

Submission to Measures to prevent the importation of illegal, unreported and unregulated seafood discussion paper

Gilles Hosch, Diatom Consulting, [REDACTED]

Leslie Roberson, University of Queensland, [REDACTED]

Richard Cottrell, University of Queensland, [REDACTED]

Emily Harrison, Minderoo Foundation, [REDACTED]

Carissa Klein, University of Queensland, [REDACTED]

Rosa Mar Domiguez-Martinez, University of Queensland, [REDACTED]

Glenn Sant, TRAFFIC, [REDACTED]

Chris Wilcox, Minderoo Foundation, [REDACTED]

Overview:

Australia has committed to implementing measures to reduce the amount of illegally sourced seafood entering its borders. As the Australian market is relatively small, a unilateral approach will not have a major effect on Illegal, Unreported, and Unregulated seafood globally. However, there is an important opportunity for Australia to create a multilateral system that other nations can join and that improves on existing unilateral approaches developed by the EU, US, and Japan. Better monitoring and control of imported seafood would also help Australia achieve its commitments as a signatory to international trade agreements, such as the Convention on International Trade in Endangered Species (CITES) and the chapters to the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) in relation to IUU fishing along with sharks and rays. The negotiations Australia is presently engaged in with new trade agreements, such as the Indo Pacific Economic Framework for Prosperity and bilateral agreements with the EU, would offer Australia an additional opportunity to forge a multilateral approach to seafood import control. Australia could become a global leader in the consumption of sustainable seafood—which is the crux of the UN Sustainable Development Goal 12—and make an important contribution to addressing the global problem of IUU fishing.

We are a group of domestic and foreign-based scientists and practitioners with Australia-specific and global expertise related to IUU fishing and fisheries management. We appreciate the opportunity to contribute to this discussion of new measures to prevent imports of IUU seafood. Here, we respond specifically to the second and third information requests in the DAFF Discussion Paper, which ask for feedback on the efficacy and cost-effectiveness of existing market-based measures to combat IUU fishing and potential policy options.

Information Request 2:

We are seeking feedback on the efficacy and cost-effectiveness of market-based measures to combat IUU fishing.

2.1. Have market-based measures to combat IUU fishing applied in the European Union, United States or Japan, or by multilateral fishery bodies, been effective in curbing IUU fishing?

2.2. To what extent do evaluations of existing import controls schemes translate to an Australian context? Do Australia's market characteristics pose additional challenges/risks?

2.3. What is the relationship between non-market and market-based policy options to combat IUU fishing? In an Australian context, should market-based measures be prioritized over other approaches,

such as providing support to developing states to implement international agreements or to enhance their monitoring, control and surveillance capabilities?

2.4. Is there a compelling case for Australia to implement unilateral market measures or are multilateral approaches preferred? What are the trade-offs between these approaches?

Conceptualizing IUU import control systems

First, we define the concepts of catch documentation and import control systems, and what they can and cannot enforce. The objective of these systems is to document the source of a seafood product, record its movement through the supply chain to the importing country, and detect any illegal product so that enforcement bodies can prevent it from entering the market. The focus of existing systems has been on the “Illegal” component of the IUU umbrella, recognizing there is overlap with the unreported and unregulated baskets, and with sustainability more broadly. It is sensible to prioritize illegal fishing, although the definition of illegality in the context of seafood is also broad (Kuemlangan et al. 2023). For example, overt illegality could be sale of banned species, fish caught in an area where fishing is prohibited, fish caught by a vessel that is not licensed to fish, use of illegal fishing gear, or a violation of quotas or catch limits (Freitas 2021). Less egregious illegality might be an infraction of a rule that is flawed, for instance mandating use of certain types of gear or discarding techniques that have a perverse outcome on catch sustainability.

