potentially benefit from State subsidies and other advantages.

¹ Also referred to as DALIAN MENGXING OCEAN FISHERIES CO., LTD depending on English translations



Vessel name	MENG XIN YU YUN 369
IMO number	-
Flag	China
Year of build	2015
GT	987
Insulated capacity	Not listed
TEU	Not listed

Compliance history of the fishing fleet

A number of vessels in the MENG XIN fleet have a history of non-compliance in both Ghana and Sierra Leone. Common infractions observed and/or sanctioned since their arrival in the region in 2012 include unauthorised transhipment at-sea (from trawler to cance – a practice known as 'saiko' in Ghana – and between trawlers), use of illegal gear, fishing in prohibited areas (no-trawl zones, inshore exclusion zone reserved for small-scale fishing, etc.), misreporting of fishing activity and dumping of juvenile fish². In 2019 a Ghanaian fishing observer went missing while on board the MENG XIN 15 – the investigation is still ongoing.

² EJF (2018) China's hidden fleet in West Africa: a spotlight on illegal practices within Ghana's industrial trawl sector



GABU REEFER, SALY REEFER and SILVER ICE

Reefers specialized in the transport of small pelagics



At-sea Fishing vessel to reefer



Small pelagics



Loitering Encounters Compliance Flagging issues

The reefers SILVER ICE, GABU REEFER and SALY REEFER have been operating in West Africa since 2009 under the ownership of FISHING & CARGO SERVICES S.A., a company incorporated in Panama and believed to be a shell company established to hide beneficial ownership¹. The vessels are operated and managed by a Spanish company based in Las Palmas: WEST COAST FROZEN FISH S.A.

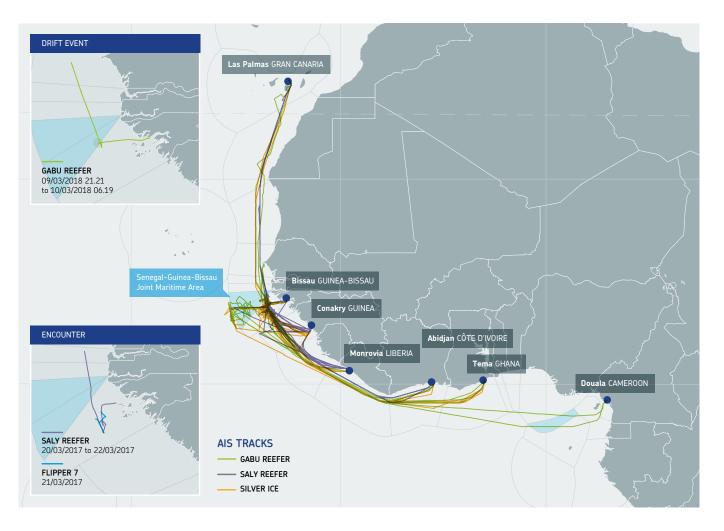
The fishing fleet serviced by the three reefers is the 'FLIPPER' fleet, currently consisting of three Soviet-built pelagic trawlers owned by other front companies established in Panama and operated from Las Palmas through the company SEA GROUP SL, which is also reportedly linked to the reefers². The reefers specialise in the transport of frozen small pelagic fish transhipped from the fishing vessels which have been operating in Guinea-Bissau. The fish is destined for the West African market. AIS analysis suggests that until 2017 the three reefers' operations relied largely on at-sea transhipments taking place regularly in the Guinea-Bissau EEZ, including in the Joint Maritime Area with Senegal where the FLIPPER trawlers regularly operate.

Landings in Bissau are believed to be marginal, most of the fish goes to the FCWC region, with the main ports visited there being Monrovia, Abidjan and Tema.

The reefer owners have systematically flagged their vessels into high-risk registers including Comoros, a country that was issued a red card by the EU for operating an open fishing vessel register without having the ability to properly monitor its fleet. All three reefers reflagged to Moldova between 2018 and 2019, also considered a high-risk flag State.

¹ TMT and C4ADS (2020), Spotlight on: the exploitation of company structures by illegal fishing operators.

