

# How to End Illegal Fishing

From coastal waters to the high seas, criminals are robbing the oceans and jeopardizing communities, economies, and the environment. It's the great ocean heist, and here's how to stop it.

## Overview

Every time you buy seafood at a restaurant, store, or waterfront dock there is a 1-in-5 chance that the fish was caught outside the law. Illegal and unreported fishing worldwide accounts for up to 26 million metric tons of fish annually, worth up to \$23.5 billion.<sup>1</sup> That equates to more than 1,800 pounds of wild-caught fish stolen from our seas *every second*.

Aside from the sheer scale of these crimes, why should you care?

Illegal fishers, by plundering this natural resource, are cheating coastal communities that depend on fish for sustenance and income, undermining the position of law-abiding commercial fishermen, skewing scientific assessments that measure the state of our fisheries, and deceiving consumers who trust that the seafood they purchase came through a fully legal supply chain.

Monitoring and enforcement of global fisheries is a huge challenge because of the vast size of the ocean, the large number of boats that are fishing, their mobility, and the fact that industrial fishing vessels are not required to operate under a standardized system of vessel identification, nor carry radio or satellite transponders that enable real-time monitoring of their location. Vessel operators can easily change a boat's identity and conceal its whereabouts, thus staying one step ahead of the law while further depleting the oceans of valuable resources.

Put simply, there are too many large fishing vessels chasing and catching fewer fish, and too many of their owners are not playing by the rules—rules that require licenses, environmentally sound gear, and fixed quotas to ensure sustainable fisheries. With 80 percent of the world's fisheries already fully exploited or overexploited,<sup>2</sup> illegal fishing is a serious economic and environmental threat. And the protections now in place to address it have proved inadequate.

Pew's ending illegal fishing project is working around the world to develop and establish an international fisheries enforcement regime that will significantly reduce illegal, unreported, and unregulated, or IUU, fishing. This work focuses on industrial-scale fishing, which does the greatest damage both environmentally and economically, and on cooperation with key partners for policy changes and actions that can be carried out over the next five to 10 years. Our objective is to ensure that within a decade there is a cost-effective global system that monitors, deters, prevents, and prosecutes illegal fishing.

Illegal fishermen are organized criminals who exploit the loopholes and gaps in a massive and fractured global fisheries management system. Stopping them requires a broad, long-term, persistent, and evolving effort. Criminal fishing operations now take advantage of:

- Poor communication between coastal states and fisheries management bodies.
- Loose controls at many ports.
- Inadequate information-sharing systems.
- Underresourced enforcement patrols, especially in developing countries.
- Industrial-sized commercial fishing vessels that are not required to have unique vessel identification numbers.

Reducing illegal fishing requires solutions in each of these areas.



Kashfi Halford

Artisanal fishers in many parts of the world are reporting declining catches, in part because of depletion of fish populations by illegal, unreported, and unregulated fishing.

## Where are the gaps?

Most countries, particularly developing and small island states, have insufficient resources to spend on at-sea monitoring, control, and surveillance. This leaves most of their exclusive economic zones, or EEZs, which extend 200 nautical miles from the shoreline, open for business by unscrupulous operators.

Similarly, it remains easy to cheat the system on the high seas beyond national waters even when regional fisheries management organizations, known as RFMOs, have set fishing policies, such as quotas for high-value species including bluefin tuna and orange roughy. Only countries that sign on as members of an RFMO are bound by its rules, so vessels registered, or “flagged,” in nonmember countries are free to ignore the rules and fish at will. If owners of vessels flagged to a member country do not want to abide by an RFMO’s quota, they can simply reflag their vessel to a nonmember state and fish with impunity.



Frank Day

Artisanal fishing canoes await launch in Kokobrite, Ghana. The catch of some near-shore species in Ghana has declined drastically in recent years, in part because of illegal fishing incursions by industrial trawlers.

When this IUU fishing depletes fish stocks and forces regulators to reduce catch limits, legitimate fishermen who follow the rules designed to preserve the health of the marine environment bear the burden.

