



November 2021

COMBATING ILLEGAL FISHING

Clear Authority Could Enhance U.S. Efforts to Partner with Other Nations at Sea



A Century of Non-Partisan Fact-Based Work

GAO@100 Highlights

Highlights of [GAO-22-104234](#), a report to congressional requesters

Why GAO Did This Study

IUU fishing undermines the economic and environmental sustainability of the fishing industry in the U.S. and globally. IUU fishing encompasses many illicit activities, including under-reporting the number of fish caught and using prohibited fishing gear. While the illicit nature of IUU fishing means its consequences can only be estimated, a recent study estimates catches from IUU fishing could cause global economic losses up to \$50 billion annually. A variety of federal agencies coordinate with one another, as well as internationally, to address IUU fishing at sea.

GAO was asked to review federal efforts to combat IUU fishing outside of U.S. waters. This report examines how the U.S. (1) works with other nations to address IUU fishing at sea, (2) identifies potential incidents of IUU fishing at sea, and (3) coordinates its interagency efforts to combat IUU fishing at sea and the extent to which selected efforts are consistent with leading collaboration practices. GAO reviewed various international agreements and the mechanisms that support these efforts, as well as other relevant agency documents. We also spoke with officials from the U.S. Coast Guard, NOAA, and DOD, among others, about their approaches to identifying and combating IUU fishing at sea.

What GAO Recommends

GAO is making one recommendation to the Department of Defense to determine whether it has the authority to continue Operation Junction Rain and, if not, seek the authority to do so. DOD partially concurred with our recommendation.

View [GAO-22-104234](#). For more information, contact Cardell D. Johnson at (202) 512-3841 or JohnsonCD1@gao.gov.

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What GAO Found

The U.S. works with other nations through multilateral agreements to collectively manage high seas fisheries. For example, the U.S. is a member of nine regional fisheries management organizations (RFMO), which are treaty-based organizations of nations with an interest in managing and conserving fisheries in specific regions of the sea. These organizations establish rules for vessels fishing in the RFMO agreement area, such as limits on the numbers and types of fish that can be caught. In addition, the U.S. establishes bilateral agreements and conducts at-sea operations focused on strengthening other nations' capacity to manage their own fisheries and fleets. For example, the Department of Defense (DOD) leads a program aimed at building African partner nations' capability to enhance maritime security and enforce their maritime laws. However, DOD officials told us that, as a result of changes to the 2017 National Defense Authorization Act, the department no longer has clear authority to conduct the operational phase of this program—known as Operation Junction Rain. By determining whether it has the authority to conduct this operation, and, if not, seeking such authority, DOD could continue efforts to support African partner nations' capability to enforce fisheries laws and regulations, which in turn helps them work to counter illegal, unreported, and unregulated (IUU) fishing.

Coast Guard Officials Preparing to Board and Inspect a Fishing Vessel



Source: State Department and U.S. Coast Guard. | GAO-22-104234

The U.S. collects and analyzes information from various sources to identify potential IUU fishing at sea outside of U.S. waters. For example, Coast Guard analyzes vessel location data to identify movements that may signal potential IUU fishing, and officials told us they use this data analysis to help to guide at-sea patrol operations to target these vessels.

Several interagency groups and processes help coordinate federal efforts to combat IUU fishing at sea. For example, an interagency working group, established by the Maritime Security and Fisheries Enforcement Act in 2019, coordinates U.S. efforts to address IUU fishing government-wide. We found that the working group generally followed selected leading collaboration practices, such as developing a written work plan. The working group's tasks include assessing areas for increased agency information-sharing on IUU fishing-related matters, identifying priority regions and nations, and developing a 5-year strategic plan to combat IUU fishing and enhance maritime security.

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Abbreviations

AFRICOM	U.S. Africa Command
AIS	Automatic identification system
DOD	Department of Defense
EEZ	Exclusive economic zone
FAO	United Nations Food and Agriculture Organization
IUU	Illegal, unreported, and unregulated
Maritime SAFE Act	Maritime Security and Fisheries Enforcement Act
MOTR	Maritime Operational Threat Response
NMIO	National Maritime Intelligence-Integration Office
NOAA	National Oceanic and Atmospheric Administration
RFMO	Regional fisheries management organization
UNCLOS	United Nations Convention on the Law of the Sea
VIIRS	Visible Infrared Imaging Radiometer Suite
VMS	Vessel monitoring system

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November 5, 2021

The Honorable Roger F. Wicker
Ranking Member
Committee on Commerce, Science, and Transportation
United States Senate

The Honorable Dan Sullivan
Ranking Member
Subcommittee on Oceans, Fisheries,
Climate Change, and Manufacturing
Committee on Commerce, Science, and Transportation
United States Senate

The Honorable John Thune
United States Senate

Illegal, unreported, and unregulated (IUU) fishing undermines the economic and environmental sustainability of fisheries and fish stocks, both in the U.S. and globally.¹ Potential effects of IUU fishing also include jeopardizing food and economic security and benefitting transnational crime by supporting illicit networks, such as narcotics trafficking or other criminal activities at sea. IUU fishing encompasses many illicit activities, ranging from underreporting the number and types of fish caught to using prohibited fishing gear, such as illegal driftnets.² The illicit nature of IUU fishing means that the size of the problem and its negative consequences can only be roughly estimated; however, according to estimates in a recent study, global illicit trade in catches from IUU fishing causes losses of up to 50 billion dollars annually from legitimate markets.³

¹A fishery refers to one or more stocks of fish that can be treated as a unit for conservation and management purposes and that are identified on the basis of geographical, scientific, technical, recreational, and economic characteristics. 16 U.S.C. § 1802(13)(A). A stock of fish refers to a species, subspecies, geographical grouping, or other category of fish capable of being managed as a unit. *Id.* § 1802(42). A stock of fish may be one species or a group of comparable species.

²Driftnet fishing is a method using large nets that are allowed to drift with the current and that are designed to entangle fish in the net's webbing.

³U.R. Sumaila, D. Zeller, L. Hood, M.L.D. Palomares, Y. Li, and D. Pauly, "Illicit Trade in Marine Fish Catch and Its Effects on Ecosystems and People Worldwide," *Science Advances*, vol. 6, no. 9 (2020).

The U.S. is one of many nations working to combat IUU fishing, and a variety of federal agencies are involved in U.S. efforts to address this global issue. For example, the U.S. Coast Guard, which is a component of the Department of Homeland Security, is the lead agency for at-sea law enforcement. The Department of Defense (DOD) engages in at-sea exercises with other countries to help partner nations build maritime security capacity, which officials say can contribute to combating IUU fishing. The National Oceanic and Atmospheric Administration (NOAA), within the Department of Commerce, has subject matter expertise in fisheries management and fisheries law enforcement. Within NOAA, the Office of General Counsel and the National Marine Fisheries Service's Office of Law Enforcement and Office of International Affairs and Seafood Inspection have roles in combating IUU fishing at sea, according to NOAA officials. The State Department has a role in negotiating and implementing international treaties and agreements that address IUU fishing in coordination with other nations. The National Maritime Intelligence-Integration Office (NMIO) facilitates information sharing and collaboration across the Global Maritime Community of Interest, which consists of federal, state, local, tribal, and territorial governments; the maritime industry; academia; and international partners.⁴

You asked us to review federal efforts to combat IUU fishing outside of U.S. waters.⁵ This report examines how the U.S. (1) works with other nations to address IUU fishing at sea, (2) identifies potential incidents of IUU fishing at sea, and (3) coordinates its interagency efforts to combat IUU fishing at sea and the extent to which selected efforts are consistent with leading collaboration practices.

To describe how the U.S. works with other nations to address IUU fishing, we reviewed various multi- and bilateral agreements the U.S. has established with other nations, as well as summaries of those agreements. For example, we reviewed collective agreements to which the U.S. is a member, such as agreements establishing regional fisheries management organizations (RFMO), and other multilateral agreements,

⁴The Office of the Director of National Intelligence, in cooperation with the Navy and the Coast Guard, created NMIO in 2009 to advance governmental collaboration and unity of effort.

⁵Our report focuses on operations at sea, but excludes efforts within U.S. territorial waters, which generally extend up to 12 nautical miles from the coastline, as well as the U.S. exclusive economic zone, which generally extends up to 200 nautical miles from the coastline.

such as the Port State Measures Agreement. We also reviewed bilateral shiprider agreements.⁶ Additionally, we interviewed relevant agency officials about the development and implementation of these agreements, including officials from the Coast Guard, NOAA, State Department, DOD, and NMIO.

To describe how the U.S. identifies potential incidents of IUU fishing at sea, outside of U.S. waters, we reviewed documents and interviewed agency officials about the information used to identify potential IUU fishing at sea and how it is obtained. For example, we discussed the collection and use of vessel location data, as well as the planning and operation of Coast Guard at-sea patrols. We also spoke with Coast Guard officials about U.S. boardings and inspections of foreign-flagged vessels outside of U.S. waters.