- https://www.tm-tracking.org/post/illegal-fishing-operators-exploit-company-structures-to-cover-up-illegal-operations
- ² C4ADS (2019), Strings attached Exploring the onshore networks behind Illegal, Unreported, & Unregulated fishing. Retrieved from https://static1.squarespace.com/static/566ef8b4d8af107232d5358a/t/5d7022301845f300016ee532/1567629912450/Strings+Attached.pdf



Vessel name	GABU REEFER	SALY REEFER	SILVER ICE
IMO number	8300949	7813925	7819759
Flag	Moldova	Moldova	Moldova
Year of build	1983	1979	1979
GT	2,028	2,009	1,753
Insulated capacity	3,620	2,253	2,570
TEU	0	0	12
Compliance	2014 – Fined for attempting to land fish in Liberia without the correct authorisation.	2017 – Illegally transhipped with factory trawlers from the FLIPPER fleet in the Guinea-Bissau EEZ.	2014 – Fined for attempting to land fish in Liberia without the correct authorisation.

Compliance event

In March 2017 SALY REEFER was detained and arrested by Guinea-Bissau authorities, together with fishing vessels FLIPPER 3, FLIPPER 4 and FLIPPER 5, for conducting at-sea transhipments – a practice that had been banned by Guinea-Bissau in 2015.

The arrest was supported by the NGO Greenpeace and led to further investigations into the fishing vessels, which were also suspected of other infractions including the use of prohibited gear and the non-payment of previous fines. Authorities in Guinea-Bissau have responded to the SALY REEFER arrest by stepping up their enforcement of the at-sea transhipment ban, making it mandatory for all transhipment operations to take place at the anchorage located in the mouth of the river Geba, in the Bissau port area. Increased visits to the anchorage area by the FLIPPER vessels, now flagged to Guinea-Bissau, suggests transhipment is now taking place in the permitted area. However, at-sea drifting behaviour by the reefers has continued to be observed.



GREEN AUSTEVOLL and GREEN MALOY

'Triangular trade' reefers



At-sea In-port Fishing vessel to reefer



Small pelagics Tuna



GREEN AUSTEVOLL and GREEN MALOY are involved in a 'triangular trade', whereby fish caught in Europe is brought to West Africa, fish caught in West or Southern Africa is traded regionally, and tuna from West Africa is exported to hubs outside of the continent, from where it will eventually be exported to Europe and other markets as a canned product.

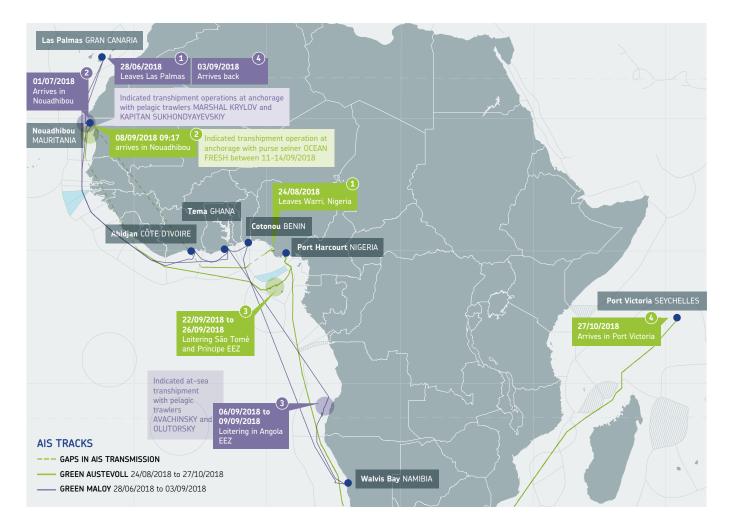
Fish is primarily loaded in Northern Europe at ports in the Faroe Islands and the Netherlands, which are known loading points for blue whiting, herring and mackerel. Fish is also loaded in Mauritania during transhipment operations off Nouadhibou and in Angola through at-sea transhipment operations.

