

**TRADE AND AGRICULTURE DIRECTORATE
FISHERIES COMMITTEE**

**Combating Illegal, Unreported and Unregulated Fishing
Where countries stand and where efforts should concentrate in the future**

This work is mandated under the PWB item 3.2.3.3.1: *Combating Illegal, Unreported and Unregulated Fishing*. This report was declassified by the Fisheries Committee at its 122nd Session in November 2018.

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Note by the Secretariat

This report identifies the progress achieved in implementing internationally recognised best policies and practices against illegal, unreported and unregulated (IUU) fishing since 2005, and points to the remaining gaps, suggesting where to concentrate additional efforts in the future.

This report builds on the analysis of information received through a survey sent to OECD member countries, as well as partner countries and economies, asking about policies and practices against IUU fishing in place in 2016. It consolidates the results into six indicators reflecting the most important areas of government intervention in relation to IUU fishing: flag, state, port and market responsibilities, as well as enforcement and international co-operation.

All country-level information used in this report has been bilaterally validated with participating countries and economies, and is presented in Annex B. The methodology used to consolidate survey results into indicators is described in detail in Annex A.

The country-level analysis is complemented by a study of best policies and practices against IUU fishing administered by regional fisheries management organisations (RFMOs). Information gathered from RFMO legislation, publicly available sources and from direct communication with RFMOs' secretariats is presented in Annex D. All the RFMOs' secretariats have also been offered an opportunity to validate the compiled information.

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Table of contents

Note by the Secretariat.....	2
Acknowledgements.....	3
Abbreviations and acronyms.....	7
Executive summary and key recommendations	9
1. Understanding progress in curbing IUU fishing and priorities for future policy improvements	14
1.1. The persistence of IUU fishing impairs the development of a sustainable ocean economy	14
1.2. There is increasing recognition of the need for strong policies and international co-operation to tackle IUU fishing globally.....	16
1.3. Tracking progress in implementing best policies and practices against IUU fishing	17
1.4. OECD countries have made significant policy progress but some areas need further attention	21
1.5. Lessons learned by OECD countries in implementing best practice against IUU fishing could help other fishing nations.....	23
1.6. The OECD policy indicators on IUU fishing could be a useful tool for policy makers and fisheries managers	24
2. Flag states have improved control over vessels fishing outside their own waters, but laws on fishing-related activities are laxer	26
2.1. Registries have become standard but could be more comprehensive	27
2.2. Authorisation regimes are increasingly used to support implementation of conservation and management measures	30
3. Coastal states are becoming better stewards of the resources in their own waters.....	32
3.1. Management of coastal waters is still being undermined by chartering arrangements.....	32
3.2. Countries apply more lenient measures to their large-scale vessels fishing in domestic waters than to those fishing outside their EEZs	33
3.3. Domestic small-scale fisheries often enjoy special exemptions, but most countries are keeping track of their fishing capacity	34
4. Uneven use of port state measures still allow IUU harvests to enter the global market, but loopholes are being closed.....	36
5. As market states, countries increasingly use economic disincentives to discourage IUU fishing	38
5.1. OECD countries have made significant efforts to improve seafood traceability	38
5.2. Despite some progress, few countries are using financial regulations to target beneficiaries of IUU fishing	42
5.3. Countries increasingly restrict subsidies to those with a clean record of compliance with regulations.....	44
6. Countries have a wider portfolio of enforcement options at their disposal	46
6.1. Modern technology is increasingly used to ease the monitoring of fishing vessels	47
6.2. Co-operation between government bodies fosters the efficient prosecution of IUU fishing.....	50
6.3. Fines for IUU fishing remain low compared to potential profits.....	53
7. Multilateral co-operation and co-ordinated actions are becoming the standard way to combat IUU fishing.....	55

7.1. Countries are implementing provisions to support multilateral co-ordination and co-operation	55
7.2. RFMOs are making progress in adopting best practice to prevent IUU fishing	56
References	70
Annex A. Evaluation methodology	80
Annex B. Compilation of answers to the survey on implementation of internationally recognised best policies and practices against IUU fishing.....	88
Annex C. OECD indicators on IUU fishing – results by country.....	92
Annex D. Compilation of RFMO-level supporting information	98

Tables

Table 1.1. OECD policy indicators on IUU fishing	20
Table 6.1. Prices for species targeted by IUU fishing.....	54
Table 7.1. MCS standards established by RFMOs	59
Table 7.2. IUU vessel listing practices in RFMOs	62
Table 7.3. Decision-making processes in RFMOs	65
Table 7.4. Cross-listing of IUU vessel lists practices across RFMOs.....	67
Table 7.5. Compliance reviews, transparent reporting and sanctions across RFMOs.....	69
Table A.1. Evaluation table for the survey on implementation of internationally recognised best policies and practices against IUU fishing.....	81
Table A.2. Options for multiple-choice (checkbox) questions presented in Table A.1	86
Table B.1. Compilation of survey results – answers to the questions presented in Table A.1.....	88
Table B.2. Compilation of survey results – answers to the multiple-choice (checkbox) questions presented in Table A.2.....	90
Table D.1. Evaluation criteria on implementation of internationally recognised best policies and practices against IUU fishing at regional level by RFMOs	99
Table D.2. Information on implementation of internationally recognised best policies and practices against IUU fishing at regional level by RFMOs	101
Table D.3. Membership of RFMOs and other organisations with a mandate to monitor fisheries or other marine resources.....	133