As long as countries depend on a system that relies on compliance by flag States to enforce regulations, high seas fisheries crime will remain a serious problem. Many irresponsible flag States shirk their commitments. Vessel owners are not required to reveal information about themselves or their vessels' history before reflagging their ships.<sup>3</sup> So owners can also change the name and registered owner of a boat to evade enforcement, leaving coastal countries and fisheries regulators almost no recourse even if they amass evidence against a suspected illegal fisher.

If vessel owners do not want to follow the rules, they can simply reflag their boats and fish with impunity.

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## Pew's approach

Pew's strategy envisions within 10 years a global fisheries enforcement system that enables even the most resource-poor fisheries officials access to clear, up-to-date information from a central, reliable source. This marine policing system would allow an official, through a single text message or mouse click, to access data needed to decide whether to permit or deny port entry to a vessel or, if need be, to begin infringement proceedings against its owners. To be effective, this system needs to be dynamic and flexible and have local political backing and the support of the policing community.

Accomplishing this will require:

- The ability to clearly identify IUU fishing vessels.
- Greater transparency through collecting and sharing information beyond national borders.
- Enforcement personnel trained, ready, and willing to act.
- The ability to sanction vessel owners and operators.

## Defined, achievable goals

Effectively fighting any organized crime requires flexibility to match the changing tactics of criminals. Those committed to ending illegal fishing worldwide must be ready to change course as conditions evolve, but each of the following goals are crucial to tackling the problem as a whole.

### Pull back the cloak of secrecy

Require unique vessel identification numbers and satellite transponders on all industrial-sized fishing vessels. Broadly, this would apply to vessels weighing 100 gross tonnes or more and allow them to be more easily tracked.

### Close off avenues to IUU catch

Address the problem of irresponsible flag States by ensuring that countries ratify and implement the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, commonly called the Port State Measures Agreement.<sup>4</sup> This international treaty adopted in 2009 by the United Nations Food and Agriculture Organization empowers port officials to inspect foreign-flagged vessels suspected of illegal fishing and requires fishing vessels to give ample advance notice when approaching a port.

### Strengthen regulations overseeing IUU fishing

Focus on key fishing and market states to restrict the entry of IUU fish into global markets. This restriction can be accomplished through tighter

port controls, better information gathering and sharing across jurisdictions, and more transparency in vessel identification and location.

### Redefine IUU fishing

Secure international recognition by countries and international organizations such as the United Nations that IUU fishing is an organized transnational crime.

### Engage the global policing community

Maintain the fisheries crime unit at Interpol to fight illegal fishing. This unit was launched in February 2013, and it will work through Interpol's 190 member countries to reform and strengthen fisheries crime detection and enforcement.

### Begin global information sharing

Establish an independent fisheries information clearinghouse that rapidly analyzes and distributes vessel data to fisheries enforcement authorities, governments, and other involved entities.

### Boost policing abilities through regional pilot projects

Create a globally replicable model for improving fisheries enforcement in resource-poor regions. With Pew's support, a group of countries in southeastern Africa has created such a system, called FISH-i Africa. The initiative increases information sharing, training, and enforcement resources, and it has already resulted in denial of fish landings at multiple ports for a major tuna vessel charged with illegal fishing.

### Leverage technology to fight criminal fishing

Deploy the best technology available to improve the monitoring, enforcement against, and prosecution of IUU fishing. These technologies should be available for the benefit of all countries, regardless of their ability to fund or pay for them.



Crew members on a vessel suspected of illegal fishing paint a new name on the hull as Australian authorities approach for an inspection in the Southern Ocean in 2011. The vessel has had numerous names throughout its history, including Zeus, Lana, and Triton, and its flag has been revoked by Togo for illegal fishing offenses.

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Mandatory identification and global tracking systems would strengthen supply chain standards for the fishing industry at a time of great demand for transparency and accountability in consumer goods.

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## Meeting these goals

Each of these goals is achievable within 10 years. The policing tools to stamp out criminal fishing are available—provided that these tools are enhanced, that authorities remain nimble in response to the evolving nature of the crimes, and that strategies are developed to create a globally responsible and sustainable fishing industry.