There are other types of illegality not directly related to the fishing operation itself, such as breaking human labour or vessel safety and compliance laws, or involvement in organised crime such as drug, arms, or migrant smuggling. A catch documentation and import control system cannot detect and enforce all types of illegality, and by nature it cannot detect unregulated, unreported, or otherwise unsustainable products (Freitas 2021). However, a well-designed system could address certain key problems. One is detection of fraudulent or duplicated catch certificates, which reports suggest are rarely identified under the current systems (Hosch 2016). A second notable objective would be improving detection of illegal trade of species of concern, such as CITES listed species, trade of species listed in the appendices of the Convention of Migratory Species (CMS), and other Biosecurity related species with regulated imports. In the case of Australia, the government has adopted stronger domestic measures than required by CITES and CMS, which should be considered in the context of this review against national legislative requirements (Fernando et al, 2022).

Thus, despite the limitations, a well-designed system could make significant gains towards improving the traceability of seafood and preventing a substantial proportion of illegal seafood from entering Australia’s market (Hosch 2016). A centralized catch documentation and import controls system would also help streamline existing regulatory and enforcement systems that Australia has implemented to meet its international trade commitments.

Overview of existing import control systems

There are currently two operational seafood import control systems: The European Union’s IUU Regulation and Catch Certificate Scheme (hereafter “EU-IUU Regulation”) and the United States’ Seafood Import Monitoring Program (“SIMP”). Japan has developed a catch documentation scheme (CDS) based on the EU CDS, which will come online in the near future but initially will only cover four species groups. These systems are all unilateral programs where each importing country (market state) is independently regulating the products that arrive at their border. We also comment on the role of

Regional Fisheries Management Organizations (RFMOs), which have a central role to play in reducing IUU fishing.

Two key features of the EU-IUU Regulation are its catch documentation scheme and market state control measures. The EU IUU Regulation involves a supply chain system of certificates that public authorities countersign, thereby calling the flag, port, and processing state authorities into action. It also creates a possibility to issue yellow and red cards to sanction non-compliant suppliers (Elvestad and Kvalvik 2015). The catch documentation scheme mandates that all seafood arriving at a country's border must be accompanied by a catch certificate, which contains certain information about its identity and origin. The yellow and red cards can be issued to countries if the EU governing body determines that their fishing practices are unacceptable and noncompliant with the EU's standards for imported seafood. The yellow card is a warning and the red card results in a trade embargo.

The US SIMP system also requires catch documentation, but that information is held by the importing company (not a government body) and is not centralized. There is no involvement of public authorities in the US SIMP. The importer is subject to random government audits but this is not a requirement (Virdin et al. 2022). Thus, SIMP is actually structured as a monitoring and record keeping system instead of a true "control system".

While the US SIMP and the EU IUU Regulation appear to have driven some improvements in the products available in their markets, evidence suggests that neither have met their target objectives for preventing seafood products with illegal origins from entering the importing country. Australia is considering creating its own unilateral system, presumably adopting the characteristics of one or all of the existing (or soon to exist) systems. However, in light of the structural flaws and limitations of these unilateral systems, our recommendation is to consider a different approach designed to accommodate multilateral cooperation among importing countries.

It is worth briefly commenting on the role and governance structure of RFMOs, which are multilateral organizations made up of coastal states and fishing nations that govern particular stocks. In theory, RFMOs are positioned to facilitate highly effective import control systems as they manage an entire fishery resource or stock (e.g., Atlantic bluefin tuna) and can therefore control how that product moves through the supply chain to market states. Essentially, a functioning RFMO can provide a basis for ensuring that products moving through a long, complex supply chain are reliably documented because they control the product at the source. However, there are many limitations to what the current RFMOs can offer in terms of control on IUU fishing. Apart from CCAMLR, the major RFMOs are all limited to tuna and billfish species. Within the tuna RFMOs, there is massive variability in governance capacity and effectiveness at controlling IUU fishing (Pons, Melnychuk, and Hilborn 2018). For instance, the Indian Ocean Tuna Commission faces serious challenges simply from its geography and the socioeconomic diversity of its member countries (Roberson, Kiszka, and Watson 2019). In general, the RFMO frameworks—especially for non-tuna species—have been implemented in an ad hoc manner that has led to substantial gaps in coverage. For example, there is no formalized taxonomic list of species covered across the various RFMOs and many commercial species are not specifically covered by any RFMO, especially deep-sea species occurring in the High Seas (Crespo et al. 2019). Thus, while it would certainly be worthwhile for Australia (and any market state) to provide support to RFMOs to increase their management capacity (Flothmann et al. 2010) as a possible route to addressing IUU imports, there is a clear need for market states to develop catch documentation and import control systems to help reduce the trade of IUU-sourced seafood given the current coverage and capacity of RFMOs.