Figures

Figure 1.1. Progress in implementing best policies and practices against IUU fishing in surveyed countries (2005 and 2016).....	22
Figure 1.2. Aggregated indicator for policies and practices against IUU fishing in relation to GDP per capita	24
Figure 1.3. OECD policy indicators on IUU fishing at regional and national level.....	25
Figure 2.1. Implementation of flag state measures (2005 and 2016)	29
Figure 2.2. Registration requirements for vessels fishing in other countries' national jurisdictions and in the ABNJ	29
Figure 2.3. Information required for an authorisation to be issued	31
Figure 3.1. Implementation of coastal state measures (2005 and 2016)	33

Figure 3.2. Comparison of registration and authorisation requirements for domestic large-scale fleet and the external fleet	34
Figure 3.3. Regulations applicable to domestic small-scale fisheries	35
Figure 4.1. Implementation of port state measures (2005 and 2016).....	37
Figure 5.1. Implementation of trade measures (2005 and 2016).....	40
Figure 5.2. Technical compliance with FATF recommendations relevant to the fight against IUU fishing by OECD countries	43
Figure 5.3. Implementation of policies improving the management of support to fisheries (2005 and 2016)	45
Figure 6.1. MCS tools in use in fisheries management by OECD countries.....	50
Figure 6.2. Institutional setup of the Norwegian Task Force against Organised Fisheries Crime and IUU Fishing.....	52
Figure 6.3. Authorities involved in information sharing at the national level.....	53
Figure 7.1. Implementation of international co-operation measures (2005 and 2016).....	56

Boxes

Box 1.1. What is IUU fishing?	15
Box 1.2. IUU-related targets of SDG 14: <i>Conserve and sustainably use the oceans, seas and marine resources for sustainable development</i>	17
Box 1.3. International treaties and voluntary agreements on IUU fishing	17
Box 1.4. The six IUU fishing policy indicators.....	20
Box 1.5. Using the OECD policy indicators on IUU fishing in practice.....	25
Box 2.1. Unique vessel identifiers (UVIs)	28
Box 5.1. Restricting access to marine insurance: An example of a disincentive to engage in IUU fishing	38
Box 5.2. The EU system for preventing IUU fishing products from entering the EU market	41
Box 5.3. Functioning of the Seafood Import Monitoring Program (SIMP) in the United States.....	41
Box 5.4. Indicators on the transparency of beneficial ownership.....	43
Box 6.1. Commitment to effective oversight of fishing vessels stemming from key international agreements.....	47
Box 6.2. Monitoring at sea with new technologies	49
Box 6.3. The Norwegian Task Force against Organised Fisheries Crime and IUU Fishing – a value chain approach	51

Abbreviations and acronyms

ABNJ	areas beyond national jurisdictions
AIS	automatic identification system
BO	beneficial owner
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CCSBT	Commission for the Conservation of Southern Bluefin Tuna
CDS	catch documentation scheme
CMM	conservation and management measure
CNCP	co-operating non-contracting party
COC	compliance committee
COFI	OECD Fisheries Committee
CP	contracting party
DWFN	distant water fishing nation
EEZ	exclusive economic zone
EMFF	European Maritime and Fisheries Fund
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FATF	Financial Action Task Force
FOC	flag of convenience
GDP	gross domestic product
GFCM	General Fisheries Commission for the Mediterranean
GT	gross tonnage
IAEG-SDGs	Inter-Agency and Expert Group on SDG Indicators
IATTC	Inter-American Tropical Tuna Commission
ICCAT	International Commission for the Conservation of Atlantic Tunas
IMO	International Maritime Organization
INTERPOL	International Criminal Police Organization
IOTC	Indian Ocean Tuna Commission
IPOA-IUU	International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing
IUU	illegal, unreported and unregulated
MCS	monitoring, control and surveillance
MPA	marine protected area

NAFIG	North Atlantic Fisheries Intelligence Group
NAFO	Northwest Atlantic Fisheries Organization
NEAFC	North East Atlantic Fisheries Commission
NPFC	North Pacific Fisheries Commission
PSM	port state measure
PSMA	Port State Measures Agreement
RBM	risk-based management
RFMO	regional fisheries management organisation
SCIC	Standing Committee on Implementation and Compliance
SCOI	Standing Committee on Observation and Inspection
SDG	Sustainable Development Goal
SEAFO	South East Atlantic Fisheries Organisation
SIOFA	Southern Indian Ocean Fisheries Agreement
SPRFMO	South Pacific Regional Fisheries Management Organisation
TAC	total allowable catch
UNCLOS	United Nations Convention on the Law of the Sea
UNDC	United Nations Office on Drugs and Crime
UNFSA	United Nations Fish Stock Agreement
UVI	unique vessel identifier
VMS	vessel monitoring system
WCPFC	Western and Central Pacific Fisheries Commission
WTO	World Trade Organization

Executive summary and key recommendations

Illegal, unreported and unregulated (IUU) fishing is a serious threat to fisheries and fisheries-dependent communities, marine ecosystems and societies at large. Public and political awareness of the issue has increased and a consensus has emerged on the need for countries to join in efforts to combat IUU fishing. The issue now features prominently on the international political agenda, particularly following the adoption of the Sustainable Development Goal (SDG) targets 14.4 and 14.6, which set the objective of ending IUU fishing and subsidies contributing to IUU fishing by 2020.

