

Cargo ships from around the world are moving untracked in African waters, where the rise of a new fishing activity affects everything from local biodiversity to piracy. By **Ben Heubl**

FISHING IN MURKY WATERS

THE VERACRUZ SHOULDN'T simply disappear. This is no small fishing boat but a 108m-long, 3,755 gross tonnage, refrigerated cargo ship built in 1977. Yet every time it crosses the sea border from Namibia to Angola it seems to do exactly that, as its operators switch off the automatic identification system (AIS) tracking signal. 'Going dark' contravenes the international treaty for Safety of Life At Sea (SOLAS) rules for ships like this of over 300 gross tonnage.

The Veracruz was repeatedly receiving catches from a local fishing vessel. This 'transshipment' practice, transferring catches from small fishing boats to larger refrigerated carriers or 'reefers', seems harmless enough on the surface but when it's done clandestinely, unmonitored and unregulated, it may contribute to loss of biodiversity, over-fishing, seafood fraud, even human rights violations and piracy.

According to Greenpeace, Europe's involvement in the flourishing fish transshipment business of West Africa has been growing, with European-owned reefers behaving suspiciously at sea. Some operate legally; others do not. Either way, European

owners take advantage of poor oversight in the region, where authorities appear powerless to control transshipping. Europe then benefits at the expense of some of the poorest nations in the world.

West Africa is a hotspot for what is known in the industry as illegal, unreported, and unregulated (IUU) fishing. The UN's Food and Agriculture Organization says IUU fishing and transshipping are tightly connected, and West African nations lose \$2.3bn each year to it, according to *Frontiers in Marine Science* journal.

How does the fish transshipment business work? Refrigerated cargo transport vessels rendezvous at an arranged time and location, say those in the business, sometimes to just exchange supplies or crew members. But when they transfer catch from a fishing boat, the frozen fish often end up in Europe, sometimes labelled as a species they're not.

Cargo vessels ship large quantities of fish over thousands of miles from Sierra Leone, Liberia and Ghana, Mauritania, Angola or Guinea, to foreign markets. Such practices can affect fish stocks that are also affected by climate change and warmer seawater, and

leave local fishers short of catch for the home market. Across West Africa, 37 species are now classed as 'threatened with extinction'. Between Angola and Mauritania, 14 others are nearly threatened, according to the International Union for the Conservation of Nature (IUCN).

Mapping the encounters

E&T's investigation followed several European cargo ships. Fisheries intelligence outfit Trygg Mat Tracking (TMT) provided us with a list of reefer vessels, some of them from Europe, matching tell-tale signs of transshipping. With the help of open data and information from Global Fishing Watch's tracking platform, it was possible to map their encounters and loitering events.

The analysis suggests that little has changed for those operators over the past three years, as the volume of encounters has remained stable. They are still turning off their AIS tracking. So why do they go dark?

Hans Mol is managing director of the European fishing cargo firm GreenSea Chartering, a company that has previously been fined for violating transshipping rules.



Going dark in West Africa

Open records from the carrier vessel Veracruz show how it repeatedly turned 'dark' by turning off its AIS signal whenever it sailed between the exclusive economic zones (EEZ) of Angola and Namibia.

It helps clients, among other things, to “send vessels pro-actively to meet [client’s] fishing vessels at the fishing grounds so they don’t waste any time going back and forth between ports”, according to its website. The firm maintains a large fleet: 38 ships are listed on its website. Mol told *E&T* his fleet is involved in fish transshipping in the Gulf of Guinea and the ships turn off AIS transponders in West Africa because of the rising threat of piracy. “There is a constant dialogue whether to turn off our AIS signal. Do you want to be visible for the pirates? The Gulf of Guinea is where we sometimes switch it off. Our first attack and kidnapping was in 2012”, he says. That was the Breiz Klipper off Nigeria.

West Africa has become a world hotspot for pirates, taking over from the Horn of Africa. In January, an attack on a Turkish cargo ship in the Gulf of Guinea vessel killed one and captured 15 crew members. This surge in piracy is linked to fish transshipment in the region, experts say. The rise of factory fishing hit the local, small-scale fishing sector the hardest. The growth of industrial fishing in the region has pushed many of the traditional fishers out of work. Piracy

became a lucrative alternative, one ship’s captain told the journalism network OCCRP.

“I believe the life of the people on board is the most important value and AIS is turned off for their safety and security”, a Green Shipping representative told *E&T*.

Global Fishing Watch, a monitoring group, insists the AIS signal is a safety feature that helps captains avoid collisions with other ships. Even US Navy warships, normally exempt from the rule, nowadays turn it on in congested waters after a number of high-profile collisions.