Key flaws in the existing systems

From a fish trade perspective, multilateral trade measures are preferred to unilateral systems (FAO, 2001; FAO, 2017). From a fisheries management perspective, unilateral market-based control systems are also considered weaker options as they fail to cover (and protect) entire stock units, making them second-rate choices in terms of effectiveness. The impact of a unilateral trade measure on a fish stock—specifically in eliminating illegally sourced product—may be effective when an end-market absorbs the majority of exports. In such cases, the unilateral measure can contribute significantly to stock conservation by severely reducing market availability for IUU-sourced fish. This was essentially the case with Patagonian toothfish, where the US held such a dominant market share that their unilateral regulation trickled down to every significant producer (Grilly et al. 2015). Even in the unusual cases of one dominant market, such as toothfish, the self-regulation and self-enforcement built into the current unilateral systems, and the absence of official guarantees and certificates provided by regulators along the supply chain, create the potential for players to move IUU products into these markets. When there are many markets and only one or two of them have an import control system (as is the case with many highly traded products such as shrimp or tuna), the potential for IUU products is much greater.

It is worth noting that the information sought in these systems is limited, meaning that even a legitimate catch certificate may not contain enough information to detect illegal products. The EU catch certification scheme suffers from design flaws such as the absence of a port and date of landing, the establishment of national catch certificates only at the time of exportation (instead of landing), and the lack of a central certificate registry, undermining traceability and detection of fraudulent overuse of legitimate catch documents (Clarke and Hosch, 2013). Similarly, in the US SIMP system importers in very short supply chains have some control over the information submitted to them; however, this control rapidly diminishes in longer supply chains undermining the value of the information collected by compliant importers (Gephart, Froehlich, and Branch 2019). The EU catch certificate scheme is paper based, meaning the mass balance of what arrives in and leaves a country and detection of duplicate certificates is not automated and must be done manually. This absence of a central (and electronic) certificate registry creates serious challenges in terms of traceability and the ability to detect fraudulent certificate over usage, especially for longer and more complex supply chains, which limits the effectiveness of the EU certification scheme.

Furthermore, the process of issuing yellow and red cards under the EU IUU Regulation lacks transparency (Van der Marel 2017), and third countries are rarely or never carded for non-compliance with the certification scheme. Third countries refers to any country not in the EU, regardless of whether it is a coastal, flag, port, or market state. Additionally, trade embargoes imposed on carded countries are toothless when these countries do not trade with the European Union, and many such countries have been red carded in the past. The targeting of all trade from specific flag states also results in unintended consequences, as small-scale and other operators who are not part of the problem bear the brunt of the measures, leading to unjust impacts (Hosch 2016).

In comparison, the United States' Seafood Import Monitoring Program (SIMP) and its biennial report to Congress provide relatively greater transparency than the European Union's system (Freitas 2021, Willette and Cheng 2018). Yet, despite its strengths, the US SIMP does not lead to definitive identifications with resulting trade embargoes for certain countries, as identifications of IUU products are often resolved and information adjusted without resulting in concrete regulatory actions. There is no mechanism or trigger that translates identifications of IUU imports into regulatory actions. There is

some evidence this is changing, with recent trade embargoes against Mexico and Russia. Notably, the US SIMP is built around its own definition of IUU (it is only relevant for the regulation if it directly impacts US interests), meaning the system is resoundingly unilateral in both its philosophy and structure. The taxonomic scope of SIMP is improving but still not comprehensive; it began with only 13 species and now has reporting requirements for nearly half of all US seafood imports (NOAA 2022). The US SIMP is also paper based, creating the same limitations for fraud detection as with the EU IUU Regulation.