To identify and describe how the U.S. coordinates its interagency efforts to combat IUU fishing at sea, we reviewed documents and interviewed officials about interagency collaboration through the Maritime Security and Fisheries Enforcement (SAFE) Act IUU fishing working group and other interagency working groups, including the International Maritime Domain Awareness Working Group.⁷ For the Maritime SAFE Act working group, we reviewed documents, including a work plan and meeting summaries. To discuss the early operations of the group since its inception in December 2019, we also spoke with officials from NOAA, which chairs the group; the Coast Guard; State Department; DOD; and NMIO. We compared the interagency collaboration to date with selected leading practices for interagency collaboration identified in our past work.⁸ We focused on applying those leading practices to the Maritime SAFE Act working group because it is designed to facilitate a government-wide approach to addressing IUU fishing. We selected five of the seven leading collaboration practices because they were the most relevant to

⁶Bilateral shiprider agreements are agreements which allow a law enforcement official from one party to embark on a law enforcement vessel of the other party. These agreements are designed to help partner nations enforce fisheries law and to prepare personnel from those nations for independent enforcement of fisheries law in the long term.

⁷The Maritime SAFE Act was enacted as part of the National Defense Authorization Act for Fiscal Year 2020. Pub. L. No. 116-92, div. C, tit. XXXV, subtit. C, 133 Stat. 1997 (2019). Among other things, the SAFE Act established a collaborative interagency working group on maritime security and IUU fishing. *Id.* § 3531.

⁸GAO, *Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms*, [GAO-12-1022](#) (Washington, D.C.: Sept. 27, 2012).

the working group. The five leading practices we selected were: (1) identifying and sustaining leadership, (2) including relevant parties, (3) developing and updating written guidance and agreements, (4) clarifying roles and responsibilities, and (5) defining outcomes and monitoring accountability.

We conducted this performance audit from April 2020 to September 2021 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Maritime Zones

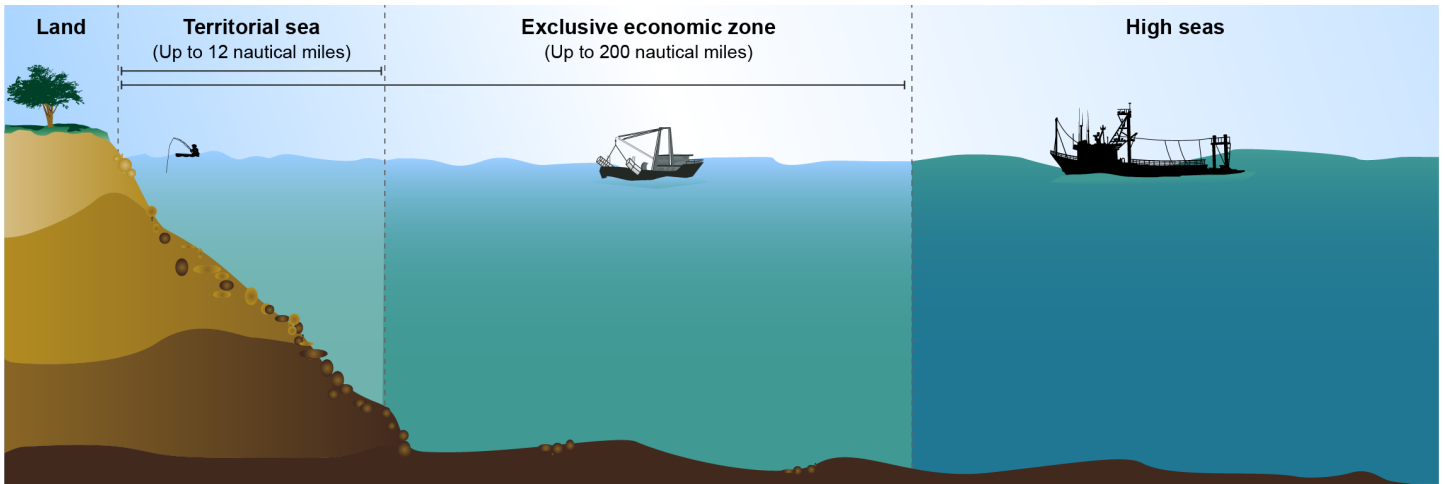
Applicable requirements for fishing vessels at sea, and thus the kinds of fishing that are permissible, vary depending on the maritime zone. A nation's territorial waters are generally a zone extending from a nation's coastline up to 12 nautical miles away;⁹ coastal nations have sovereignty and jurisdiction over this zone. Beyond and adjacent to the territorial sea, coastal nations generally have an exclusive economic zone (EEZ) up to 200 nautical miles from their coastlines.¹⁰ In this zone, a coastal nation has certain rights, including sovereign rights for the purpose of exploring and exploiting, conserving, and managing the natural resources of the waters.

Beyond EEZs, the ocean is generally defined as "high seas" and is considered international waters. According to a report from the nongovernmental organization Pew Charitable Trusts, the high seas represent approximately two-thirds of the world's oceans. Figure 1 illustrates the locations of maritime zones.

⁹Territorial sea begins at a nation's baseline, which is defined in the 1982 United Nations Convention on the Law of the Sea (UNCLOS) as generally the low-water line along the coast as marked on large-scale charts officially recognized by the coastal nation. For the purposes of this report, we call this a nation's coastline.

¹⁰International law governing exclusive economic zones (EEZ) was established by UNCLOS. The U.S. is not a party to UNCLOS; however, according to officials from NOAA and the State Department, the U.S. recognizes that UNCLOS reflects customary international law.

Figure 1: Maritime Zones of the Oceans



Source: GAO analysis of United Nations Convention on the Law of the Sea. | GAO-22-104234

On the high seas, vessels are subject to the laws of their flag state.¹¹ Additionally, because flag states commit to implementing international agreements and conventions to which they are a member, a nation's vessels are subject to applicable rules established by international agreements and conventions, as implemented by the nation. These agreements and conventions, including RFMO agreements, generally cover specific geographic regions of the high seas. RFMOs are treaty-based international bodies comprising nations that share an interest in managing and conserving fisheries in specific regions of the high seas.¹² RFMOs establish binding conservation measures to manage and

¹¹The flag state of a vessel is the nation of jurisdiction under whose laws the vessel is registered or licensed and is deemed the nationality of the vessel.

¹²The U.S. belongs to nine RFMOs where the U.S. is a coastal nation or has a fishing interest, according to State Department officials: (1) North Pacific Fisheries Commission, (2) Northwest Atlantic Fisheries Organization, (3) International Commission for the Conservation of Atlantic Tunas, (4) Western and Central Pacific Fishery Commission, (5) Inter-American Tropical Tuna Commission, (6) Commission for the Conservation of Antarctic Marine Living Resources, (7) South Pacific Regional Fishery Management Organization, (8) The North Atlantic Salmon Conservation Organization and (9) the North Pacific Anadromous Fish Commission. Additionally, the U.S. acts as an observer to other RFMOs covering fisheries that are harvested for U.S. import. There are also a number of other international fishing agreements that function similarly but that are not considered RFMOs by the State Department. According to a report from the nongovernmental organization Pew Charitable Trusts, there are approximately 17 RFMOs worldwide.

conserve particular species of fish or other living marine resources within specific geographic regions of the oceans. For example, the International Commission for the Conservation of Atlantic Tunas RFMO agreement establishes a limit on allowable catch of certain species of tuna within the agreement area. Violations of RFMO conservation measures are generally considered IUU fishing.

Definition of IUU Fishing

IUU fishing is a broad term that generally includes activities that violate national law or international fishing regulations or agreements.¹³ NOAA defines each aspect of IUU fishing as follows:

- **Illegal fishing** refers to fishing activities conducted in contravention of applicable laws and regulations, including those adopted at the regional and international level.
- **Unreported fishing** refers to fishing activities that are not reported or are misreported to relevant authorities in contravention of national laws and regulations or reporting procedures of a relevant RFMO.
- **Unregulated fishing** occurs in geographic areas or for specific species of fish for which there are no applicable conservation or management measures, and when fishing activities are conducted in a manner inconsistent with a nation's responsibilities for the conservation of living marine resources under international law. Fishing activities are also unregulated when occurring in an RFMO-managed area and conducted by vessels without nationality, or by those flying a flag of a nation or fishing entity that is not party to the RFMO, in a manner inconsistent with the conservation measures of that RFMO.¹⁴