AIS analysis shows that, in addition to the Atlantic trade in small pelagics, both vessels are also involved in transport of tuna caught in the FCWC region and adjacent high seas areas.

This includes catch from purse seiners, which is transhipped in port in Abidjan. This catch is transported to international processing hubs, such as Port Victoria and Manta, Ecuador.

GREEN AUSTEVOLL and GREEN MALOY are flagged to Bahamas and owned by Norwegian company GREEN SHIPPING AS, a subsidiary of the GREEN REEFERS AS group, which specializes in the transport of chilled and frozen products. All ship-owning and management companies of the GREEN REEFERS group are owned by CAIANO AS.

The two reefers are operated by GREEN SEA CHARTERING BVBA (GSC), a Belgian company established as a shipping pool by GREEN REEFERS and the SEATRADE group – the largest operator of refrigerated cargo ships in the world.

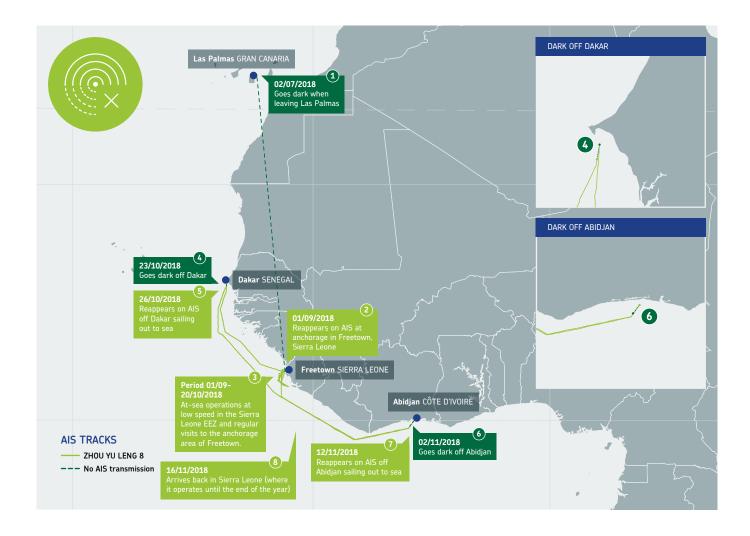


Vessel name	GREEN AUSTEVOLL	GREEN MALOY
IMO number	8819299	8804579
Flag	Bahamas	Bahamas
Year of build	1991	1990
GT	5,084	5,084
Insulated capacity	7,521	7,525
TEU	142	142

Risk factors

The journey details presented here are not considered to be indicative of illegal activity, but show the complexity of vessel movements and the need to pay attention to factors such as time spent at anchorages and in port, loitering behaviour at sea, indicated encounters and gaps in AIS transmission when analysing a port entry request and the vessel documents received with it. Transhipment operations at-sea in Angola are not limited to GREEN SEA CHARTERING-operated reefers and are considered high-risk by the WATF. Those operations are banned in the absence of a fishery observer, however according to a recent assessment the number of monitored transhipments is low, raising the possibility that some catch bound for West African ports may have been transhipped illegally¹. The WATF has also documented cases where allegedly authorised transhipment operations in Angolan waters were not supported by valid export authorisations.

¹ Pramod, G. (2017) Angola – Country Report 8 pages, In: Policing the Open Seas: Global Assessment of Fisheries Monitoring Control and Surveillance in 84 countries, IUU Risk Intelligence – Policy Report No. 1, Canada



CASE STUDY ZHOU YU LENG 8

'Going dark' when approaching ports

Vessel name	ZHOU YU LENG 8
IMO number	8887997
Flag	China
Year of build	1995
GT	943
Insulated capacity	1,285
TEU	0

The reefer ZHOU YU LENG 8 is an example of a vessel that does not appear on AIS for extended periods of time including while operating in the FCWC region and in source fishery areas to the north. During 2018, no AIS transmissions were received from this vessel between January and June, although port records from both Dakar and Abidjan indicate that it was active in the FCWC region and in Senegal during this time. It transmitted briefly from Las Palmas in July and then disappeared from AIS again until September – during this period its operations are not known. From September to December, ZHOU YU LENG 8 transmitted more consistently on AIS but had a significant number of shorter AIS gaps.