In summary, the flaws and limitations observed in existing unilateral systems, as well as the challenges faced in implementing effective certification schemes and trade embargoes, highlight the need for careful consideration and comprehensive critique when establishing new seafood trade management tools. Addressing these shortcomings is crucial to ensure the effectiveness, transparency, and fairness of any future systems implemented in the pursuit of sustainable fisheries management practices.

Information Request 3:

We are seeking feedback on potential policy options aimed at preventing the importation of IUU seafood into Australia, as well as approaches to assessing costs and benefits to stakeholders.

- 3.1. What policy reforms are necessary to prevent the importation of seafood derived from IUU fishing practices?
- 3.2. How can policy minimise compliance costs, trade risks and address transitional and distributional impacts?
- 3.3. Are there any legal implications to the proposed policy options of which you are aware?
- 3.4. What additional costs and benefits should be considered when evaluating policy options?

Key design criteria for better seafood import control systems

We recommend that Australia not repeat the mistake of creating another sealed-off unilateral catch documentation and import control system, especially in light of Australia's limited international market share for most of its imported seafood products. Instead, we propose designing a generic system that meets Australia's needs and could function as an independent system, but that is harmonised with existing systems and built to encourage participation from other States (*Figure 1*). It is conceivable that major seafood importers such as the EU, US, and Japan, who have undertaken unilateral approaches to IUU regulation, would still be interested in cooperating in a multilateral scheme. We note that the negotiation of the Indo Pacific Economic Framework for Prosperity involves the USA and Japan, which could present opportunities for dialogue around shared approaches. By providing a basis for unilateral schemes to cooperate in a single system, Australia can create a multi-lateralized system wherein the burden of compliance on the industry is reduced, costs are shared among participating market states, and the impact of such a scheme is maximized as more markets absorbing imports of a species are able to unite using a shared platform that supports their individual control systems.

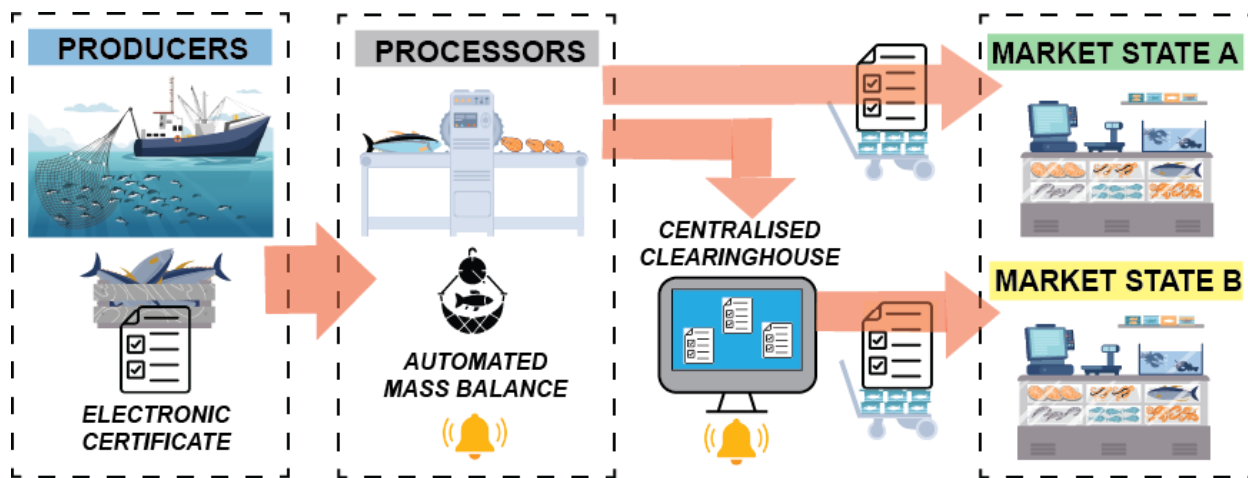


Figure 1: Conceptual diagram of a supply chain from production (fishing) to imported product by multiple market states. In Market State B represented Australia, products would first flow through the proposed centralised clearinghouse. Automated mass balance checks would be incorporated throughout the supply chain, and fraud detection at any step would trigger alarms. The electronic catch certificates held in the centralised clearinghouse would be available for regulators from Market State A to view, even if that country had not formally joined the system. The development of a generic clearinghouse would also mean Market State A could also opt to join the system more formally, adopting the flow of information used by B at any point.