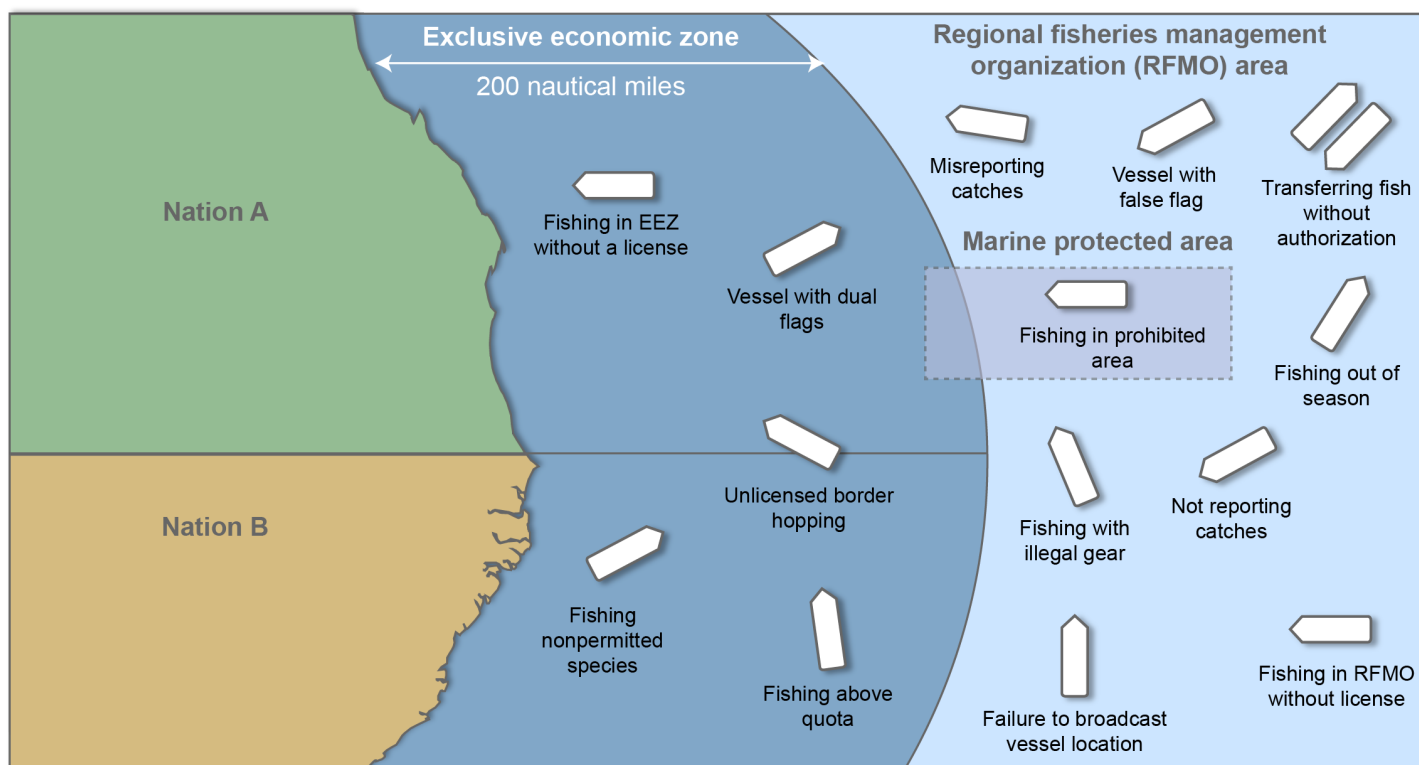
IUU fishing encompasses many illicit activities that can occur both within a nation's EEZ as well as on the high seas. For example, within national EEZs, vessels may engage in IUU fishing by fishing without an appropriate license or fishing above a nationally established quota. On

¹³Although human trafficking and forced labor are illegal under U.S. law, they are not generally included in regulatory definitions of IUU fishing, including the definition under the High Seas Driftnet Moratorium Protection Act or the definition in the Maritime SAFE Act. For the purposes of this report, IUU fishing does not include fishing with forced labor.

¹⁴Under the Maritime SAFE Act, the term IUU fishing means illegal fishing, unreported fishing, or unregulated fishing as such terms are defined in paragraph 3 of the International Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported and Unregulated Fishing, adopted at the 24th Session of the Committee on Fisheries in Rome on March 2, 2001. NOAA's definitions, above, are also based on the definitions in the International Plan of Action.

the high seas, examples of IUU fishing include fishing out of season or fishing in a prohibited area. Figure 2 below illustrates common types of IUU fishing.

Figure 2: Common Types of Illegal, Unreported, and Unregulated Fishing



Source: GAO analysis of agency information. | GAO-22-104234

U.S. Laws and Federal Agencies

The U.S. works through international relationships to combat IUU fishing on the high seas. In doing so, U.S. jurisdiction is generally limited to its own flagged vessels; however, some domestic laws are relevant to U.S. efforts to combat IUU fishing by foreign-flagged vessels operating outside of U.S. waters, including the following:

- The **Maritime SAFE Act** was enacted in 2019 for several purposes, including to support a government-wide approach to counter IUU fishing and related threats to maritime security; improve data sharing that enhances surveillance, enforcement, and prosecution against IUU fishing and related activities at a global level; and support coordination and collaboration to counter IUU fishing internationally in

priority regions.¹⁵ The act established, among other things, an interagency working group on maritime security and IUU fishing. For the purposes of this report, we refer to this group as the Maritime SAFE Act working group.

- The **High Seas Fishing Driftnet Moratorium Protection Act** prohibits the U.S. from entering into international agreements that would prevent full implementation of the UN Moratorium on Large-Scale High Seas Driftnets.¹⁶ The act, and the statutes implementing the various RFMO conventions that the United States is party to, apply to U.S. vessels, but the U.S. can also apply those laws to stateless vessels operating on the high seas as if they were U.S. vessels.
- The **Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006**, which amended the High Seas Driftnet Fishing Moratorium Protection Act, established a process for identifying nations for IUU fishing in a biennial report to Congress.¹⁷

Efforts to combat IUU fishing on the high seas require coordination and information sharing among a number of federal agencies that have different roles and responsibilities. (See table 1.)

¹⁵Pub. L. No. 116-92, div. C, tit. XXXV, subtit. C, §§ 3531-3572, 133 Stat. 1997 (2019) (codified at 16 U.S.C. §§ 8001-8041).

¹⁶Pub. L. No. 104-43, tit. VI, 109 Stat. 391 (1995) (codified as amended at 16 U.S.C. §§ 1826d-1826k).

¹⁷Pub. L. No. 109-479, § 403(a), 120 Stat. 3575, 3626 (codified as amended at 16 U.S.C. § 1826h). For the biennial reports produced since 2009, see <https://www.fisheries.noaa.gov/international/report-iuu-fishing-bycatch-and-shark-catch>. Once a nation or entity is identified in the biennial report, NOAA enters into a two-year consultation period to press for necessary measures to address the issue for which it was identified. Following these consultations, NOAA determines whether to negatively or positively certify the identified nation or entity in the next report to Congress. A positive certification is issued if the nation has provided evidence of actions that address the activities for which it was identified. A negative certification may result in denial of U.S. port access for fishing vessels of that nation and potential import restrictions on fish or fish products.

Table 1: U.S. Agency Roles in International Efforts to Combat IUU fishing

Agency	Key roles and responsibilities
National Oceanic and Atmospheric Administration (NOAA), within the Department of Commerce	NOAA has subject matter expertise on fisheries management and illegal, unreported, and unregulated (IUU) fishing; accordingly, it consults with the State Department in negotiations of some international agreements, and it represents U.S. efforts in some multilateral agreements that manage high seas and shared fisheries. NOAA also works with other nations to strengthen enforcement and data collection programs and participates in some at-sea exercises with such partner nations. Additionally, according to NOAA officials, the agency can enforce U.S. marine resource laws, including those targeting IUU fishing and trafficking in IUU fish and fish products.
U.S. Coast Guard	The Coast Guard generally serves as the lead agency for at-sea enforcement of international fisheries agreements—including boarding and inspecting vessels suspected of IUU fishing, which it can do under the authority of some regional fisheries management organizations—and for identifying potential IUU fishing at sea. The Coast Guard also works closely with other nations in efforts to build capacity to manage their own fisheries and fleets.
State Department	The State Department leads diplomatic efforts, including negotiating new RFMOs and other international agreements, and maintains contact with other nations during implementation of these agreements. It also coordinates with other nations through diplomatic channels in cases where vessels flagged under those nations are identified as engaging in IUU fishing and a government-to-government approach to addressing the potential violation is necessary.
Department of Defense (DOD)	DOD engages in periodic at-sea exercises with other countries to help build other nations' maritime security. It generally does so through its geographic combatant commands. According to DOD officials, these exercises build partner nations' maritime security capacity, which can help them to manage their own fisheries and fleets.
Navy	The Navy contributes expertise, personnel, and resources for training and building partner nations' capacity to provide maritime security. According to DOD officials, such capacity can help partner nations manage their own fisheries.
National Maritime Intelligence-Integration Office (NMIO)	Established by the Office of the Director of National Intelligence, which is administered by the Navy, NMIO facilitates maritime information sharing within the government and provides unified intelligence support to U.S. policymakers.

Source: GAO analysis of agency information. | GAO-22-104234

U.S. Works with Other Nations to Address IUU Fishing through Agreements and Capacity-Building Efforts, but DOD Lacks Clarity on Its Authority to Fully Execute Some Efforts

The U.S. works with other nations through multilateral agreements to develop measures to collectively manage high seas fisheries. In addition, the U.S. establishes bilateral agreements focused on building other nations' capacity to manage their own fisheries and fleets, including DOD exercises with partner nations designed to increase other nations' maritime security, which can include building fisheries law enforcement capacity. However, DOD lacks clarity on whether it has all the necessary authority to conduct parts of its capacity-building efforts in Africa.