This reefer appeared to transmit on AIS whilst operating at sea but disappeared from AIS when approaching port in Dakar or Abidjan and did not reappear until after the port visit. Switching AIS off to enter port is particularly risky behaviour from a maritime safety perspective – as AIS is important for reducing collision risk in busy areas, such as the approach to ports. The reason for these gaps in AIS is unclear, but they could indicate attempts to conceal operations in coastal areas.



CASE STUDY SAN ELPIDIO AIS turn offs between ports

Vessel name	SAN ELPIDIO
IMO number	8814902
Flag	Panama
Year of build	1989
GT	4,579
Insulated capacity	5,580
TEU	0

The SAN ELPIDIO is a reefer that almost always systematically switches off its AIS unit between port calls. SAN ELPIDIO operated between Walvis Bay in the south to Las Palmas in the north during 2018. During these operations, the vessel transited the FCWC area and entered port in Togo, Benin, Ghana and Côte d'Ivoire. During this time, it was responsible for one of the longest recorded AIS gap amongst the reefers monitored in 2018, the gap started in the EEZ of Ghana on 8 February 2018 and ended in Benin on 22 March 2018, a total of 1,005 hours.

The AIS gaps, usually made while transiting or operating at sea may occur for a number of different reasons including to cover-up legal and/or illegal activities such as unauthorised transhipment.



CASE STUDY HAI FENG fleet Reefer to reefer encounters



In port

At sea (suspected) Fishing vessel to reefer Reefer to reefer (suspected)



Demersal Small pelagics



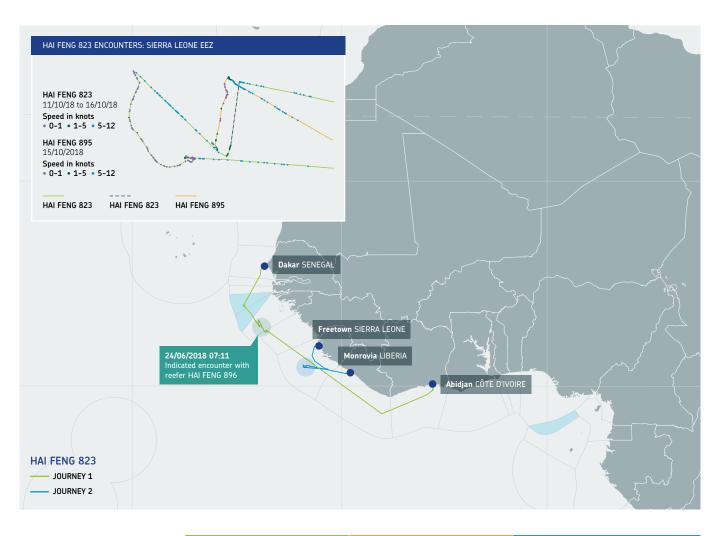
Compliance Loitering Encounters AIS gaps

There were 20 encounters detected between reefers and other cargo vessels during 2018 that are of interest to the FCWC region. Many of these reefers have visited FCWC ports while others are servicing vessels linked to the FCWC region. Ten of these were encounters between reefer vessels in the HAI FENG fleet. These ten encounters occurred in the EEZs of Guinea, Guinea-Bissau, Senegal and Sierra Leone and involved HAI FENG 823, 895 (both of which made calls into FCWC ports) and HAI FENG 896, which although it didn't operate in FCWC EEZs during 2018, but operated in EEZs further north, has connections to the FCWC region.

The HAI FENG 823 and HAI FENG 896 are owned and operated by ZHONGYU GLOBAL SEAFOOD CORP. (ZGSC) a company controlled by the State-owned enterprise CHINA NATIONAL FISHERIES CORPORATION (CNFC). HAI FENG 895 is operated by a Panamanian shell company, YUN FENG S.A.., under the same beneficial ownership. The HAI FENG reefers regularly land fish in the FCWC region, mainly in the ports of Monrovia, Abidjan and Tema. On arrival in FCWC ports, HAI FENG reefers are therefore likely to be carrying a combination of fish products loaded or transhipped in multiple ports and at-sea locations across several jurisdictions – which presents a challenge for MCS and due diligence verifications.