### **Require fishing vessels to have unique identification numbers**

As the most straightforward and effective first step toward transparency in industrial fishing, every fishing vessel weighing 100 gross tonnes or more should be required to have a unique identifying number that stays with it from construction to scrapping and a tamper-proof, mandatory global tracking system.<sup>5</sup> These will prevent vessels suspected of illegal fishing from being able to change their identities or disappear, literally, off the radar.

The gold standard of unique vessel identifiers is the International Maritime Organization, or IMO, number. These numbers, much like the serial numbers on cellphones, automobiles, and other products, are already required for cargo and passenger vessels that meet certain size requirements.

The lack of a similar requirement for fishing vessels is a glaring oversight. Given the importance to police authorities worldwide of identification numbers to recognize and solve a range of crimes, there is no credible counterargument to requiring IMO numbers on fishing vessels.

Requiring identification numbers and global tracking systems would provide stronger supply chain standards for the fishing industry at a time when demand for transparency and accountability in consumer goods has never been greater.

Achieving this would require working with central players in the fisheries industry—legitimate fishermen, vessel financiers and insurers, fish buyers and retailers, regional fisheries management organizations, port authorities, and key governments—to encourage them to require IMO numbers and global tracking systems for all large vessels with which they do business.

While this process is occurring, Pew is also working in select countries to create a single, publicly accessible fishing vessel information system, based on IMO numbers, that other countries can eventually join in order to establish a reliable, cost-effective “one-stop” global system for identifying vessels.



The Spanish-owned Txori Argi, left, was fined \$1.2 million in 2012 for illegally fishing for tuna in Mozambique's waters. The South Korean-owned Premier was fined \$1 million in 2013 for forging a license to fish for tuna in Liberian waters.

## Increase port controls

Ports known for lax enforcement or limited inspections are prime spots for IUU fishermen to move their ill-gotten catch to market.<sup>6</sup> One important way to seal this gap in the supply chain is the Port State Measures Agreement. The treaty requires parties to exert greater port controls on foreign-flagged vessels and as a result keep IUU catch out of the world's markets, removing some of the incentive for dishonest fishing operators to continue their illegal activities. The treaty will take effect once 25 parties have ratified it.<sup>7</sup>

States enforcing the treaty would refuse entry or access to port services, including landing and shipment of fish, to foreign-flagged vessels known to have engaged in IUU fishing. These vessels would be subject to immediate inspection, with the results communicated to relevant states and organizations to help enforcement efforts.<sup>8</sup> As more ports shut out illegal catch, it would become costlier to get those fish to market, and harder for unscrupulous operators to make a profit.

Once in place, the treaty would promote sustainable fishing, boost cost-effective fisheries management and enforcement, increase transparency and information sharing among fisheries authorities, and help developing states improve IUU monitoring and enforcement.

The United Nations notes that illegal fishermen often commit other crimes, including evading taxes, bribing fisheries enforcement personnel, and hiding ill-gotten profits, and it urges strengthened law enforcement and international cooperation.



Authorities confiscated the Antillas Reefer in August 2008 after an investigation revealed it had been fishing illegally in Mozambique's waters. The ship was converted to a patrol vessel and now polices fishing off the coast of southeast Africa.

## Stronger law enforcement against fisheries crime

Many forms of illegal fishing—such as fishing in a no-take marine reserve or catching and trading in endangered marine species—qualify as environmental crimes in some countries, but not in others. This inconsistency limits the ability of governments to enforce fisheries and conservation policies equally around the world.

Illegal vessel operators have forged and altered licenses and other required documentation as a cover to fish illegally. According to the United Nations Office on Drugs and Crime, or UNODC, illegal fishing also is linked to transnational organized crime, including human trafficking (often for forced labor on fishing vessels), and drug and arms smuggling.<sup>9</sup>

UNODC notes that illegal fishers often commit other crimes, including evading taxes, bribing fisheries enforcement personnel, and hiding ill-gotten profits. The United Nations Commission on Crime Prevention and Criminal Justice in 2013 urged states to strengthen law enforcement and increase international cooperation to combat transnational organized crime committed at sea.<sup>10</sup>