A successful system would espouse **seven broad key design criteria**:

1. Creation of a central Clearinghouse

To encourage multilateral participation and cost-sharing, we recommend establishing an electronic Clearinghouse where interested countries can join the certification system (Hosch 2016). This Clearinghouse will facilitate the transition from paper-based documentation to digitalization, allowing other countries to sign on easily and benefit from the system's management capabilities. By pooling resources and sharing costs, participating countries can collectively ensure the effective operation and maintenance of the certification system. Acting unilaterally, Australia will be unlikely to confer protection to any fish stock through a unilateral trade measure, given its small market share. The participation of even one major market state, or a market state that consistently imports the same products or from the same sources as Australia, will substantially improve chances of detecting illegal fish and putting downward pressure on IUU fishing.

2. Electronic catch documentation system

To ensure seamless implementation and efficient operation, it is imperative that the proposed seafood trade certification system be entirely electronic, leveraging advanced technologies for data management and traceability. A paper-based approach is neither feasible nor effective in the modern era. Ultimately, the initial catch certificate must be issued as an electronic document. If other States joined the system but used paper catch certificates, those papers could be easily digitized. Paper digitization, which is based on AI and machine learning tools, is a widely used and relatively straightforward process. By embracing an electronic system, we can harness the full potential of data flow and establish hard links

between certified incoming and outgoing lots throughout the entire supply chain. This will enable comprehensive monitoring, enforcement, and mass-balance verification within each participating supply chain country (Di Vaio and Varriale 2020).

3. Official certification process

The proposed system should be based on an official certification process enacted by supply chain public authorities, as opposed to importers certifying veracity of information at the time of importation, which is often long after the date of catch (as it is the case under the SIMP). This approach ensures the legitimacy and credibility of the certification, as well as the consistent adherence to established standards and regulations. By entrusting certification to public authorities, we can enhance transparency and build trust among all stakeholders involved in the seafood trade (Hosch and Blaha 2017).

Given that catch certificates depend on flag state verification and certification, it is also vital to establish mechanisms for verifying the compliance and product tracking capacity of flag states. Robust monitoring, control, and surveillance (MCS) systems should be in place to enable the accuracy and reliability of catch certificates issued by flag states. This verification process will strengthen the integrity of the certification system and enhance trust among participating countries. This is why the EU asked third countries to designate public authorities, and then launched “bilateral dialogues” seeking to establish - *inter alia* - the capacity of third countries to monitor, to police and to ascertain legality of fishing operations.

4. Integration with trade system Infrastructure

To streamline operations and facilitate efficient handling, the proposed system should seamlessly integrate with existing trade system infrastructure, particularly customs processes (Di Vaio and Varriale 2020). Recognizing that customs officials will primarily interact with the certification system, it is crucial to design a user-friendly interface that aligns with their workflows and maximizes their effectiveness. The Spanish model, known for its successful integration of seafood trade and customs processes, serves as an exemplary blueprint for this integration (Hosch 2016).

5. Minimum Key Data Elements and Unique IDs

To ensure compatibility with existing systems and facilitate interoperability, the proposed system should utilize minimum sufficient key data elements based on the catch documentation templates currently used. By focusing on essential information, we can avoid unnecessary complexity and reduce the administrative burden on stakeholders. Additionally, the system should assign unique identifiers to each entity involved in the supply chain, enabling simple and effective tracking and traceability of seafood products while maintaining confidentiality.

6. Automated Mass Balance Monitoring and Ongoing Access to Certificates

The system should incorporate automated mass balance monitoring and enforcement, allowing for real-time monitoring of the certified lots along the supply chain. This analytical capability will detect any discrepancies or fraudulent “double-spend” activities within the chain, signalling laundering of non-originating product into legally certified supply streams, and triggering alarms at the time of exporters filing trade certificates for exportation, reinforcing the system's effectiveness. Furthermore, certificates should be made available to regulators on an ongoing basis. For example, regulators in Country A would

be able to see catch certificates that Australia published in the centralized clearinghouse, allowing Country A to check for duplicates and fraud (*Figure 1*). This would enable the regulatory process to operate at a speed that matches the supply chain at the national level, so that enforcement action can be triggered and taken in a timely manner.