This report aims to inform policy makers on the progress made in implementing measures against IUU fishing by OECD countries over the last decade, while identifying regulatory loopholes and policy gaps which undermine efforts in the fight against IUU fishing by the wider set of countries participating in the project. The objectives of this detailed analysis is to inspire and guide countries, RFMOs, international organisations and all stakeholders in the fisheries sector in how to focus their effort and investment to step up their fight against IUU fishing.

The analysis is based on an objective framework that monitors the adoption and implementation of recognised best policies and practices against IUU fishing. The process is transparent in that the information collected is made publically available. This analysis is carried-out on the basis of the survey results from countries participating in COFI activities, including responses from 31 countries or economies, of which 23 are OECD members. At the same time, the study recognises that countries may have different portfolios of policies and practices, and it does not attempt to measure the effectiveness of these. The objective of the analysis is rather to help identify areas where future investment in measures against IUU fishing may be considered.

The information is summarised into six policy indicators reflecting the most important areas of government intervention in relation to IUU fishing. Four state responsibility indicators assess countries' regulatory activity as **flag states** (regulating domestically-flagged fishing vessels in the areas beyond their national jurisdiction and in foreign exclusive economic zones), **coastal states** (regulating vessels in the domestic exclusive economic zone), **port states** (applying port controls and regulating the flow of products to the market) and **market states** (creating economic disincentives for IUU fishing and using market tools to detect illegal seafood moving along the supply chain). The **enforcement** indicator assesses the capacity of monitoring, control and surveillance schemes, national inter-agency co-operation practices, and the comprehensiveness of existing sanctioning systems. The **international co-operation** indicator assesses the scope of international co-operation against IUU fishing. The country-level analysis is complemented by a study of best policies and practices against IUU fishing administered by regional fisheries management organisations (RFMOs).

The survey results show considerable improvement over the last decade among OECD countries. Among the most noticeable changes is the almost universal implementation of comprehensive registration and authorisation regimes, which allow countries to monitor vessels and effectively eliminate fishing operations in contravention of applicable laws. In 2016, all OECD member countries surveyed reported full implementation of registration processes for national vessels conducting both fishing and fishing-related activities (such as transshipment) in other jurisdictions or in the areas beyond national jurisdictions, against

only 60% and 33%, respectively, in 2005. The share of OECD countries with fully implemented authorisation regimes for fishing activities rose from 87% to 100%, and for fishing-related activities from 40% to 78%.

Widespread implementation of port state measures (PSMs) can also now cut access to offloading areas to operators of vessels involved in IUU fishing. For example, with intention to better direct available control capacity, lists of ports designated for use by foreign-flagged vessels and advance requests requirements for port entry by the same vessels are now in use in 87% of the OECD countries surveyed (up from, respectively, 53% and 27% in 2005). Measures in place to deny port access or services to vessels suspected of IUU fishing are used in 87% of those countries (compared to 40% in 2005). Moreover, 96% of the OECD countries surveyed have designated an authority to act as a focal point for the exchange of information on PSMs (up from 20% in 2005) and 83% reported fulfilling obligations related to PSM arising from membership of RFMOs (20% in 2005).

The use of measures targeting fish product markets and better alignment of economic incentives is also on the rise. For instance, catch documentation and certification schemes preventing IUU fishing products from entering the market are now required in 96% of the OECD countries surveyed. It is also increasingly common to investigate financial transactions related to the seafood trade for fraudulent sourcing.

Reforms are also reinforcing legal foundations for effective enforcement practices. All OECD countries surveyed universally reported the use of catch documentation schemes, vessel monitoring systems and automatic identification systems, and cross-checking of trade certificates in 2016. In 2016, the majority of countries had developed systems to store monitoring, control and surveillance (MCS) data (96%) and 87% reported the use of risk-based management to better prioritise and target the allocation of enforcement efforts. This is being reinforced by progress on the co-operation front. Implementation of standards for sharing information at regional or international level was reported by 87% of surveyed countries, up from 43% in 2005. Co-operative systems on MCS and joint actions against alleged IUU operations were reported by 91% of countries, up from 33% in 2005.