A big part of stopping any transnational crime is to ensure that authorities, no matter where they are in the world, can communicate and cooperate effectively with authorities elsewhere. To that end, Pew and the Norwegian government have partnered with Interpol to establish Project Scale, an initiative that will leverage Interpol's 190 member countries to:

- Raise awareness about fisheries crime and its consequences.
- Establish national environmental security task forces to ensure cooperation on fisheries crime within and across borders.
- Assess the needs of countries that are particularly vulnerable to illegal fishing.
- Conduct operations to suppress criminal activity at sea and in port, to disrupt trafficking routes, and to ensure that national laws and policies are enforced.
- Increase surveillance to better police fisheries crimes.
- Gather better data on fisheries crime to help improve monitoring and enforcement.

Interpol will conduct targeted monitoring and enforcement operations with a focus on vulnerable regions, including western and southeastern Africa. Working through each member country's National Central Bureau, Interpol will strengthen marine enforcement expertise and, ultimately, improve fisheries compliance and enforcement worldwide. The global police organization has also developed a fisheries crime working group, which met for the first time in February 2013. This group will help Interpol member countries enhance their ability to prevent and respond to fisheries crimes, with greater information sharing and analytic and operational support. With its global reach and extensive experience fighting environmental crime, Interpol is ideally positioned to be a major player in the worldwide fight against illegal fishing and other fisheries crimes. The organization is leading effective global operations that have helped reduce illegal logging, rhinoceros poaching, and the ivory trade through better training of—and enforcement by—authorities policing those crimes.

Governments around the world can advance this goal by acknowledging the links between IUU fishing and transnational organized crime, and by introducing legislation to recognize the most severe cases of illegal fishing as environmental crimes. Governments should also bolster fisheries and criminal laws with an eye toward shutting down criminal activities associated with IUU fishing.

## **Develop a global fisheries enforcement system**

For years, a loosely knit group of experts on illegal, unreported, and unregulated fishing, many working independently, has tracked vessels and spotted irregular vessel activity around the world. In many cases, those experts were able to tip off enforcement officials to possible IUU violations.

It is time to bring structure and consistency to such investigative work and leverage it globally. Pew and its partners are establishing an independent fisheries analytical unit and information clearinghouse, guided by a working group of experienced IUU fishing investigators.

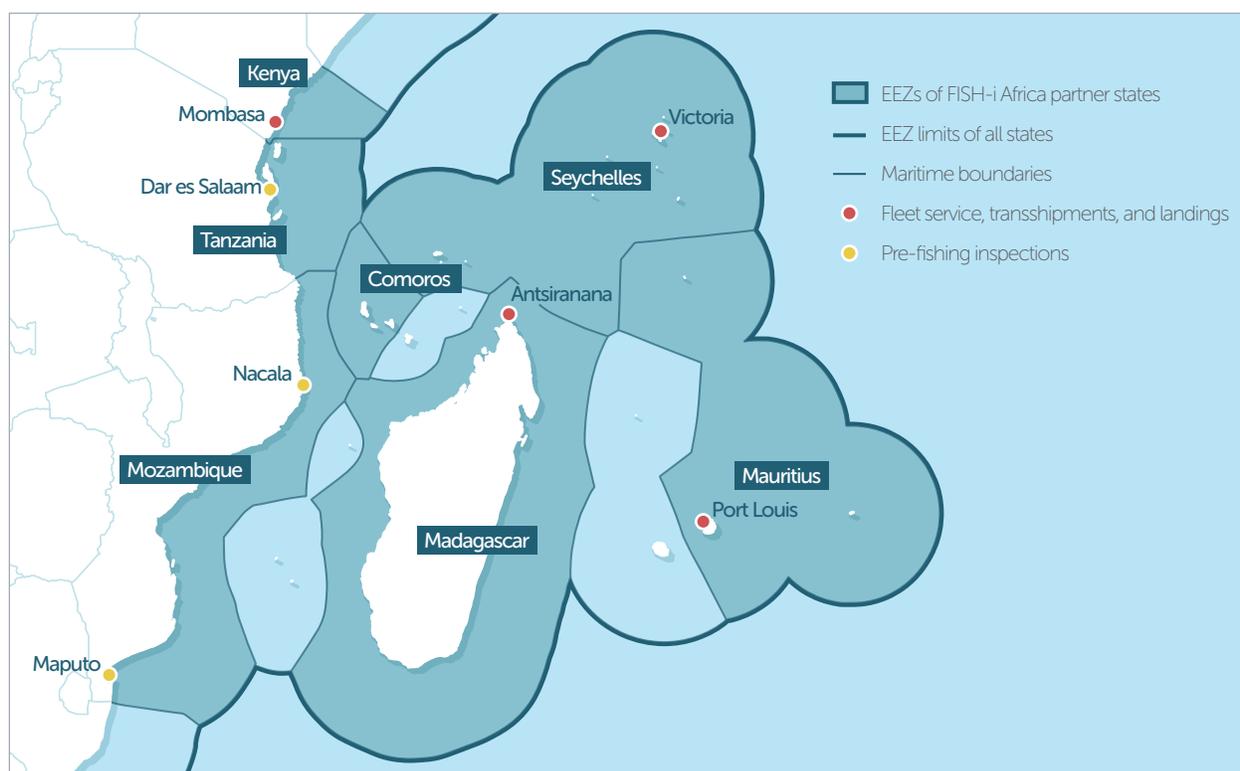
The analytical unit will have an independent global capacity to systematically organize, assess, and use data from a wide range of sources to inform enforcement authorities about suspicious vessels, allowing quick response to suspected illegal activity. The new unit will work closely with the Interpol fisheries crime program to create a comprehensive public-private hub for generating and sharing information and intelligence.