Several HAI FENG reefers regularly visit the anchorage area in Bissau port, Guinea-Bissau, where transhipment operations are reported to take place with ZGSC's fishing vessels. They also frequently visit the in-port transhipment area of Freetown, Sierra Leone, where several of their historically associated fishing vessels currently operate, including vessels of the CNFC fleet with which they were previously accused of transhipping illegally in Guinea.

Some also visit the anchorage of Nouadhibou, Mauritania, where CNFC operates a fishing fleet and controls a fish processing company, MAURITANO-CHINOISE DE PÊCHE. They also regularly visit the port of Dakar to load fish caught by affiliated fleets (such as the CNFC joint venture SENEGAL PECHE).



Vessel name	HAI FENG 823	HAI FENG 895	HAI FENG 896
IMO number	8863496	8814237	8420751
Flag	China	Panama	China
Year of build	1992	1989	1989
GT	1,328	3,503	1,599
Insulated capacity	1,530	4,248	2,257
TEU	0	0	0

Compliance history

The HAI FENG fleet has a history of illegal operations and transhipment in West Africa. Most recently, HAI FENG 823 was arrested by Liberia in December 2018 for lying to a Liberian Coastguard Officer, presenting falsified documents and conspiring to violate the tax and customs laws of Liberia. The vessel was offloading a cargo of fish that had been transhipped at sea in Sierra Leone and presented false documentation that understated the quantity of fish on board. In addition, it was reported that the true quantity of catch on board exceeded that permitted on the Sierra Leone export permit¹.

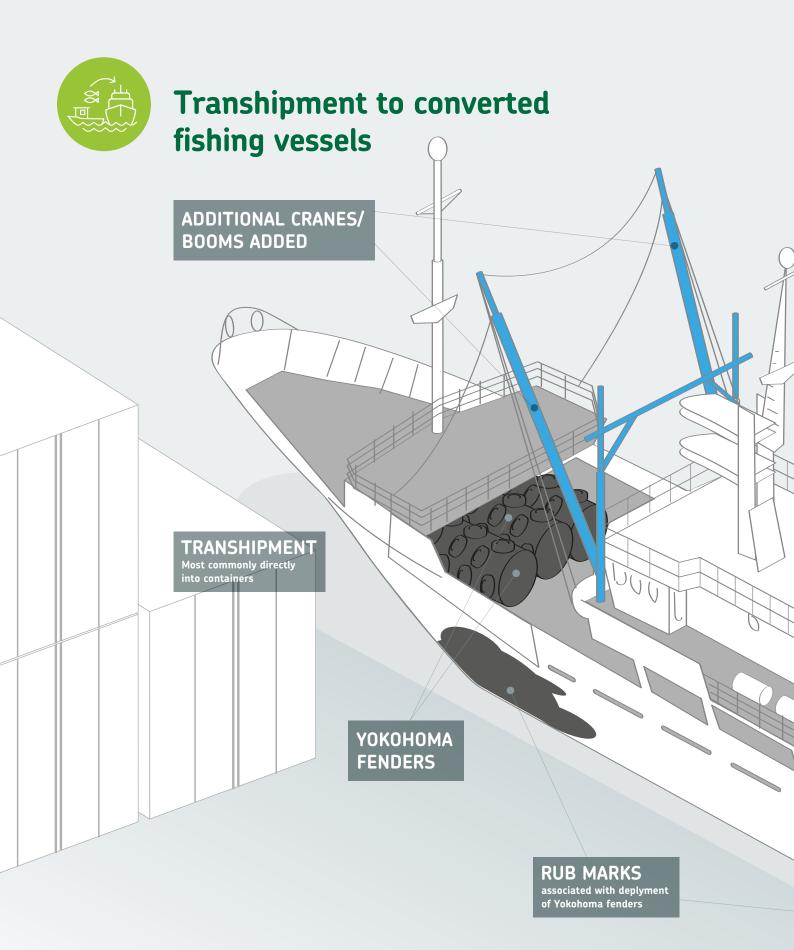
HAI FENG 823, 829, 830 and 896 have a documented history of offences including illegal transhipment in Guinean waters and bypassing customs authorities whilst offloading catch in Spain (2006)².