U.S. Works with Other Nations through Multilateral Agreements for Collective Management of High Seas Fisheries

The U.S. is a member of various multilateral agreements with other nations to collectively and sustainably manage high seas fisheries and combat IUU fishing. Through RFMO agreements, the U.S. works collectively with other member nations to patrol areas of the high seas covered by RFMOs to identify potential IUU fishing. For example, Operation North Pacific Guard is an IUU fishing-focused operation by Japan, China, Russia, South Korea, Canada, and the U.S. that patrols areas of the northern Pacific Ocean covered by three RFMO agreements.¹⁸ In 2019, this operation identified 58 violations of RFMO conservation measures. The vessels were reported to the relevant RFMOs and their individual flag states for further action. See figure 3 below for photos of a Coast Guard vessel interdicting a vessel using an illegal high seas driftnet, and Coast Guard officials preparing to conduct a law enforcement boarding under measures established by the Western and Central Pacific Fisheries Commission RFMO.

Figure 3: Coast Guard Vessel Interdicting Illegal Fishing and Officials Preparing to Conduct a Law Enforcement Boarding



Source: State Department and U.S. Coast Guard. | GAO-22-104234

The U.S. and other RFMO member nations collaborate to ensure violations of RFMO conservation measures are addressed. When U.S. officials identify potential violations, they work with other RFMO member nations and relevant flag states to take appropriate actions. For example, in 2020, the Coast Guard identified a vessel violating the International

¹⁸The operation patrols areas covered by the North Pacific Fisheries Commission, Western and Central Pacific Fisheries Commission, and North Pacific Anadromous Fisheries Commission RFMO agreements.

Commission for the Conservation of Atlantic Tunas conservation measures by fishing without registration in waters covered by the RFMO. Moreover, the Coast Guard determined the vessel was not legally flagged and was therefore presumed to be a stateless vessel. NOAA prepared a correspondence to the Secretariat of the RFMO advising the Secretariat of the sighting and flagless status of the vessel. This message to the Secretariat requested the reported information be forwarded to all member states of the RFMO. Member states that received the message would be on the lookout for the vessel for tracking purposes and be able to board and inspect if it came into their ports, according to NOAA officials.

In addition to RFMOs, the U.S. participates in other multilateral agreements and coalitions to collectively manage high seas fisheries and address IUU fishing on the high seas. Other multilateral agreements in which the U.S. participates include the following:

- **The Port State Measures Agreement** – This agreement is the first binding international agreement to specifically target IUU fishing according to the United Nations Food and Agriculture Organization.¹⁹ U.S. implementation of the agreement includes sharing vessel inspection information with other nations, organizations, and RFMOs. The agreement seeks to block fishery products derived from IUU fishing from reaching markets by encouraging communication among nations on what vessels are known to have engaged in IUU fishing on the high seas and denying them port access. The agreement also provides a framework through which the U.S. works with other nations to help achieve United Nations sustainable development goals, one of which was to end IUU fishing worldwide by 2020.²⁰ In support of this agreement, NOAA developed an international training program to provide technical assistance to global partners working to implement

¹⁹The United Nations Food and Agriculture Organization (FAO) is the specialized agency of the UN that leads international efforts to defeat hunger and plays a lead role in supporting nations in achieving the 17 sustainable development goals established in 2015. FAO approved the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, which entered into force on June 5, 2016. Sixty-nine nations, including the U.S., have become parties to the agreement.

²⁰While the 2020 deadline originally stated in the sustainable development goals has passed, FAO reported in December 2020 that member nations have developed frameworks of binding and voluntary international instruments, which, if fulfilled, will lead to preventing, deterring and eliminating IUU fishing. Food and Agriculture Organization of the United Nations, *Combating Illegal, Unreported and Unregulated Fishing*, 34th session (Rome, Italy: February 2021), 3.

the agreement. NOAA officials said they conducted this program in Southeast Asia and South America, with financial and organizational support from the State Department and the U.S. Agency for International Development.

- **Quadrilateral Defense Coordination Group.** This multilateral security coordination group collaboratively identifies potential IUU fishing in areas outside of U.S. waters. The group brings together defense and security agencies from Australia, France, New Zealand, and the U.S. to coordinate maritime surveillance to reduce IUU fishing in Pacific Island countries' EEZs and in adjacent areas of the high seas. For example, in 2018, the group conducted a large-scale surveillance operation in support of the Pacific Islands Forum Fisheries Agency.²¹ Member nations contributed resources to surface and aerial surveillance. With over 250 personnel involved and 14.1 million square kilometers of ocean included, it was one of the biggest fisheries surveillance operations on record, according to agency officials. During the operation, 257 vessels suspected of IUU fishing were detected, and crew of 177 vessels were interrogated at sea.
- **Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean.** This multilateral agreement, to which the U.S. is a party, went into effect in June 2021 and prohibits unregulated fishing in the high seas of the Central Arctic Ocean for 16 years. This area borders the EEZs of the U.S. and other Central Arctic coastal nations. The agreement recognizes that large portions of the central Arctic Ocean were previously covered by ice, limiting vessel access; however, the ice has diminished in recent years, providing new access to vessels. The agreement establishes a joint program of scientific research and monitoring to gain a better understanding of Arctic Ocean ecosystems and provides that commercial fishing in the region will not be authorized until international mechanisms are in place to ensure its sustainability. This agreement is the first multilateral agreement of its kind to take a binding approach to protecting an area from commercial fishing before such fishing has begun, according to the State Department.

²¹The Pacific Islands Forum Fisheries Agency is an intergovernmental agency that facilitates cooperation and coordination on fishery policies among its member states to conserve migratory tuna stocks, for the benefit of the peoples of the region.

U.S. Works with Other Nations to Help Build Capacity for Managing Their Fisheries and Fleets, but DOD Lacks Clarity on Its Authority to Continue an Operation That Helped African Nations

As part of its efforts to address IUU fishing, the U.S. works with other nations to help them build capacity to manage their own fisheries and fleets, enabling them to better establish and enforce their fisheries law over their flagged vessels. Examples of how the U.S. partners with nations to build capacity include bilateral shiprider agreements; various efforts managed by NOAA, with cooperation from other agencies; and DOD-led exercises with other nations.

The goals of bilateral shiprider agreements are to help partner nations enforce their fisheries law and to prepare personnel from those nations for independent enforcement of fisheries law in the long term. The U.S. has entered into 15 shiprider agreements that address IUU fishing.²² Such agreements generally allow the Coast Guard to collaborate with other nations by

- partnering with foreign personnel for training,
- exchanging information,
- allowing partner personnel aboard U.S. vessels to exercise boarding and inspection provisions within their EEZs, and
- taking actions against potential violations by vessels flagged to partner nations on the high seas.

Through operation of shiprider agreements between 2016 and 2020, the Coast Guard boarded and inspected 199 fishing vessels in cooperation with partner nations. Those inspections discovered 25 IUU fishing violations, according to information from Coast Guard officials.²³

U.S. agencies are working to create new shiprider agreements and expand existing shiprider agreements to include IUU fishing enforcement provisions, according to Coast Guard officials. Those officials noted that these efforts are partly in response to the Maritime SAFE Act, which calls for including counter-IUU fishing provisions in existing shiprider agreements in which the U.S. is a party, and entering into new shiprider

²²According to the State Department, the U.S. has shiprider agreements that address IUU fishing with the following nations: Cape Verde, Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Nauru, Palau, Republic of Marshall Islands, Samoa, Senegal, Sierra Leone, The Gambia, Tonga, Tuvalu, , and Vanuatu.

²³Coast Guard officials told us they compiled these data from after-action reports that their law enforcement staff review, validate, and assess on a quarterly basis as part of the Law Enforcement Planning and Assessment System.

agreements that include counter-IUU fishing provisions with priority flag states and nations in priority regions.²⁴

In addition to Coast Guard collaboration efforts, NOAA develops capacity-building partnerships with other nations, and NOAA officials told us these partnerships enhance partner nations' efforts to combat IUU fishing, including through effective investigation and prosecution of fisheries cases. Specifically, NOAA is authorized, including through U.S. implementation of the Port State Measures Agreement, to provide assistance to other nations to strengthen their efforts to combat IUU fishing through training, technical, and legal assistance. Accordingly, NOAA has taken actions such as providing counter-IUU fishing technical assistance and training for partner nations in Southeast Asia, Africa, Latin America, and the Caribbean. NOAA officials told us these activities can enhance monitoring, control, and surveillance capacities in partner nations, and help partner nations strengthen their fisheries management laws and regulations.

The U.S. also partners with other nations through DOD-led at-sea exercises designed to help them build maritime security capacity, which can contribute to partner nation capacity to address IUU fishing in their territorial waters as well as IUU fishing committed by their flagged vessels on the high seas. DOD's geographic combatant commands lead these exercises, with support from other federal agencies, including NOAA and the Coast Guard.²⁵ For example, through the U.S. Africa Command's (AFRICOM) African Maritime Law Enforcement Partnership program, the Coast Guard and DOD work together to build African partner nations' capability to enhance maritime security and enforce their maritime laws at sea through real-world combined maritime law enforcement operations. This program, which started in 2008, has several phases that include risk assessments, classroom training, and joint exercises, and culminate with

²⁴See 16 U.S.C. § 8014(a). The Maritime SAFE Act working group is currently working to define and identify the priority flag states and regions, according to NOAA officials. Officials from the Department of State and the Coast Guard told us that the U.S. is currently negotiating or renegotiating shiprider agreements with a number of nations, and that those nations will not be publicly identified until those agreements have been finalized.