## Targeting illegal fishing hot spots

Illegal fishing is a problem in every ocean, but it disproportionately affects coastal states with limited resources or ability to respond. Those countries need an enforcement model that allows them to take effective action without large long-term costs. FISH-i Africa is that model. It has been tested under real-world conditions and designed to be replicated globally in resource-poor regions. Launched in December 2012, FISH-i Africa is a Pew-supported partnership among seven southeastern African nations—the Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, and Tanzania—to share information and coordinate responses to suspected illegal fishing in each other's waters.

### FISH-i Africa Countries and Their EEZs

Sharing resources and information helps FISH-i Africa partner countries monitor and enforce fishing policies across EEZs that cover a combined 4.9 million square kilometers (1.9 million square miles)



Source: SeaAroundUs, [www.searoundus.org/eez/](http://www.searoundus.org/eez/)  
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The Western Indian Ocean is one of the world's hot spots for IUU fishing. Regional governments, fisheries organizations, and nongovernmental bodies have demonstrated a strong commitment to tackle the problem. Within weeks of its launch, FISH-i Africa produced results, as several partner countries shared information that led to the denial of fishing licenses and port entries for the Premier, a South Korean-owned tuna vessel strongly suspected of IUU fishing off the Indian Ocean and Atlantic Ocean coasts of Africa.<sup>11</sup>

As the project continues, Pew will encourage high-level political engagement among southeastern African states, develop data sharing and enforcement training, and work with the partner countries to implement common tools, including vessel databases and monitoring software to provide a more accurate picture of ocean activity. That will help national enforcement agencies prepare for action against illegal vessels and aid in documenting any enforcement actions and resulting judicial penalties.

## **Putting new technology to work**

In addition to automatic identification system transponders to track the location of vessels, Pew is assessing other available software and hardware that could cost-effectively increase efficiency and accuracy in the effort to curtail illegal fishing.

We have joined with several fisheries and maritime enforcement entities and private companies to assess existing technology and ways to deploy it more dynamically and effectively to support rapid information exchange, tracking, and data analysis to interdict and successfully prosecute ship owners suspected of IUU fishing.

A focus will be on identifying technologies not currently used in the fisheries sector that could be adapted in these efforts, or specifically designed for use by the analytical unit, Interpol, or both.

## **Why Pew?**

The Pew Charitable Trusts has long recognized the rapidly escalating risks to our oceans and the incredible and vital marine life they harbor, and it has developed an international conservation program aimed at ensuring a sustainable ocean legacy for generations to come. Ending illegal fishing is a significant piece of this program.