Why not just avoid West Africa altogether? ‘Going dark’ is risky but the business is lucrative. Mol said while the piracy threat for his company’s fleet is significant, it’s not significant enough to quit operating there.

“We should all, including us and Maersk and CMA, stop going to Ivory Coast, Ghana, Benin, Togo, Nigeria, and Cameroon,” he said. Yet *E&T* found the GreenSea reefer Green Selje loitering in Ghana’s exclusive economic zone (EEZ), and other GreenSea vessels were spotted in economic zones of countries Mol mentioned.

Mol says his firm’s business is legal: “We are transshipping according to the quotas set out in rich fishing grounds including Morocco and Mauritania. We are not transshipping pelagics in Ghana or Nigeria or any of these countries,” he says.

Operators in West African waters are highly specialised, either operating exclusively within the region or going back and forth between Africa and continental Europe. West Africa is a lifeline for some big European cargo firms. GreenSea has only a handful of serious competitors. They all know each other well.

Global Fishing Watch data indicates that the Spanish reefer V Centenario is among

aggressive examples of reefer operators in West Africa. Vesselfinder lists the owner as Rodríguez Mariscos SA, but when *E&T* contacted the company we received no reply.

To Mol, though, it is not European ships that are the problem; it is the Chinese and Russian ships and container vessels responsible for unauthorised fish transfers. “[Our reefers] are considered fishing vessels. We have to be transparent,” he said. “Container vessels don’t have to follow the same rules.”

Flags of convenience

E&T’s research confirmed that Chinese reefer fleets are active in the region, but they concentrate elsewhere more densely. Only a handful of encounters by Chinese cargo vessels were found and few loitering events – that is when vessels stand still at sea, potentially waiting for a rendezvous. However, flag status alone may be deceptive. Chinese-run vessels often opt for a flag of convenience. So do European operators. Most of GreenSea’s reefers, for example, are registered under the flag of the Bahamas, one of several states operating a so-called ‘open register’. Common encounters by flag are among Liberian and Russian-flagged cargo vessels.

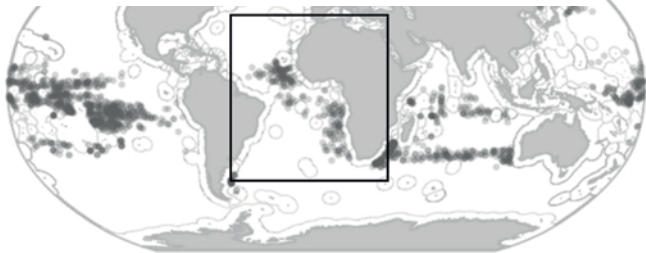
Authorities find it hard to determine who operates illegally and who doesn’t. The UN Food and Agriculture Organization (FAO) says transshipments in West Africa bring a unique monitoring challenge for state authorities, but reefer operators say that as long as all transshipments are authorised, there is no problem. Legal fish transshipments are recognised and listed by national authorities. GreenSea says it operates legally under established fishing partnership agreements. >

Global patterns of transshipment for different fishing gear

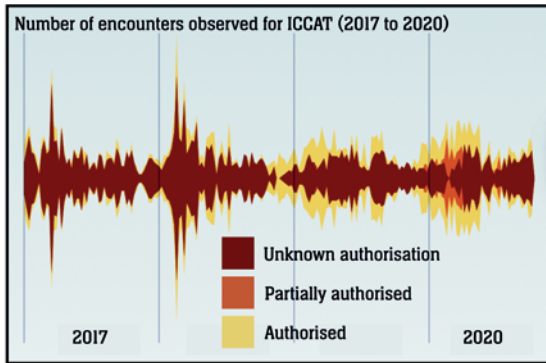
Drifting longlines



Drifting longlines is often criticised for its bycatch of vulnerable species when fishers unintentionally catch vulnerable species such as endangered seabirds, sharks or sea turtles.

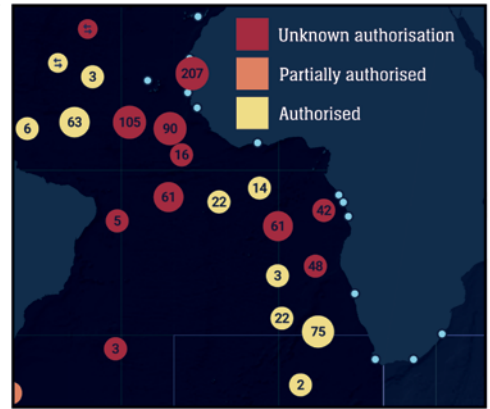


All likely encounters between reefers and fishing vessels as identified from AIS data spanning 2012 to 2017 and separated by fishing gear type are shown. EEZs outlined in light grey. Pictograms represent major target species.