7. Wide scope of species coverage

The system should be designed to be able to cover a wide range of species, including highly endangered ones, to promote responsible and sustainable fishing practices. While it may be tempting to limit the number of species covered to achieve cost savings, such a strategy undermines the fundamental purpose of the certification system and the protection of vulnerable marine resources. It also creates an opportunity to bypass documentation by mislabelling a product as an unregulated species. Furthermore, no substantial cost savings are realized by limiting the number of species covered from a system architecture or operations point of view. However, a substantial portion of internationally traded seafood is labelled in highly aggregated categories such as “marine fish” or “sharks and rays” (Roberson, Watson, and Klein 2020; Niedermüller et al. 2021). Such uninformative labels render traceability and certification schemes ineffective. Therefore, it is recommended that the system encompass all species to ensure comprehensive traceability and compliance.

Conclusion: Australia’s opportunity to lead

Australia has committed to implementing measures to reduce the amount of illegally sourced seafood entering its borders. As the Australian market is relatively small, a solely unilateral approach will not have a major effect on IUU seafood globally. However, there is an important opportunity for Australia. First, Australia could invest to create a system that allows it to implement its own unilateral regulatory approach in the near term while facilitating a multi-lateralized system - building a Catch Documentation Scheme Platform open to participation from other end-market States and which can interoperate with existing systems developed by the EU, US, and Japan. Second, Australia could look to the existing systems and design a platform that improves on existing unilateral approaches, creating a fully digital system that allows real time detection of fraud and has embedded permitting steps that stop IUU product from moving through the supply chain (Hosch 2016).

Australia could become a global leader in the assurance of sustainability for its seafood. The UN Sustainable Development Goal 12 explicitly calls for leadership from developed countries. Leadership by a few countries, such as Australia, could make a substantial contribution to reducing IUU fishing, improving the health of the ocean and the people it supports.

References

- Clarke, S. and Gilles Hosch. 2013. “Traceability, Legal Provenance & the EU IUU Regulation: Russian Whitefish and Salmon Imported into the EU from Russia via China.” (Accessed online at http://www.sasama.info/en/pdf/reports_17.pdf)
- Crespo, Guillermo Ortuño, Daniel C Dunn, Matthew Gianni, Kristina Gjerde, Glen Wright, and Patrick N Halpin. 2019. “High-Seas Fish Biodiversity Is Slipping through the Governance Net.” *Nature Ecology & Evolution* 3: 1273–76. <https://doi.org/10.1038/s41559-019-0981-4>.
- Di Vaio, Assunta, and Luisa Varriale. 2020. “Digitalization in the Sea-Land Supply Chain: Experiences from