²⁵The Department of Defense has 11 unified combatant commands, each of which has a geographic or functional mission that provides command and control of military forces in peace and war.

incremental U.S. withdrawal at the conclusion of each year's operation, according to DOD officials.

As part of the program, the U.S. previously worked with African partner nations under Operation Junction Rain. Through this operation, Coast Guard law enforcement personnel embarked with partner nation personnel aboard a U.S. Naval ship, Coast Guard ship, or African partner nation vessel to patrol the African partner nation's EEZ and assist the partner nation in enforcing their fishery laws and regulations. However, the 2017 National Defense Authorization Act consolidated a number of authorities for payment of personnel expenses related to certain security cooperation with foreign governments, including the authority on which DOD had previously relied to conduct Operation Junction Rain.²⁶ As a result of this legislative change, in 2019, legal counsel for AFRICOM and the Office of the Secretary of Defense determined that AFRICOM no longer had the authority to expend funds needed to conduct this operation or any other maritime law enforcement operations in the region, according to AFRICOM officials. Consequently, the final Operation Junction Rain took place in 2019, according to DOD officials. In 2020, AFRICOM officials submitted a legislative proposal to the Office of the Secretary of Defense to request the authority to conduct Operation Junction Rain. However, these officials told us that the proposal was ultimately withdrawn from consideration, and that officials were exploring other potential authorities. DOD officials told us that, as of June 2021, they still do not believe they have sufficient authority to conduct this operation.

According to the Maritime SAFE Act, it is the policy of the U.S. to, among other things, (1) develop holistic diplomatic, military, law enforcement, economic, and capacity-building tools to counter IUU fishing, and (2) promote global maritime security through improved capacity and technological assistance to support improved maritime domain awareness. Further, according to a DOD document, the ability of African partner nations to enforce their laws at sea directly affects their economic and food security and national stability, and the safety and stability of coastal African nations has significant impacts on U.S. national security and those of U.S. partners and allies. According to DOD officials, Operation Junction Rain yielded significant positive results in developing African partner nations' capacity to strengthen fisheries law enforcement along their nearly 19,000 miles of coastline. If DOD determines whether it has the authority to conduct Operation Junction Rain, DOD could either

²⁶Pub. L. No. 114-328, § 1243, 130 Stat. 2000, 2514 (2016).

resume the program or seek the requisite authority to do so. Officials told us resuming the program would support African partner nations in developing their ability to enforce fisheries laws and regulations, which in turn would help them work to counter IUU fishing both in their EEZs and on the high seas when committed by their flagged vessels.

U.S. Leverages Various Information Sources to Identify Potential IUU Fishing At Sea

The U.S. collects and analyzes information from various sources to identify potential IUU fishing at sea outside of U.S. waters. For example, technology for tracking vessel location at sea helps U.S. agencies identify movements of fishing vessels on the high seas that may indicate potential IUU fishing.²⁷ In addition, Coast Guard at-sea operations—which include patrols, boardings, and inspections under the authority of RFMOs—can lead to identification of IUU fishing.

Federal Agencies Use Vessel Location Data to Help Identify Indicators of IUU Fishing at Sea

Federal agencies analyze vessel location data obtained through a variety of tracking technologies and other sources to help identify potential incidents of IUU fishing (see sidebar). Coast Guard officials told us U.S. government agencies—such as the Coast Guard and NOAA—directly collect some vessel location data and that they also receive some vessel location data from other nations. For example, in 2018 during the Coast Guard’s annual fisheries enforcement operation, the Department of Fisheries and Oceans of Canada coordinated on the use of radar satellite imagery that was instrumental in identifying IUU fishing in the northern Pacific Ocean. Additionally, Coast Guard officials said they use international data provided through the nonprofit Global Fishing Watch, which has access to six other nations’ location data and satellite location data from the European Space Agency, according to Global Fishing Watch officials.²⁸

²⁷Some RFMOs that the U.S. is a member of have adopted measures requiring vessels to report location through a satellite-based monitoring system; however, the specifics of the broadcasting requirements vary and, according to NOAA officials, access to these data may be limited to the flag state in some cases.

²⁸Global Fishing Watch’s mission is to advance ocean governance through increased transparency of human activity at sea. In support of this, the organization creates and shares maps, data, and analysis tools. The organization signed a memorandum of understanding with the Coast Guard Research and Development Center in 2019 that formalizes coordination to help deter IUU fishing, among other purposes. Representatives from Global Fishing Watch told us they also collaborate and share information with NOAA.

Examples of Vessel Location Tracking Technologies

Automatic Identification System (AIS) is a shipboard broadcast system that uses radio waves to continuously send and receive location and position information within approximately 20 nautical miles. The primary purpose of AIS is for collision avoidance, but Coast Guard officials told us these data can also be used to identify potential IUU fishing. Requirements to broadcast AIS on the high seas depend on the vessel size and the vessel's flag state requirements. AIS data is generally received in real or near-real time and publicly available through a variety of sources, including private companies and a web-based tool developed by the Departments of Transportation and the Navy.

Vessel Monitoring System (VMS) is satellite-based technology that automatically broadcasts the location and movement of vessels at a greater range than AIS. However, as with AIS, not all vessels are required to transmit through VMS. VMS requirements vary by flag state and conditions of various international agreements, including Regional Fisheries Management Organizations (RFMO). VMS data are generally treated as proprietary to the flag state of the vessel or RFMO, depending on established flag state and RFMO data rules and procedures. Additionally, some countries make their vessels' data available through the nonprofit Global Fishing Watch. NOAA is responsible for setting, monitoring, and enforcing VMS use in the U.S.

Visible Infrared Imaging Radiometer Suite (VIIRS) is satellite technology that uses highly sensitive optical sensors to see lights at night, enabling visualization of vessels using light to attract catch. According to NOAA officials, VIIRS data is managed by the Earth Observation Group within the Colorado School of Mines.

Source: Information from U.S. Coast Guard, U.S. Department of Transportation, National Oceanic and Atmospheric Administration, Indian Ocean Tuna Commission, and Global Fishing Watch. | GAO-22-104234

NOAA and the Coast Guard analyze the data to identify vessel movements and actions that may indicate IUU fishing. Such movements and actions include entering another nation's EEZ, moving in patterns that signal illegal transshipping,²⁹ and ceasing to transmit positional data, according to Coast Guard officials. The Coast Guard also partners with Global Fishing Watch for data analysis, according to Coast Guard officials.

Coast Guard officials told us they use this data analysis to develop lists of vessels suspected of IUU fishing, which help guide at-sea patrol operations to target these vessels. Coast Guard officials told us the lists of suspected vessels contribute to successful identification of IUU fishing at sea. For example, the Coast Guard identified and interdicted a listed vessel in 2018, according to officials. The Coast Guard included this vessel on a list of suspected vessels after analysis of location data indicated the vessel was moving in ways characteristic of using prohibited

²⁹For the purposes of this report, transshipping refers to the transfer of fish or other goods from one vessel to another at sea.

high seas driftnets.³⁰ Coast Guard officials told us images of the vessel captured by Coast Guard aircraft confirmed this suspicion. Coast Guard officials told us they intercepted the vessel, confirmed illegal use of driftnets, and escorted the vessel to authorities of its flag state. According to Coast Guard officials, authorities of the flag state prosecuted the case, imprisoned several people, and destroyed the vessel.

Coast Guard Identifies Potential Incidents of IUU Fishing through Operations at Sea

The Coast Guard identifies potential IUU fishing through at-sea operations, including patrols and boarding and inspections carried out under the authority of RFMOs. The Coast Guard conducts at-sea patrols using its vessels or aircraft. These patrols may be part of missions to address specific types of IUU fishing, such as to identify high seas driftnet fishing. If the Coast Guard observes potential IUU fishing during patrol operations that are not directly related to IUU fishing, it will follow up as appropriate, according to Coast Guard officials. For example, during a mission not focused on IUU fishing, the Coast Guard observed a vessel with a large number of shark fins drying on the deck, which officials told us could be an indicator of illegal shark-finning practices. In response, the Coast Guard provided information on the suspected IUU fishing to NOAA, which then investigated the vessel in cooperation with the Secretariat of the RFMO covering the region of the ocean where the illegal activity was observed.

The Coast Guard may also identify IUU fishing through at-sea boardings and inspections conducted under the authority of RFMO agreements. For example, in 2018 during the Coast Guard's annual fisheries enforcement operation, one Coast Guard patrol vessel conducted boardings of 10 vessels under the authority of the Western and Central Pacific Fisheries Commissions RFMO agreement, which includes a high seas boarding and inspection provision. Of these 10 vessels, the Coast Guard identified six with violations, including not reporting positional data through a vessel monitoring system, as required. When the Coast Guard investigates potential violations through boardings and inspections, it reports them to

³⁰High seas driftnet fishing involves deploying large mesh curtains up to 10 miles wide and approximately 50 feet deep to trap catch behind the gills. Driftnets catch both target and non-target marine species and can result in overharvesting. The United Nations General Assembly adopted a resolution in 1991 calling for a worldwide moratorium on all large-scale pelagic driftnet fishing, and the U.S. implemented this resolution through the High Seas Driftnet Fisheries Enforcement Act in 1992.

the RFMO, which alerts the vessel's flag state, according to Coast Guard officials.