However, the results also highlight areas needing further attention. Among the OECD countries surveyed, the regulations applied to fishing-related activities remain more permissive than those governing fishing. They need to be addressed to close seafood supply chains to IUU fishing operators. In particular, 22% of surveyed OECD countries still do not have legislation pertaining to authorisation for fishing-related activities in the high seas and reporting of transshipments is less commonly required than reporting of catches, both on the high seas and in domestic waters (see Recommendation 3 below). What is more, almost a fourth of OECD countries surveyed reported no regulations allowing control over foreign private companies chartering domestic company vessels to access its coastal marine resources (see Recommendation 6 below).

In 2016, only 6% of surveyed OECD countries were making data on fishing authorisations of foreign vessels in their domestic waters easily accessible to both the public and other arms of government, and only 38% were making this information accessible for fishing authorisations in foreign waters for vessels flying their flags (see Recommendation 5 below). This limitation may result in cumbersome processes that hinder the detection of illegal activities. A third of the OECD countries surveyed do not have risk based mechanisms in place to prioritise which vessels to inspect in port, or targets for the number of port inspections (see Recommendation 8 below). A third of the OECD countries surveyed do not have in place fully functioning mechanisms allowing the use of trade

information to target the movement of IUU fishing products along the value chain (see Recommendation 9 below).

Lack of universally implemented dissuasive sanctioning schemes continues to create loopholes that IUU fishing operators can exploit. For instance, while all the OECD countries surveyed have regulations on the prevention of money laundering that in principle cover the proceeds from IUU fishing, only 26% reported that their regulations specifically considered IUU fishing as a predicate offence for money laundering. Co-ordination between fisheries agencies and tax authorities is only occurring in 26% of the OECD countries surveyed. And only 70% of participating OECD member countries reported they had a specialised task force or inter-agency group convened specifically for the purpose of fighting IUU fishing. This diminishes the effectiveness of existing legislation and does not facilitate the pursuit of related crimes such as money laundering. Further, prosecution of IUU fishing violations could be easier if vessel registration systems required information about the beneficial owners of vessels. In 2016, this was the case in only about half of the OECD countries surveyed for vessels fishing on the high seas, and even less (39%) for vessels fishing in domestic waters (see Recommendations 9 and 14 below). In addition, in 20% of the OECD countries surveyed, fishers who do not abide by the law still have access to public support (see Recommendation 12 below).

The degree of implementation of good policies and practices against IUU fishing appears to be often closely related to gross domestic product per capita, suggesting that countries outside the OECD area are more likely to face larger regulatory gaps and implementation weaknesses. Given the positive impact that closing such gaps in countries outside the OECD could have on the fight against IUU fishing worldwide, including in countries where best practice are already in place, countries should be interested in co-operating with each other on this front. For such purpose, the survey developed by this project could be used in countries not yet covered in the report to guide these countries, and their OECD partners, in identifying priorities for policy improvement (see Recommendation 17 below).

RFMOs play a key role in initiating and co-ordinating efforts against IUU fishing, particularly with respect to straddling and highly migratory fish stocks, which migrate through or occur in multiple jurisdictions. Adoption and implementation of measures against IUU fishing by RFMOs have also improved over the last decade. For instance, RFMOs have developed more comprehensive MCS minimum standards, IUU vessel listing mechanisms and processes for reviewing compliance with obligations arising from membership. Co-operation between RFMOs has also improved. However, room for improvement exists. In particular, protocols for sharing IUU vessel lists currently in place are not standardised and practices vary between RFMOs (see Recommendation A5). The use of sanctions by RFMOs is also not common: only a few RFMOs have provisions for imposing sanctions on member countries for not adhering to adopted conservation and management measures. Moreover, even when provisions are in place, the implementation and reporting does not appear systematic (see Recommendation A7).

Key recommendations for addressing IUU fishing

The assessment of the adoption and implementation of best policies and practices against IUU fishing across all countries surveyed led to the identification of recommendations to address the gaps that need targeted effort and investment to be overcome. Many of these gaps are to be found in only a few OECD countries, following the progress made over the past decade. The recommendations should especially be of interest to countries outside the OECD area.

At country level, the OECD recommends to:

1. Reinforce the international accountability of flag-granting states with respect to vessels under their jurisdiction conducting fishing operations on the high seas by maintaining strict registration and deregistration procedures;
2. Advance the adoption and implementation of mandatory unique vessel identifiers through the International Maritime Organization (IMO) by all flag states for vessels fishing on the high seas;
3. Adopt strong regulatory framework to support effective oversight of the transshipment activities;
4. Recognise the importance of the impact of domestic fishers on local marine resources by strengthening regulations governing domestic fishers (e.g. strict fishing authorisation regimes) in coastal waters;
5. Assure transparency on fishing vessel registries and granted fishing authorisations through public disclosure of the information by flag and coastal states;
6. Ensure the access to coastal marine resources through chartering arrangements is regulated;
7. Establish lists of vessels internationally recognised as involved in IUU fishing that are maintained and used at national level, and develop efficient protocols to share them with other countries for easy verification when vessels attempt to gain access to port services;
8. Establish strict protocols for effective implementation of port state measures
9. Enhance corporate transparency in relation to entities managing large-scale fishing operations through policies allowing to trace the money generated by IUU fishing and, consequently, gather critical evidence for law enforcement authorities against behind-the-scene beneficiaries of IUU activities and their networks;
10. Restrict access to marine insurance for vessels involved in IUU fishing through co-operation and information sharing between flag and coastal states and insurance companies;
11. Support the marginalisation of products of unknown origin through public information programmes raising awareness of the problem of IUU fishing and how it compromises the sustainability of marine resources and ecosystems, targeted trade policies, and greater controls by market states;
12. Reserve access to fisheries support to fishers with a clean record of compliance with regulations through policies assuring strict compliance verification when applying for support;
13. Prohibit harmful subsidies that contribute to overfishing, overcapacity and support IUU fishing by working together towards effective disciplines in the World Trade Organization (WTO);