The HAI FENG reefers were directly owned and operated by CNFC and were servicing the group's fishing fleet in West Africa. Historically several unauthorised at-sea transhipment operations between HAI FENG reefers and CNFC fishing vessels have been documented, particularly in Guinea waters³.

¹ https://www.seashepherdglobal.org/latest-news/arrest-liberia-haifeng

² EJF (2007) Pirate Fish on our Plate: Tracking illegally-caught fish from West Africa into the European market

³ EJF (2009) Dirty Fish – How EU Hygiene Standards facilitates illegal fishing in West Africa





From: **Fishing vessels** To: **Container in port**



Tuna Shark Demersal species Small pelagics



In recent years a new type of transhipment vessel has appeared in the broader West Africa region. Fishing vessels are switching operations from fish catching to fish transport operations.

POSSIBLE ADDITIONAL FREEZER HOLD SPACE ADDED

While, visually these vessels can be difficult to distinguish from active fishing vessels, some of them have been linked to illegal fishing, fish laundering, document fraud and forgery, complex company structures and opaque beneficial ownership.

These vessels, sometimes known as 'mini-reefers' may be reconfigured to have larger cargo and freezing capacity, as well as deck cranes and booms to conduct at-sea transhipment operations. They may carry Yokohama fenders to enable them to come safely alongside another vessel at sea. Or they may, at the simplest, have the fishing gear removed or stowed, and the holds are used to store transhipped fish. However, these are not necessarily permanent changes, and in some cases, vessels appear to be capable of and are used in both fishing and transport operations to some degree interchangeably.



CASE STUDY TIAN YI HE 6 Fishmeal factory vessel operating in West Africa



At sea (suspected) Fishing vessel to factory ship Factory ship to reefer



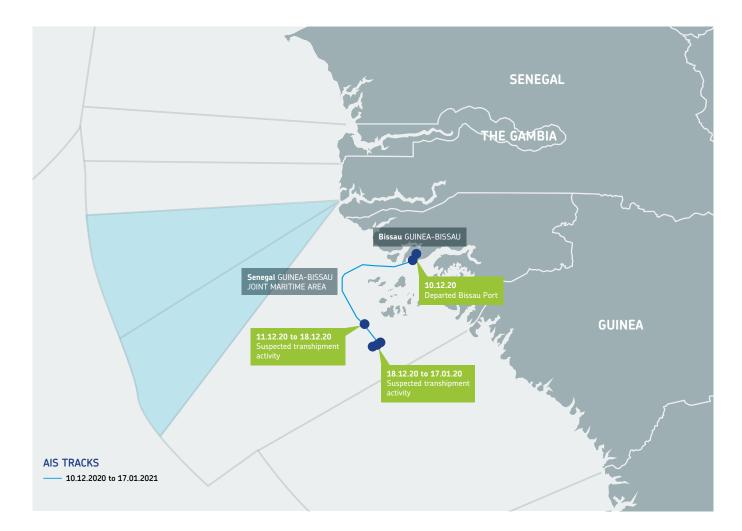
Small pelagics



Compliance Loitering Encounters

The TIAN YI HE 6 is a fishmeal factory ship that started operations in West Africa in late 2019, after transiting from China. AIS monitoring indicates the vessel was not active on fishing grounds between 2017 and 2019. The vessel was monitored by the WATF when it arrived in the region at a time when small pelagic fishing vessels were looking for new fishing opportunities in West Africa countries, and the Chinese market for fishmeal had a product shortfall, particularly for high quality fishmeal.