Five of the nine RFMO agreements of which the U.S. is a member have high seas boarding and inspection provisions under which member nations may board and inspect vessels flagged to other RFMO member nations to monitor compliance with the RFMO agreement and its conservation measures.³¹ From 2016 through 2020, the Coast Guard boarded and inspected 227 fishing vessels on the high seas under RFMO authorities and discovered 90 potential violations of RFMO conservation and management measures, according to information from Coast Guard officials. Coast Guard officials said they had suspected some of these vessels of IUU fishing, and that they randomly boarded others to project an enforcement presence and deter IUU fishing activity.

Coast Guard officials told us they are working with the Department of State and NOAA to promote the adoption of high seas boarding and inspection measures in all RFMO agreements to which the U.S. is a member. Coast Guard officials specified that, in many cases, changing RFMO agreement provisions requires a full consensus among all members, which makes the process challenging.³² For example, Coast Guard officials said that in 2021, the South Pacific Regional Fisheries Management Organization proposed adopting high seas boarding and inspection provisions, but the initiatives were unable to reach consensus among member countries.

³¹The Western and Central Pacific Fisheries Commission, Commission for the Conservation of Antarctic Marine Living Resources, Northwest Atlantic Fisheries Organization, and the North Pacific Fisheries Commission have adopted high seas boarding and inspection provisions that apply to all vessels operating in fisheries managed under their conventions. The International Commission for the Conservation of Atlantic Tunas has adopted boarding and inspection provisions that apply only to Eastern Atlantic and Mediterranean Bluefin tuna and Mediterranean Swordfish fisheries.

³²Some RFMOs, such as the Commission for the Conservation of Antarctic Marine Living Resources, make substantive decisions by consensus, while others have voting procedures for some or all decisions, according to NOAA officials. According to NOAA officials, RFMOs favor a consensus-based decision-making process even if it is not required.

Interagency Groups and Processes Help Coordinate U.S. Efforts to Combat IUU Fishing at Sea, and the Maritime SAFE Act Working Group Generally Followed Selected Leading Collaboration Practices

An interagency working group established by the Maritime SAFE Act in 2019 coordinates U.S. agencies' efforts government-wide to address IUU fishing. We found that this working group generally followed selected leading collaboration practices. In addition, several other interagency groups and processes help coordinate aspects of U.S. efforts related to combating IUU fishing at sea.

Maritime SAFE Act Working Group on IUU Fishing Coordinates U.S. Efforts Government-wide and Generally Followed Selected Leading Collaboration Practices

The Maritime SAFE Act interagency working group coordinates U.S. efforts to combat IUU fishing government-wide and is tasked with ensuring an integrated federal response to IUU fishing globally. The act outlines the working group's responsibilities, which include assessing areas for increased interagency information sharing on matters related to IUU fishing; increasing maritime domain awareness relating to IUU fishing;³³ outlining a strategy to coordinate, increase, and use shiprider agreements between DOD or the Coast Guard and relevant countries; and, through a strategic plan, identifying priority regions and priority flag states to be the focus of the working group's assistance.³⁴ In addition, the act directs the working group to prepare the following documents:

- annual reports summarizing nonsensitive information about the working group's efforts to investigate, enforce, and prosecute groups and individuals engaging in IUU fishing;

³³Maritime domain awareness is defined by National Security Presidential Directive 41 (NSPD-41)/Homeland Security Presidential Directive 13 (HSPD-13), *Maritime Security Policy*, issued by the White House in 2004, as the effective understanding of anything associated with the global maritime domain that could impact the security, safety, economy, or environment of the U.S.

³⁴The act defines priority regions as those at high risk for IUU fishing activity or the entry of illegally caught seafood into the markets of the countries in the region and in which countries lack the capacity to fully address such illegal activity. It defines priority flag states as countries the flagged vessels of which actively engage in, knowingly profit from, or are complicit in IUU fishing, and that are willing, but lack the capacity, to monitor or take effective enforcement action against their fleet.

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- by December 2021, a 5-year integrated strategic plan on combating IUU fishing and enhancing maritime security, including specific strategies with monitoring benchmarks for addressing IUU fishing in priority regions; and
 - not later than 5 years after submission of the 5-year integrated strategic plan, and 5 years after, a report on a number of issues related to IUU fishing.

As of June 2021, the group had met four times, established subworking groups and task groups, developed a work plan, and solicited public comments on that work plan.³⁵ The four subworking groups are to address the following issues:

- **Maritime intelligence coordination.** This subworking group of 13 agencies, led by NMIO, has four responsibilities, according to working group documents and NMIO officials:
 1. Support the working group in identifying priority regions and priority flag states (including by collating intelligence and supporting development of a framework for analysis, according to a NMIO official).
 2. Coordinate completion of an updated interagency memorandum of understanding between the Secretaries of State, Defense, the Interior, Commerce, Homeland Security, and the Office of Director of National Intelligence, on enforcement of U.S. laws and international agreements on living marine resources of the U.S.
 3. Leverage the intelligence community to support targeted law enforcement operations and investigations; analyze and share IUU fishing information; and uncover vessel owners, criminal organizations, and flag states that undermine global fisheries management efforts.
 4. Lead the establishment of protocols for information sharing and collaboration on emerging technologies and intelligence to support maritime domain awareness and counter-IUU fishing activities.
- **Gulf of Mexico IUU fishing.** Led by NOAA, this subworking group is to identify federal actions taken and policies established during the 5 years prior to enactment of the Maritime SAFE Act with respect to IUU

³⁵The task groups, which the group's work plan states are intended to be narrower in focus and more limited in duration than the subworking groups, address (1) priority regions and priority flag states (led by the State Department), and (2) development of the 5-year strategic plan.

fishing in the U.S. EEZ in the Gulf of Mexico. The subworking group is also to identify actions that NOAA, the State Department, and the Coast Guard can take, using existing resources, to combat IUU fishing in the U.S. EEZ in the Gulf of Mexico, as well as any additional authorities that could assist each agency in more effectively addressing such IUU fishing. Pursuant to the act, NOAA issued a related report to Congress in 2021.

- **Public-private partnerships.** The work plan tasks this subworking group, led by NOAA, with developing a communications strategy and plan to inform and involve stakeholders in the working group's efforts, identifying existing formal partnerships between agencies and private entities, and engaging with existing partners to identify areas for additional efforts.
- **Forced labor.** Led by the State Department, NOAA, and Department of Labor, this subworking group was formed in 2021 in response to a recommendation in an interagency report to Congress on human trafficking in the seafood supply chain.³⁶ The report calls for formation of this subworking group to develop and facilitate an integrated approach across the U.S. government to combat human trafficking within the seafood supply chain and to include that work in the working group's 5-year strategic plan.³⁷

We found that the Maritime SAFE Act working group's early actions are generally consistent with selected leading collaboration practices we identified in prior work (see fig. 4).³⁸ For example, the working group's structure includes a rotating leadership role that is shared by NOAA, the Coast Guard, and the State Department. This is consistent with the leading practice of identifying and sustaining leadership. The working group has also developed a work plan, as noted above, that describes the






³⁶NOAA and the State Department, *Report to Congress, Human Trafficking in the Seafood Supply Chain, Section 3563 of the National Defense Authorization Act for Fiscal Year 2020 (P.L. 116-92)*, accessed June 29, 2021, https://media.fisheries.noaa.gov/2020-12/DOSNOAAReport_HumanTrafficking.pdf?null. Among other things, the report listed countries and territories with fisheries or related seafood industries most at risk for human trafficking within their seafood supply chains. One of the report's recommendations was formation of a subworking group on human trafficking, including forced labor, under the Maritime SAFE Act working group.

³⁷GAO has also reported on forced labor, including its use in the seafood industry. See GAO, *Forced Labor: CBP Should Improve Communication to Strengthen Trade Enforcement*, [GAO-21-259](#) (Washington, D.C.: Mar. 1, 2021), and GAO, *Forced Labor: Better Communication Could Improve Trade Enforcement Efforts Related to Seafood*, [GAO-20-441](#) (Washington, D.C.: June 18, 2020).

³⁸[GAO-12-1022](#).

activities of the group and its subworking groups for fulfilling the responsibilities outlined in the Maritime SAFE Act, which is consistent with the leading practice of developing and updating written guidance and agreements. NOAA officials said that the work plan is considered a living document, but that the working group had not yet determined its process for formally updating the work plan over time.