Pew is known primarily for its science-based advocacy aimed at major policy goals and its leadership in bringing together disparate groups with shared objectives. Pew believes that the goals and solutions detailed in this booklet play to its strengths and that the expertise and partnerships it has built over many years of working on ocean conservation—including a wealth of experience specifically related to ending illegal fishing—put it in the perfect position to be successful with this global campaign and to encourage important stakeholders to support these objectives.

## Endnotes

- 1 David J. Agnew et al., "Estimating the Worldwide Extent of Illegal Fishing," *PLOS ONE* 4 (2): e4570, <http://www.plosone.org/article/info:doi/10.1371/journal.pone.0004570>.
- 2 United Nations Food and Agriculture Organization, *The State of World Fisheries and Aquaculture 2012*, 2012, <http://www.fao.org/docrep/016/i2727e/i2727e.pdf>.
- 3 United Nations Office on Drugs and Crime, *Transnational Organized Crime in the Fishing Industry, Focus on: Trafficking in Persons, Smuggling of Migrants, Illicit Drugs Trafficking*, 2011, [http://www.unodc.org/documents/human-trafficking/Issue\\_Paper\\_-\\_TOC\\_in\\_the\\_Fishing\\_Industry.pdf](http://www.unodc.org/documents/human-trafficking/Issue_Paper_-_TOC_in_the_Fishing_Industry.pdf).
- 4 United Nations Food and Agriculture Organization, "Agreement to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing," 2009, [http://www.fao.org/fileadmin/user\\_upload/legal/docs/1\\_037t-e.pdf](http://www.fao.org/fileadmin/user_upload/legal/docs/1_037t-e.pdf).
- 5 Report of the Joint Meeting of Tuna RFMOs (2007), p. 2 and Appendix 14, and Reports of the first and second Workshops on Exchange of Information and Maintenance of the Consolidated List of Authorized Vessels of Tuna Regional Fisheries Management Organizations, T-RFMO CLAV Technical Report No. 1, 2011, p. 8, and T-RFMO CLAV Technical Report No. 2, 2012. Report of the FAO Technical Consultation to Identify a Structure and Strategy for the Development and Implementation of the Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels, Report No. 956 FIRO/R956 (En) (2010), p. 3, and Report of the Thirtieth Session of the Committee on Fisheries, FAO Fisheries and Aquaculture Report No. 1012 FIPI/R1012 (En), p. 9 and para. 56.
- 6 United Nations Office on Drugs and Crime, *Transnational Organized Crime in the Fishing Industry, Focus on: Trafficking in Persons, Smuggling of Migrants, Illicit Drugs Trafficking*.
- 7 United Nations Food and Agriculture Organization, "Agreement to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing."
- 8 United Nations Food and Agriculture Organization, "Agreement to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing."
- 9 United Nations Office on Drugs and Crime, *Transnational Organized Crime in the Fishing Industry, Focus on: Trafficking in Persons, Smuggling of Migrants, Illicit Drugs Trafficking*.
- 10 United Nations Commission on Crime Prevention and Criminal Justice, Resolution 22/6, p. 67, 2013, [http://www.unodc.org/documents/commissions/CCPCJ\\_session22/Chapter\\_1\\_working\\_copy\\_clean.pdf](http://www.unodc.org/documents/commissions/CCPCJ_session22/Chapter_1_working_copy_clean.pdf).
- 11 Per Erik Bergh and Sandy Davies, "Liberian Government and Dongwon Industries Agree on an Out of Court Settlement of Two Million USD for IUU Tuna Fishing by F/V Premier and F/V Solevant," Stop Illegal Fishing, April 2013, [http://www.stopillegalfishing.com/sifnews\\_article.php?ID=110](http://www.stopillegalfishing.com/sifnews_article.php?ID=110).

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## For further information, please visit:

[pewenvironment.org](http://pewenvironment.org)

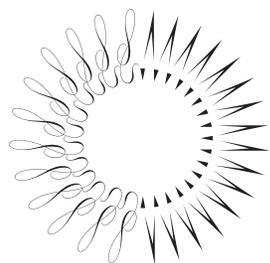
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