14. Develop standards on transparency of sanctions imposed on fishers to allow comprehensive assessment of the effectiveness of sanctioning systems in place and establishing best practices for other countries to learn from;
15. Improve communication and information sharing at regional level – for example, creating regional fisheries intelligence groups bringing together the International Criminal Police Organization (INTERPOL), RFMOs and national executive government bodies, to share information on IUU fishing, develop new tools and share best practices to eliminate IUU fishing;
16. Intensify efforts to develop partnerships between public administrations and private sector stakeholders, in particular technology providers, to deploy innovative platforms and technology to track IUU fishing vessels – for example through initiatives such as the agreements between the governments of Indonesia and Peru with Global Fishing Watch;
17. For developed countries, share experiences with developing countries to help them adopt and implement best policies and practices against IUU fishing.

With respect to RFMOs, the OECD recommends to:

- A1. Build comprehensive IUU vessel lists by gathering information from various stakeholders, putting particular effort into inclusion of IMO numbers, as flags and names can be easily changed;
- A2. Co-operatively adopt standards on monitoring, control and surveillance tools and practices, particularly comprehensive lists of authorised vessels that can be easily checked against existing lists of IUU fishing vessels – co-operation between RFMOs could help identify and define standards to be adopted at regional level;
- A3. Systematically use information on vessels' beneficial owners, to verify that authorised operators have no legal, personal, financial or other ties to those sanctioned for illegal fishing;
- A4. Establish an efficient voting protocol in all RFMOs, allowing easier adoption of measures against IUU fishing and sanctioning non-compliant parties than consensus-based decision making. When objection procedures are in place, their format should be well defined so that the objectives of the proposed by RFMOs conservation and management measures (CMMs) are not compromised;¹
- A5. Tighten co-operation between RFMOs over the mutual recognition of IUU vessel lists;
- A6. Regularly review the compliance of RFMO members with agreed CMMs and data submission requirements. Publicly and transparently report on this process;
- A7. Create a strict and transparent sanctioning mechanisms for countries that fail to fulfil their obligations as RFMO members.
- A8. The OECD also encourages countries with vested interests in resources in the RFMOs' areas of competence but which are not members to join and actively contribute to the enforcement of adopted CMMs.

¹ Limiting the grounds for objections facilitates a swift adoption process. Justification of the objection must be thorough and well-reasoned, and presented to all co-operating parties in a transparent manner. Provisions for an independent review process contribute to the smoother acceptance of decisions by other parties and overall improved sense of fairness in each RFMO.

1. Understanding progress in curbing IUU fishing and priorities for future policy improvements

1.1. The persistence of IUU fishing impairs the development of a sustainable ocean economy

Illegal, unreported and unregulated (IUU) fishing is a serious threat to sustainable fishing, fishery-dependent communities, marine ecosystems and societies at large (Box 1.1). IUU fishing reduces the resources available to legal fishers, creating unfair competition that reduces the profitability and employment opportunities associated with legitimate fishing. This, in turn, can harm the social cohesion of fishing communities and weaken food security in countries that depend on local fishery resources (Petrossian, 2014^[1]; Stiles et al., 2013^[2]). IUU fishing also undermines governments' capacity to manage fish stocks sustainably by adding pressure on resources that is difficult to estimate and account for when designing the necessary policies (Österblom, 2014^[3]). This is the case for IUU fishing both in countries' exclusive economic zones (EEZs) and on the high seas (Berkes et al., 2006^[4]). Furthermore, IUU fishing often involves the use of techniques that are detrimental to resources and ecosystems, and targets species that need to be protected, sometimes leading to damaged coral reefs and destructive bycatch of endangered species (Liddick, 2014^[5]).

Box 1.1. What is IUU fishing?

Building on the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) (FAO, 2001^[6]), the elements of IUU fishing are defined as follows:

- **Illegal fishing** refers to activities conducted in a country's EEZ in contravention of its laws and regulations as well as to fishing in international waters in violation of that country's flag state law and regulations related to its obligations under the international treaties and regional fisheries management organisations (RFMO) convention arrangements to which it is party.
- **Unreported fishing** refers to fishing activities that have not been reported, or have been misreported, to the relevant national authority or RFMO, in contravention of the laws, regulations and reporting procedures of that country or organisation. This can occur both within EEZs and on the high seas.
- **Unregulated fishing** refers to fishing activities in areas or of fish stocks where there are no national, regional or international conservation or management measures applicable to a particular fishery or fishing vessel. Unregulated fishing can occur in an unmanaged fishery within an EEZ or on the high seas by vessels without nationality, or by vessels flying the flag of a country that is not a party to international conventions or a relevant RFMO.