Figure 4: Maritime Security and Fisheries Enforcement (SAFE) Act Working Group’s Implementation of Selected Leading Collaboration Practices, as of June 2021

Leading collaboration practices	Examples of issues to consider	Examples of actions taken by the working group
Identifying and sustaining leadership 	How will leadership be sustained over the long term? If leadership is shared, have roles and responsibilities been clearly identified and agreed upon?	The working group’s leadership consists of a rotating role for three agencies, with a chair term of 3 years. The National Marine Fisheries Service assumed the initial chair role, and agencies plan to identify the next chair before the end of the first term.
Including relevant participants 	Have all the relevant participants been included? Do they have the ability to commit resources for their agency?	The heads of 15 departments or agencies from across the federal government are to appoint representatives to the working group, which is also to include representatives from five entities to be appointed by the President, as well as representatives from one or more members of the intelligence community to be appointed by the Director of National Intelligence. Most representatives called for by the act have been appointed. ⁸
Developing and updating written guidance and agreements 	If appropriate, have participating agencies documented their agreement regarding how they will be collaborating?	The written work plan developed by the working group describes the activities of the group and its subworking group for fulfilling the responsibilities outlined in the Maritime SAFE Act.
Clarifying roles and responsibilities 	Have participating agencies clarified roles and responsibilities?	For each subworking group and for other ongoing activities, the work plan identifies a lead agency, other agency participants as applicable, and specific tasks.
Defining outcomes and monitoring accountability 	Have short- and long-term outcomes been clearly defined? Is there a way to track and monitor their progress?	The working group established interim outcomes and accountability by developing a work plan with time frames for specific tasks. The group plans to determine how to monitor progress as it begins to develop its 5-year strategic plan, due in December 2021.

Source: GAO analysis of our prior work on leading collaboration practices and information from working group members and documents. | GAO-22-104234

Notes: The Maritime SAFE Act established a collaborative interagency working group on maritime security and illegal, unreported, and unregulated (IUU) fishing in December 2019. Pub. L. No. 116-92, div. C, tit. XXXV, subtit. C., § 3551, 133 Stat. 1997, 2005 (2019) (codified at 16 U.S.C. § 8031). For our prior work on leading collaboration practices, see GAO, *Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms*, GAO-12-1022 (Washington, D.C.: Sept. 27, 2012).

³⁹According to National Oceanic and Atmospheric Administration officials, the Office of Science and Technology Policy has had turnover of its previously appointed working group representative(s) and a new representative has not yet been appointed.

Under the act, the heads of 15 specified federal entities are to appoint representatives to the working group. The group is also to include representatives from five entities to be appointed by the President, as well as representatives from one or more members of the intelligence community to be appointed by the Director of National Intelligence. See appendix I for a list of the members specified by the act. Almost all of these entities have appointed representatives to the working group, with the Navy appointing its representative to the group in June 2021.³⁹

According to DOD officials, the Navy's delay in selecting a representative was due to a number of causes. For instance, DOD officials noted that the Navy's efforts in support of combating IUU fishing involve multiple areas within the Navy, and DOD needed to identify the most appropriate organization to represent the Navy in the working group. DOD officials also said that assisting law enforcement and partner nations in efforts that support combating IUU fishing is not part of the Navy's primary mission.

Our past work found that if collaborative efforts do not consider the input of all relevant stakeholders, important opportunities for achieving outcomes may be missed.⁴⁰ The Maritime SAFE Act includes provisions relevant to the Navy, such as calling for (1) the working group to develop a strategy to determine how military assets and intelligence can contribute to enforcement strategies to combat IUU fishing, and (2) agencies to assess opportunities to create partnerships similar to the Oceania Maritime Security Initiative and the Africa Maritime Law Enforcement Partnership in other priority regions.⁴¹ Further, NOAA officials also emphasized the importance of including the Navy as the working group begins efforts to develop the 5-year strategic plan required by the act. Participation in the working group by the Navy's newly

³⁹The Office of Science and Technology Policy has had turnover of its previously appointed working group representative(s); a new representative has not yet been appointed, according to NOAA officials.

⁴⁰[GAO-12-1022](#) and GAO, *Managing for Results: GAO's Work Related to the Interim Crosscutting Priority Goals under the GPRA Modernization Act*, [GAO-12-620R](#) (Washington, D.C.: May 31, 2012).

⁴¹The Oceania Maritime Security Initiative provides that if a Navy vessel is traveling to a priority area in which the Coast Guard needs to conduct counter-IUU fishing work, the Navy may allow Coast Guard officials and law enforcement officials from Pacific Island partner nations to embark on Navy vessels.

appointed member will better position the group to enhance and sustain its collaborative efforts to address IUU fishing worldwide.

Other Interagency Groups and Processes Help Coordinate Some U.S. Efforts Related to IUU Fishing

Other interagency groups and processes help coordinate some broader U.S. efforts that relate to combating IUU fishing at sea. Specifically, agency officials identified groups focused on maritime intelligence or maritime domain awareness, the Civil Applications Committee, the U.S. Southern Command J2 working group on IUU fishing, and the U.S. Maritime Operational Threat Response Plan as all helping to coordinate U.S. efforts.

Maritime Intelligence or Maritime Domain Awareness Groups

NMIO leads several interagency groups focused on maritime intelligence or maritime domain awareness. According to a NMIO official, these groups serve a broader purpose than addressing IUU fishing; however, the official explained that their efforts can focus on IUU fishing and may facilitate federal efforts to combat it, as appropriate. For example:

- NMIO leads the Maritime Intelligence Strategy Board, which a NMIO official said includes all intelligence agencies and DOD's combatant commands.
- NMIO also leads the Maritime Domain Awareness Executive Steering Committee, which coordinates policies, strategies, and initiatives supporting the nation's maritime domain awareness plan, according to NMIO officials. The committee includes officials from the intelligence community and the Departments of Commerce, State, Defense, Homeland Security, and Transportation, according to NMIO officials.
- NMIO supports the State Department-led the International Maritime Domain Awareness Working Group, according to a NMIO official. This group was created by the Executive Steering Committee and first met in January 2021.⁴² Among other things, the group intends to develop mechanisms for government-wide coordination and shared awareness on the U.S.'s international maritime domain awareness efforts. It also intends to gather interagency international priorities, objectives, and requirements to inform the development of a government-wide strategy for global maritime domain awareness.

⁴²According to a working group document, the group's members include the Departments of Commerce (including NOAA), Defense, Homeland Security (including the Coast Guard), Justice, State, and Transportation, as well as the intelligence community.

Civil Applications Committee

Chartered in 1975 and led by the U.S. Geological Survey, the interagency Civil Applications Committee coordinates and oversees the federal civil use of classified collections of remotely sensed data.⁴³ These collections include data collected by military and intelligence capabilities. Approximately 2 years ago, the committee formed an IUU fishing community of interest that began by coordinating remote sensing resources on IUU fishing, according to State Department and U.S. Geological Survey officials. In addition, the committee is leading ongoing work under the Maritime SAFE Act working group to identify planned or potential geospatial remote sensing technologies that can be leveraged to support maritime domain awareness and capabilities for addressing IUU fishing, according to the work plan for the Maritime SAFE Act working group.

U.S. Southern Command J2 Working Group on IUU Fishing

Coast Guard and DOD officials told us that this combatant command formed a working group in September 2020 to discuss IUU fishing issues related to the command's area of responsibility in the waters adjacent to Central and South America and the Caribbean Sea. The purpose of the group is to promote coordination, information sharing, efforts to address information gaps, and discussions among IUU fishing analysts across the intelligence community and U.S. government, according to DOD officials. These officials said that the group includes representatives from U.S. Southern Command (including Special Operations Command South),⁴⁴ the Coast Guard, NOAA, NMIO, the State Department, the Office of Naval Intelligence, and Florida International University.⁴⁵ DOD officials said that members of the working group routinely share information on

⁴³According to a U.S. Geological Survey official, the committee's principal members are the Coast Guard; Departments of Agriculture, Commerce, Health and Human Services, the Interior, and Transportation; Environmental Protection Agency; Federal Emergency Management Agency; National Aeronautics and Space Administration; National Science Foundation; Tennessee Valley Authority; and U.S. Army Corps of Engineers. Associate members are the Defense Intelligence Agency; Departments of Energy, Homeland Security, and State; National Geospatial-Intelligence Agency; National Guard Bureau; and National Reconnaissance Office. Ex officio members are the Office of the Director of National Intelligence, Office of Science and Technology Policy, and National Geospatial Intelligence Committee.

⁴⁴Special Operations Command South includes military members from all four services. It plans and executes special operations in Central and South America and the Caribbean to find and counter threats to U.S. interests and maintain regional stability.

⁴⁵DOD officials said that Florida International University is developing a Security Research Hub to acquire and collate IUU fishing-related data from various open-source or publicly available information resources, including the nonprofit organization Global Fishing Watch and Windward, a commercial maritime intelligence company.

U.S. Maritime Operational
Threat Response (MOTR) Plan

international coordination, initiatives, and events and that the group has also worked with international partners.

First signed in 2006, MOTR is the presidentially approved plan to achieve coordinated, quick, and decisive U.S. government responses to threats against the U.S. and its interests in the maritime domain. The MOTR plan and its protocols guide federal agencies toward consistent, coordinated, and consensus-based responses to maritime threats, according to the plan. Such threats include illegal fishing, as well as acts of terrorism, piracy, drug trafficking, human trafficking, and arms trafficking. MOTR includes 10 federal entities.⁴⁶ In 2010, the Secretary of Homeland Security established the Global MOTR Coordination Center to serve as the national MOTR coordinator. Officials explained that the center is funded by and administratively part of the Coast Guard.