- Italy in Rethinking the Port Operations within Inter-Organizational Relationships.” *Production Planning & Control* 31 (2–3): 220–32. <https://doi.org/10.1080/09537287.2019.1631464>.
- Elvestad, Christel, and Ingrid Kvalvik. 2015. “Implementing the EU-IUU Regulation: Enhancing Flag State Performance Through Trade Measures.” *Ocean Development & International Law* 46 (3): 241–55. <https://doi.org/10.1080/00908320.2015.1054745>.
- Fernando, D., Rigby, C. and Sant, G. (2022). The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and sharks. Shark Newsletter of the IUCN Shark Specialist Group #4, January 2022. http://www.iucnssg.org/uploads/5/4/1/2/54120303/iucn_ssg_shark_news_issue_04_january_2022-s.pdf#page=12
- Flothmann, Stefan, Kristín von Kistowski, Emily Dolan, Elsa Lee, Frank Meere, and Gunnar Album. 2010. “Closing Loopholes: Getting Illegal Fishing under Control.” *Science* 328: 1235–36. <https://doi.org/10.1126/science.1190245>.
- FAO. 2001. International Plan of Action to Prevent, Deter, and Eliminate Illegal, unreported and Unregulated Fishing. Rome, Italy
- FAO. 2017. Voluntary Guidelines for Catch Documentation Schemes. Rome, Italy. 20 pp.
- Freitas, Ben. 2021. “Corruption in the Fisheries Sector: Import Controls, Transparency, and WWF Practice.” World Wildlife Fund.
- Gephart, Jessica A., Halley E. Froehlich, and Trevor A. Branch. 2019. “To Create Sustainable Seafood Industries, the United States Needs a Better Accounting of Imports and Exports.” *Proceedings of the National Academy of Sciences* 116 (19): 9142–46. <https://doi.org/10.1073/pnas.1905650116>.
- Grilly, Emily, Keith Reid, Sarah Lenel, and Julia Jabour. 2015. “The Price of Fish: A Global Trade Analysis of Patagonian (*Dissostichus Eleginoides*) and Antarctic Toothfish (*Dissostichus Mawsoni*)☆.” *Marine Policy* 60 (October): 186–96. <https://doi.org/10.1016/j.marpol.2015.06.006>.
- Hosch, Gilles. 2016. “Trade Measures to Combat IUU Fishing:” Geneva: International Centre for Trade and Sustainable Development (ICTSD).
- Hosch, Gilles and Francisco Blaha. 2017. Seafood traceability for fisheries compliance – Country-level support for catch documentation schemes. FAO Fisheries and Aquaculture Technical Paper No. 619. Rome, Italy.
- Kuemlangan, Blaise, Elizabeth-Rose Amidjogbe, Julia Nakamura, Alessandra Tomassi, Rudolph Hupperts, Buba Bojang, and Teresa Amador. 2023. “Enforcement Approaches against Illegal Fishing in National Fisheries Legislation.” *Marine Policy* 149 (March): 105514. <https://doi.org/10.1016/j.marpol.2023.105514>.
- Niedermüller, Simone, Gil Ainsworth, Silvia de Juan, Raul García, Andres Ospina-Alvarez, Pablo Pita, and Sebastian Villasante. 2021. “The Shark and Ray Meat Network: A Deep Dive into a Global Affair.” WWF.
- NOAA. 2022. “NOAA Seeks to Expand Seafood Import Monitoring Program.” *National Oceanic and Atmospheric Administration, U.S. Department of Commerce*, December 27, 2022. <https://www.noaa.gov/news-release/noaa-seeks-to-expand-seafood-import-monitoring-program>.
- Pons, Maite, Michael C. Melnychuk, and Ray Hilborn. 2018. “Management Effectiveness of Large Pelagic Fisheries in the High Seas.” *Fish and Fisheries* 19: 260–70. <https://doi.org/10.1111/faf.12253>.

- Roberson, Leslie A, Jeremy J Kiszka, and James EM Watson. 2019. "Need to Address Gaps in Global Fisheries Observation." *Conservation Biology* 33 (4): 966–68.
- Roberson, Leslie A, Reg A Watson, and Carissa J Klein. 2020. "Over 90 Endangered Fish and Invertebrates Are Caught in Industrial Fisheries." *Nature Communications* 11 (1): 4764.
- Van der Marel, Eva. 2017. An Opaque Blacklist: The Lack of Transparency in Identifying Non-Cooperating Countries under the EU IUU Regulation - European International Arbitration Review (EIAR) - Volume 5 - Issue 2.
- Viridin, John, Tibor Vegh, Blake Ratcliff, Elizabeth Havice, Jack Daly, and Jack Stuart. 2022. "Combatting Illegal Fishing through Transparency Initiatives : Lessons Learned from Comparative Analysis of Transparency Initiatives in Seafood, Apparel, Extractive, and Timber Supply Chains." *Marine Policy* 138 (April): 104984. <https://doi.org/10.1016/j.marpol.2022.104984>.
- Willette, Demian A., and Samantha H. Cheng. 2018. "Delivering on Seafood Traceability under the New U.S. Import Monitoring Program." *Ambio* 47: 25–30. <https://doi.org/10.1007/s13280-017-0936-4>.