IUU fishing has economic consequences that go beyond the fisheries sector. Apart from the forgone revenue from the illegally removed marine resources, other costs of IUU fishing include the loss of local economic activities related to fisheries (Bennett, Govan and Satterfield, 2015^[7]) and lost opportunities to collect fees and other tax liabilities (Galaz et al., 2018^[8]) that reduce countries' abilities to fight poverty, fund public investment and support development activities. The proceeds from illegal fishing are often laundered through complex networks of at-sea transshipment services and fraudulent catch documentation (Liddick, 2014^[5]). Agnew et al. (2009^[9]) estimate that illegal and unreported fishing cost the global economy as much as USD 23.5 billion annually, excluding the cost of unregulated fishing and other related economic losses.

IUU fishing is inherently a global activity. As seafood is one of the most traded food commodities (OECD/FAO, 2018^[10]), products deriving from IUU fishing can fraudulently end up on consumers' plates in any country. Operators engaged in IUU fishing also move from one jurisdiction to another in search of higher profits, targeting areas where regulations and enforcement are weaker. The countries most vulnerable to IUU fishing are those with weak governance and insufficient capacity to police their waters (Liddick, 2014^[5]). Poor socio-economic conditions can also make fishers and others in fishing communities vulnerable to recruitment into criminal activities (UNODC, 2011^[11]). Moreover, globalisation has enabled criminal networks to expand the scope of illegal fishing operations and use fishing vessels for related crimes, such as drugs and weapons trafficking, and human abuse, and use of the proceeds to finance terrorism (UNODC, 2011^[11]).

1.2. There is increasing recognition of the need for strong policies and international co-operation to tackle IUU fishing globally

Over the past decade, a more detailed picture of the threat posed by IUU fishing operations has emerged. Public and political awareness of the issue has increased and a consensus has emerged on the need for countries to join in efforts to combat IUU fishing.² Countries have realised that curtailing IUU fishing could contribute to the recovery of their fisheries without having to resort to socially or politically unpopular actions such as fishing moratoria or forced capacity removals (Cabral et al., 2018^[12]; OECD, 2017^[13]). The issue also now features prominently on the international political agenda, particularly following the adoption in 2015 of specific targets under the Sustainable Development Goal (SDG) 14, which set objectives to end IUU fishing (14.4) and eliminate subsidies contributing to IUU fishing (14.6) by 2020 (Box 1.2).³ Calls for better enforcement of legislation targeting IUU fishing has become a focal point for discussion at high-level meetings such as the *Our Ocean Conference* series, most recently hosted by Indonesia in Bali.⁴ On 5 June 2018, the *International Day for the Fight Against Illegal, Unreported and Unregulated (IUU) Fishing* was celebrated for the first time.⁵ Members of the World Trade Organization (WTO) also continue to discuss disciplines on subsidies related to IUU fishing (WTO, 2018^[14]).

² Countries, for example, acknowledged the threat that IUU fishing poses to sustainable development in *The Future We Want*, the outcome document of the United Nations Conference on Sustainable Development held in Rio de Janeiro, Brazil, 20–22 June 2012 (United Nations, 2012^[146]): “We acknowledge that illegal, unreported and unregulated fishing deprive many countries of a crucial natural resource and remain a persistent threat to their sustainable development.”

³ The fight against IUU fishing can also contribute to attaining SDG 1 (No poverty), SDG 2 (Zero hunger) and SDG 16 (Peace, justice and strong institutions).

⁴ More information at <http://ourocean2018.go.id/>.

⁵ A resolution proposed by FAO and agreed by the United Nations General Assembly on 5 December 2017.

Box 1.2. IUU-related targets of SDG 14: *Conserve and sustainably use the oceans, seas and marine resources for sustainable development*

SDG Target 14.4:

“By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.”

SDG Target 14.6

“By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation.”

Concrete progress has been made with the adoption of a number of international treaties and voluntary agreements intended to support the fight against IUU fishing (Box 1.3). As a result, fishing nations, including within the OECD, have been taking action to address IUU fishing through new regulations and improved monitoring and enforcement practices.

Box 1.3. International treaties and voluntary agreements on IUU fishing

Since 2005, a number of countries have committed to improved measures against IUU fishing. The major documents include:

- 2009 Agreement on Port State Measures to Prevent, Deter, and Eliminate Illegal, Unreported and Unregulated Fishing; in force since 2016 (FAO, 2009^[15])
- 2014 Voluntary Guidelines for Flag State Performance (FAO, 2014^[16])
- 2015 Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (FAO, 2015^[17])
- 2017 Voluntary Guidelines for Catch Documentation Schemes (FAO, 2017^[18])

1.3. Tracking progress in implementing best policies and practices against IUU fishing

Despite the efforts invested in the fight against IUU fishing, the problem persists and it is believed that each year more than 15% of global capture fisheries production is still taken illegally, or not accounted for in any statistics (FAO, 2016^[19]). Hence, monitoring progress and identifying gaps in the adoption and implementation of recognised best policies and practices against IUU fishing will be key to maintaining momentum towards greater compliance with fisheries regulations and identifying priorities for action.

The Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs) is responsible for development of a global indicator framework to track progress in the achievement of

SDGs.⁶ In this context, the Food and Agriculture Organization of the United Nations (FAO) was designated as custodian of Indicator 14.6.1, which aims to measure “progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing”. The methodology for this indicator was approved by the FAO Committee on Fisheries Bureau in July 2017.⁷ The FAO started collecting information on this in the context of its regular monitoring of the implementation of the Code of Conduct for Responsible Fisheries; the progress will be reported at country level once scores are validated by surveyed countries.⁸

To complement the global monitoring effort led by the FAO, this report aims to inform policy makers from OECD member countries and partner countries and economies working with the OECD Fisheries Committee (COFI) on the progress made in implementing a broader set of measures against IUU fishing, covering policies (regulations and instruments) and practices (decision-making processes, institutional arrangements and deployed tools) identified as having potential to reduce IUU fishing through a review of recommendations from international legal instruments and the relevant scientific literature, as well as consultations with stakeholders. The remainder of the report refers to this inventory as “recognised best policies and practices”.⁹ In considering the international instruments aiming to combat IUU fishing also covered in the FAO indicators, this report focuses on the implementation of relevant individual measures rather than on the adherence to the instruments as a whole. In addition, it considers market instruments and tools for international co-operation. Finally, this project makes the disaggregated country-level information publicly available.

The purpose of this detailed analysis is to illustrate the concrete advances that have been made, to inspire those countries wanting to step up their fight against IUU fishing. The report also aims to identify regulatory loopholes and policy gaps, which continue to undermine efforts in this fight. This will guide countries, RFMOs, international organisations and all stakeholders in the fisheries sector in how to focus their effort and investment in the fight against IUU fishing.

A questionnaire was developed to obtain information from governments on whether they had adopted the recognised best policies and practices, i.e. the appropriate legislation was in place. Governments were also asked to self-assess the degree to which they implement them. Answers were scored, and scores validated by respondents, to objectively and

⁶ This was agreed at the 47th session of the UN Statistical Commission held in March 2016. The report of the Commission, which included the global indicator framework, was then taken note of by United Nations Economic and Social Council at its 70th session in June 2016. More information can be found at: <https://sustainabledevelopment.un.org>.

⁷ The FAO indicator focuses on evaluation, by countries, or their adherence and implementation to the 1982 United Nations Convention on the Law of the Sea, the 1995 United Nations Fish Stocks Agreement, and the 2009 FAO Agreement on Port State Measures (PSMA); implementation of Flag State Responsibilities in the context of the 1993 FAO Compliance Agreement and FAO Voluntary Guidelines for Flag State Performance; and development and implementation of a national plan of action (NPOA) to combat IUU fishing in line with the IPOA-IUU. Methodology available at: <https://unstats.un.org/sdgs/metadata/files/Metadata-14-06-01.pdf>.

⁸ More details at: <http://www.fao.org/sustainable-development-goals/indicators/1461/en/>.

⁹ This inventory updates and expands a similar inventory undertaken in 2005 in the report *Why Fish Piracy Persists* (OECD, 2005[22]).

transparently consolidate the information into a series of indicators (Box 1.4).¹⁰ The data collected refer to 2016 and, where similar information was collected in 2005, allow identification of progress over the past decade.

Responses were received from 31 countries and economies – 23 OECD members and 8 non-members.¹¹ In 2015, these countries together accounted for about 23% of the global capture fisheries production volume (FAO, 2017_[20]) and 85% of the value of landings in the OECD member countries (OECD, 2017_[21]).¹² The analysis focuses on OECD member countries, while occasionally referring to non-members (when specified). It is important to note that a number of important fishing nations are not included in the analysis and so the results need to be considered with caution.¹³ In particular, the limited coverage of countries outside the OECD area needs to be considered when referring to this study and using results derived from it as benchmark indicators. Nevertheless, this is a useful step towards more transparency on IUU fishing issue and efforts to find best solutions to the problem, aimed to feed into the global discussion and encourage progress, both inside and outside the OECD.

When reviewing the progress made in terms of international co-operation, the country-level analysis is complemented by a study of best policies and practices against IUU fishing administered by RFMOs. Information gathered from RFMO legislation, publicly available sources and from direct communication with RFMOs' secretariats is presented in Annex D. All the RFMOs' secretariats have also been offered an opportunity to validate the compiled information.

¹⁰ The questionnaire and references to the sources in which each of the recognised best policies and practices were identified, as well as the scoring methodology used to consolidate the collected information into indicators, can be found in Annex A, including the precise criteria that were defined for each question to guide the self-assessment of the degree of implementation by surveyed countries (in Table A.1).