Since inception of the MOTR plan, the U.S. government has used it in more than 1,000 maritime events, including migrant interdictions, drug seizures, terrorism, and piracy, according to MOTR documentation. For example, federal agencies recently used the MOTR plan to address an incident of suspected IUU fishing, according to Coast Guard officials. In this instance, the Coast Guard identified a vessel suspected of IUU fishing in the convention area of an RFMO that had not adopted an applicable high seas boarding and inspection provision. Coast Guard officials said they worked with the State Department to use the MOTR plan as a framework to request authority from the vessel's flag state to board and inspect the vessel. While the flag state ultimately denied this request, U.S. officials and the flag state together determined that the suspected IUU fishing was related to unclear vessel registration processes and resolved the issue. State Department officials said that the resolution included contacting the nation understood to be the vessel's next port of call to request that it perform a port inspection upon the vessel's arrival.

The MOTR plan is also used in exercises to plan for addressing potential incidents of IUU fishing. For example, agencies used it in 2020 to conduct an interagency discussion prior to a Coast Guard IUU fishing patrol, according to State Department officials. State Department officials said that the discussion focused on federal authorities and potential scenarios the Coast Guard could face during its patrol, including legal and policy

⁴⁶These include the Centers for Disease Control and Prevention; Departments of Defense, Homeland Security, Justice, State, Transportation, and Treasury; NMIO; NOAA; and National Security Council.

considerations for potential high seas boardings to combat IUU fishing. The officials said that approximately 50 military officers and officials from the Coast Guard, the State Department, and NOAA examined scenarios that could occur during the patrol operations. State Department officials explained that by presenting challenging legal and diplomatic scenarios not normally associated with standard law enforcement and fisheries operations, the exercise provided additional information to U.S. agencies that might become involved in responding to IUU fishing.

Conclusions

IUU fishing at sea is an international issue that causes significant negative economic impacts globally. The U.S. is one of many nations working to combat IUU fishing through international cooperation mechanisms and at-sea exercises to build partner nation capacity to enforce their fisheries law. Additionally, the Maritime SAFE Act provides that it is the policy of the U.S. to develop diplomatic, military, law enforcement, economic, and capacity-building tools to counter IUU fishing, and to promote global maritime security through improved capacity and technological assistance to support improved maritime domain awareness. One such capacity-building tool is DOD's African Maritime Law Enforcement Partnership program, which builds African partner nations' capability to enhance maritime security and enforce their maritime laws at sea through real-world combined maritime law enforcement operations. However, due to legislative changes, DOD lacks clarity on whether it has the authority to fully execute one phase of the partnership—specifically, Operation Junction Rain, which arranges combined maritime law enforcement activities with U.S. and African partner nation personnel. DOD officials told us they do not believe they have the authority to conduct the program, and DOD documents indicate it is not clear whether there may be other available authorities to leverage to continue the operation. According to DOD officials, Operation Junction Rain yielded significant positive results in developing partner nations' capacity to strengthen fisheries law enforcement. If DOD determines whether it has the authority to conduct Operation Junction Rain, the department could either resume the program or seek the necessary authority to do so. Resuming the program would strengthen DOD support of African partner nations in developing their ability to enforce fisheries laws and regulations, which in turn would help them work to counter IUU fishing both in their EEZs and on the high seas when committed by their flagged vessels.

Recommendation for Executive Action

The Department of Defense should determine whether it has the authority to continue to conduct Operation Junction Rain and, if it determines it does not, seek the authority to do so. (Recommendation 1)

Agency Comments and Our Evaluation

We provided a draft of this report to the Departments of Commerce, Defense, Homeland Security, and State, and the Office of the Director of National Intelligence for review and comment. We received written comments from the Department of Defense, which are reproduced in appendix II. In addition, NOAA, within the Department of Commerce, the Department of Defense, the Department of Homeland Security, and the Office of the Director of National Intelligence provided technical comments, which we incorporated as appropriate. State Department did not provide comments.

DOD partially concurred with our recommendation. Specifically, DOD stated that it did not believe it should seek any additional authority specifically to conduct law enforcement operations, including enforcement of fishery laws and regulations of African countries. Our recommendation specifies that DOD should determine whether it has the authority to continue to conduct Operation Junction Rain—an operation it previously conducted—and, if it determines it does not, seek the authority to do so. The African Maritime Law Enforcement Partnership program, under which Operation Junction Rain was established, directly supports AFRICOM's efforts to counter IUU fishing, among other things, and DOD officials told us this program yielded significant positive results in the past. We believe that, if DOD determines whether it has the authority to conduct Operation Junction Rain, the Department could either resume the program or seek the requisite authority to do so. Officials told us that resuming the program would strengthen DOD support of African partner nations in developing their ability to enforce fisheries laws and regulations, which in turn would help them work to counter IUU fishing both in their EEZs and on the high seas when committed by their flagged vessels.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the appropriate congressional committees; the secretaries of Commerce, Defense, Homeland Security, and State; and the Director of the Office of the Director of National Intelligence. In addition, the report is available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-3841 or JohnsonCD1@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix II.

A handwritten signature in black ink, appearing to read "Cardell Johnson", with a stylized flourish at the end.

Cardell D. Johnson
Director, Natural Resources and Environment

Appendix I: Members of the Maritime SAFE Act Working Group on IUU Fishing

The Maritime Security and Fisheries Enforcement (SAFE) Act established a collaborative interagency working group on maritime security and illegal, unreported, or unregulated (IUU) fishing, and specified the membership of this working group.¹ The act provides that there is to be one chair of the working group, which is to rotate between the Commandant of the Coast Guard, the Secretary of State, and the Administrator of the National Oceanic and Atmospheric Administration, on a 3-year term. The act further provides that there are to be two deputy chairs, from a different department than that of the chair, to be appointed from the Coast Guard, the Department of State, and the National Oceanic and Atmospheric Administration. The working group is also to include members from the following 12 federal agencies, to be appointed by their respective agency heads:

- the Departments of Agriculture, Defense, Justice, Labor, and the Treasury;
- the Federal Trade Commission;
- the Food and Drug Administration;
- the U.S. Navy;
- the U.S. Agency for International Development;
- U.S. Customs and Border Protection;
- the U.S. Fish and Wildlife Service; and
- U.S. Immigration and Customs Enforcement.

The working group is also to include one or more members from the intelligence community,² to be appointed by the Director of National Intelligence. This member currently consists of a representative from the National Maritime Intelligence-Integration Office. Finally, the working group is also to consist of representatives, to be appointed by the President, from the following five entities:

- the Council on Environmental Quality;
- the National Security Council; and

¹Pub. L. No. 116-92, div. C, tit. XXXV, subtit. C, § 3551, 133 Stat. 1997, 2005 (2019) (codified at 16 U.S.C. § 8031).

²The act uses the definition of intelligence community from section 3 of the National Security Act of 1947 (50 U.S.C. § 3003), which defines such community as consisting of a number of specified agencies and entities.

**Appendix I: Members of the Maritime SAFE Act
Working Group on IUU Fishing**

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- the Offices of Management and Budget, Science and Technology Policy, and the United States Trade Representative.

Appendix II: Comments from the Department of Defense

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OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
2400 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-2400

Mr. Cardell D. Johnson
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Johnson:

This is the Department of Defense (DoD) response to the Government Accountability Office (GAO) Draft Report, GAO 21-104234, "Combatting Illegal Fishing: Clear Authority Could Enhance U.S. Efforts to Partner with Other Nations at Sea," dated August 17, 2021.

The DoD response to the report's recommendation is enclosed. My point of contact is Mr. James Furlo, 703-571-9423, james.a.furlo.civ@mail.mil.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Egan".

Deputy Assistant Secretary of Defense for
African Affairs

Enclosure:
As stated

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Enclosure 1

GAO DRAFT REPORT DATED AUGUST 17, 2021
GAO-21-104234

COMBATTING ILLEGAL FISHING: Clear Authorities Could Enhance U.S. Efforts to Partner
with Other Nations at Sea

DEPARTMENT OF DEFENSE COMMENTS
TO THE GAO REPORT RECOMMENDATION

GAO RECOMMENDATION: The Department of Defense should determine whether it has the authority to continue to conduct Operation Junction Rain and, if it determines it does not, seek the authority to do so.

DoD RESPONSE: DoD partially concurs. The Department of Defense agrees that it should only undertake operations or activities for which it has sufficient and appropriate legal authority. DoD does not agree with the recommendation that the Department seek additional authority specifically to conduct law enforcement operations, including enforcement of fishery laws and regulations of African countries. As the draft report details, the Department of Homeland Security, through the U.S. Coast Guard, the Department of Commerce, through the National Oceanic and Atmospheric Administration, and the Department of State have important roles in countering illegal, unreported, and unregulated fishing. Multiple organizations within DoD are currently addressing the question of maritime security from both a policy and authorities perspective consistent with DoD's role.

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Appendix III: GAO Contact and Staff Acknowledgments

GAO Contact

Cardell D. Johnson, (202) 512-3841 or johnsoncd1@gao.gov

Staff

Acknowledgments:

In addition to the contact named above, Anne-Marie Fennell (Director), Elizabeth Erdmann (Assistant Director), Emily Norman (Analyst in Charge), Krista Breen Anderson, David Dornisch, Will Horowitz, Patricia Moye, Cynthia Norris, Courtney Tepera, Mick Ray, Sara Sullivan, Sarah Veale, Christina Werth, and Sara Younes made key contributions to this report.

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