The TIAN YI HE 6 was previously active in the Northwest Indian Ocean (potentially in the squid fishery – squid-meal being a known substitute for fishmeal, particularly for use in aquaculture), and then in the Northwest Pacific Ocean. Shortly after its arrival in Guinea-Bissau, the vessel was accused of hiding its fisheries purpose and as a result was fined for failure to notify Guinea-Bissau authorities when entering the EEZ, a violation of the national fisheries law, and for obstructing the work of fisheries inspectors.



Vessel name	TIAN YI HE 6
IMO number	8698633
Flag	China
Year of build	2010
GT	11,296
Insulated capacity	Not known
TEU	0

Compliance

The vessel started operations in Guinea-Bissau in November 2019, and its stationary behaviour in the Senegal-Guinea-Bissau Joint Maritime Area prompted an investigation by Guinea-Bissau authorities. Authorisation is also required to operate as a fish carrier vessel, and transhipment is restricted to a dedicated area near the port of Bissau.

The investigation identified several unauthorised at-sea transhipment operations with Turkish-flagged purse seiners targeting small pelagics, previously operating in Mauritania. The TIAN YI HE 6 and the fishing vessels providing the fish were charged and fined. The TIAN YI HE 6 resumed operations in the Guinea-Bissau EEZ in February 2020. In March 2020 the TIAN YI HE 6 and a Dakar-based transport vessel were caught in the middle of an unauthorised at-sea transhipment operation. Ongoing monitoring suggests that possible at-sea transhipment operations have continued to take place, involving Turkish-flagged purse seiners, as well as new Chinese-built vessels flagged in São Tomé and Príncipe that arrived in Guinea-Bissau in October 2020. Fishmeal landed in the region's hubs – either by the factory ship itself or by associated transport vessels – for onward exportation to end markets should therefore also be the focus of thorough port controls.



CASE STUDY SAIKO in GHANA

Transhipment to small transport vessels



At-sea Trawler to transport canoe



Small pelagics



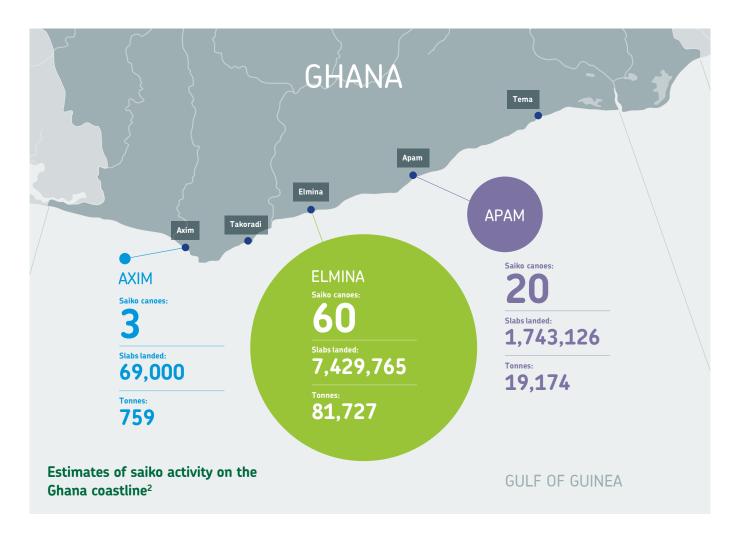
Ownership Monitoring Enforcement

Saiko is an example of transhipment from fishing vessels to small transport vessels. It began as a practice whereby Ghanaian canoes would trade supplies for unwanted by-catch from industrial trawlers. But today these trawlers actively catch such fish to, while still at sea, transfer it frozen to specially adapted canoes. These canoes then transport the fish to landing sites and fish markets. Such trawlers are licensed to catch demersal species but in reality, they also catch small pelagic species such as sardinella and mackerel, thus competing with the artisanal fishing community and contributing to overfishing of the stocks. While saiko is commonly practiced in Ghanaian waters, Ghanaian saiko canoes also travel to the border with Côte d'Ivoire, in order to trade with industrial vessels fishing there.