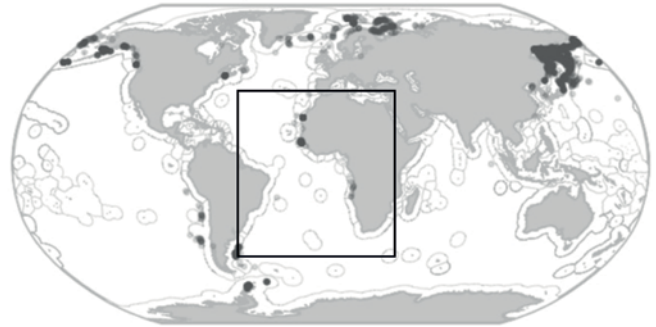


Though, now with more authorised encounters, volume across the ICCAT area remained stable between 2017 and 2020

Number of encounters for the International Commission for the Conservation of Atlantic Tunas (ICCAT) between January 2017 and November 2020 shows that West Africa is crowded with encounters without known authorisation



Trawlers



SOURCE: STUDY 'GLOBAL HOT SPOTS OF TRANSSHIPPING OF FISH CATCH AT SEA' PUBLISHED IN SCIENCE ADVANCES, JULY 2018; GLOBAL FISHING WATCH CARRIER PORTAL, ACCESSED FEBRUARY 2021

More AIS tracking could improve surveillance with uninterrupted monitoring but it's not mandatory or even installed on smaller ships. An alternative is the Vessel Monitoring System (VMS), a satellite-based system that provides data to the fisheries authorities on location, course and speed at regular intervals. However, both VMS and AIS have limitations. They can be deliberately disabled or manipulated to evade detection by entering false or simulated data, according to a study by Interpol on fisheries crime in West Africa.

Reefer operators need to be made accountable. GreenSea learnt the hard way and paid dearly for its violation. "It was a mistake [but] we learned a lot from it. We must become part of policymaking", a GreenSea representative told *E&T*. It sought advice from Friend of the Sea (FoS), a not-for-profit organisation promoting sustainable fisheries, which helped the company to revise its existing procedures to avoid IUU fishing.

Mol says his firm's reefers and procedures are audited "to make sure that we do everything to avoid IUU [fishing]". FoS audits and certifies some of GreenSea's vessels each year. This year, for example, it's looking at the vessels Green Maloy and Green Bodo. Both were mentioned in Trygg Mat Tracking's list of active reefers with conspicuous patterns for which *E&T* found numerous loitering events in Angola. Paolo Bray, founder and director at FoS, says there are now no compliance issues to his knowledge.

Mol says the worst outcome for illegal transshippers is to be added to blacklist databases. But they aren't perfect. FoS and other blacklist operators have to rely on tip-offs. Some violations may go unnoticed. The EU and regional fisheries management

Catching vessel to refrigerated cargo vessel

Where it takes place: Ports, anchorages, across countries' exclusive economic zones or at high seas

SOURCE: FAO, STUDY: 'TRANSSHIPPING: A CLOSER LOOK'

Rating (1 to 5)	
Global occurrence	4
Volumes transhipped	5
Adverse fisheries impacts	5
IUU fishing risk	5
Importance to industry	5
Social importance	4
Degree of management	3
MCS implementation	3

organisations maintain official IUU blacklists, but unlisted vessels can sail without alarming authorities and may continue to commit violations undetected.

The modern answer to monitoring is a mix of AIS tracking data, satellite and radar monitoring, together with improved policy and authorisation schemes. In Japan and Peru, the authorities are now using cutting-edge technology to battle IUU fishing in their economic ocean zones.

Global Fishing Watch, SkyTruth and Google applied AI algorithms to more than 30 billion AIS messages from vessels to look for signs of transshipping, and the effort yielded a number of positive results, says to

Global Fishing Watch CEO Tony Long. Furthermore, the organisation now makes use of satellite data gathered by the US National Oceanographic and Atmospheric Administration.

The second strand to a long-term solution is enforcement, with more help from Europe to developing nations that lack resources. For example, Angola benefits from assistance by the French Navy, which patrols the coast to combat illegal fishing as well as piracy. Just as Europe collaborates with African nations to battle migration, it may want to increase efforts to assist West African partners like Ghana to combat illegal fishing. *