Due to saiko's illegal and unreported nature, there is limited information on the scale of and composition of the catches. However, a recent study by the Environmental Justice Foundation (EJF) and Hen Mpoano¹ estimates that approximately 100,000 MT of fish were landed through saiko in 2017. Small pelagic species make up more than half of the saiko catch weight, and the value of fish sold at sea is estimated as between USD 40 to 50 million. The value of this increases when it is sold at the landing sites to an estimated USD 53 to USD 81 million.

Combining saiko landings with official landings reported by the industrial trawl fleet of 67,205 MT, it is estimated that trawlers caught approximately 167,000 MT of fish in 2017. Estimated landings of the trawl fleet in 2017 were similar in magnitude to the landings of the entire small-scale fishing sector. This suggests that just 40% of catches were landed legally and reported to the Fisheries Commission in 2017, despite having fishery observers present to monitor fishing activity on some of the vessels. As the saiko fish are not landed in ports but transhipped at sea, Ghanaian inspectors are unable to monitor the transhipment or landing of the catch. This means that they cannot verify catch volume or species composition correctly during their routine implementation of port State measures and vessel inspections.

¹ EJF and Hen Mpoano (2019). Stolen at sea. How illegal 'saiko' fishing is fuelling the collapse of Ghana's fisheries. http://ejf.mudbank.uk/resources/downloads/Stolen-at-sea_06_2019.pdf



Impacts

The transhipment of fish at sea from Ghanaian industrial fishing vessels to canoes is prohibited in Ghana's 2010 Fisheries Regulations. Lack of enforcement means that industrial trawlers lack incentive to reduce their bycatch and artisanal fishers are demotivated to address their own destructive fishing practices – including the use of dynamite, poison and undersized mesh nets – as well as their over-capacity.

The saiko industry employs significantly fewer people than the artisanal sector, 1,500³ versus two million in the artisanal sector. However, an average saiko canoe lands in a single trip the equivalent of around 450 artisanal fishing trips. So while the saiko industry has expanded rapidly, the catches of the artisanal fishery have been declining despite increased fishing effort. This affects livelihoods and poverty levels as around 200 coastal villages rely on fisheries as their primary source of income. Furthermore, saiko depresses the prices on the market, in particular for small pelagics, which means the artisanal fishers get less for the fish they manage to catch. The substantial catch of small pelagic fish through saiko is unreported and not included in marine fishery statistics. Juveniles make up a significant portion of the saiko catch, affecting the viability of the stock. Recent assessments suggest that Ghana's small pelagics fishery may collapse in the short term⁴.

Despite national laws prohibiting foreign ownership and control in the sector, over 90% of the industrial trawl fleet operating in Ghana are linked to Chinese beneficial owners, although the fishing vessels are flagged to Ghana.

² Slabs landed (≈11kg).

³ Crewmembers, watchmen and hustlers (EJF & Hen Mpoano, 2019).

⁴ Lazar, N., et al. (2018). Status of the small pelagic stocks in Ghana and recommendations to achieve sustainable fishing 2017. Scientific and Technical Working Group. USAID/ Ghana Sustainable Fisheries Management Project (SFMP). Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island.

ACRONYMS

AIS	Automatic identification system
CNFC	China National Fisheries Corporation
EEZ	Exclusive economic zone
EJF	the Environmental Justice Foundation
FCWC	Fisheries Committee for the West Central Gulf of Guinea
FAO	Food and Agriculture Organization
GT	Gross tonnage
IMO	International Maritime Organization
МТ	Metric tonne
NGO	Non-governmental Organization
SIF	Stop Illegal Fishing
TEU	Twenty-foot equivalent unit
тмт	Trygg Mat Tracking
WATF	West Africa Task Force
ZGSC	Zhongyu Global Seafood Corporation













The West Africa Task Force brings together the six member countries of the FCWC – Benin, Côte d'Ivoire, Ghana, Liberia, Nigeria and Togo – to tackle illegal fishing and fisheries crime. The Task Force is hosted by the FCWC and supported by a Technical Team that includes TMT and Stop Illegal Fishing with funding from Norad. By actively cooperating, by sharing information and by establishing interagency working groups the West Africa Task Force are working together to stop illegal fishing.

For more information go to: www.fcwc-fish.org