¹¹ The following OECD members completed the questionnaire: Australia, Belgium, Canada, Denmark, Estonia, Germany, Greece, Iceland, Ireland, Italy, Japan, Korea, Lithuania, Latvia, the Netherlands, New Zealand, Norway, Poland, Slovenia, Sweden, Turkey, the United Kingdom and the United States. The non-OECD countries and economies were: Albania, Colombia, Lebanon, Libya, Malta, Chinese Taipei, Thailand and Tunisia. On 25 May 2018, the OECD Council invited Colombia to become a member country. At the time of preparation, the deposit of Colombia's instrument of accession to the OECD Convention was pending and therefore Colombia does not appear in the list of OECD members and is not included in the OECD zone aggregates. The countries that participated in both the 2017 survey and the equivalent one in 2005 include: Australia, Belgium, Canada, Germany, Iceland, Ireland, Italy, Japan, Korea, the Netherlands, New Zealand, Norway, Slovenia, Turkey and the United States.

¹² To compute the share of the value of landings for OECD member countries, the value for countries with missing data was estimated on the basis of the production volume sourced from FAO (FAO, 2017_[20]) and a proxy price calculated as an average price for OECD member countries that reported data for 2015 (OECD, 2017_[21]).

¹³ Important OECD fishing nations not included in the report are Chile, Finland, France, Mexico, Portugal and Spain.

Box 1.4. The six IUU fishing policy indicators

The recognised best policies and practices reviewed in this report are classified into six categories focusing on the key areas of intervention. The indicators are constructed by aggregating scores for all the policies and practices under each of these categories (Table 1.1).

The four state responsibility indicators assess countries' regulatory activity as:

- **flag states** (regulating domestically flagged fishing vessels in the areas beyond national jurisdiction and in the exclusive economic zones of foreign countries)
- **coastal states** (regulating vessels in their domestic exclusive economic zones)
- **port states** (applying port controls and regulating flows of products to their markets)
- **market states** (creating economic disincentives for IUU fishing and using market tools to detect illegal seafood moving along the supply chain).

The **enforcement** indicator assesses the capacity of the monitoring, control and surveillance schemes; national interagency co-operation practices; and the comprehensiveness the sanctioning systems in place.

The **international co-operation** indicator assesses the extent to which countries engage internationally to fight IUU fishing, mostly through regional fisheries management organisations.

Table 1.1. OECD policy indicators on IUU fishing

Policy indicators
Flag state responsibilities
Coastal state responsibilities
Port state responsibilities
Market state responsibilities
Enforcement
International co-operation

1.4. OECD countries have made significant policy progress but some areas need further attention

In 2005, inadequate legislation and management practices were identified as key underlying causes for IUU fishing (OECD, 2005^[22]). It is thus encouraging that this report has found considerable improvement among the OECD countries surveyed over the last decade with respect to the implementation of recognised best policies and practices against IUU fishing (Figure 1.1).

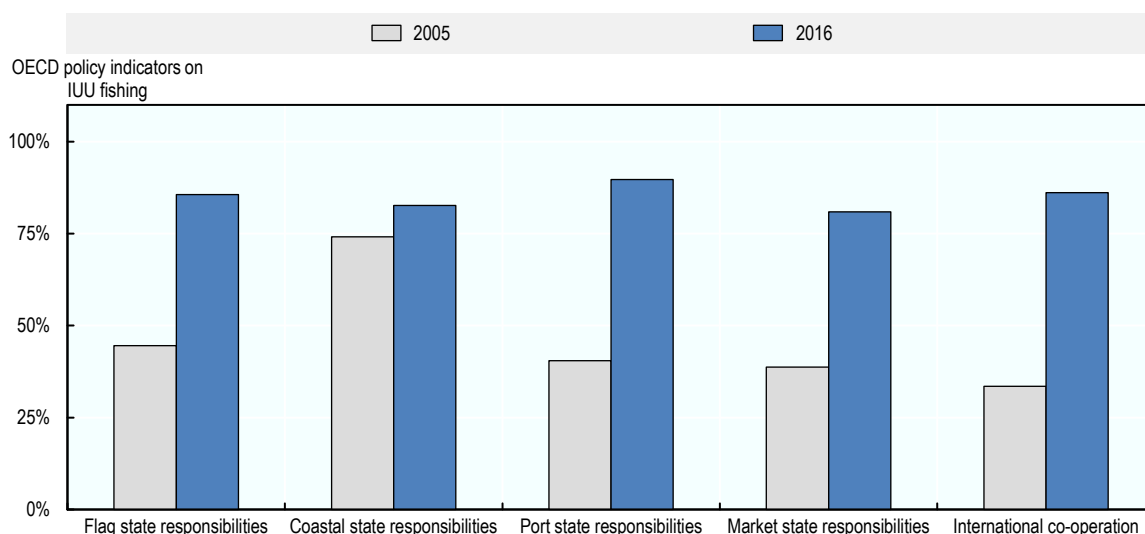
According to the survey results, states are becoming better at assuming their responsibilities in their roles as flag, coastal, port and market states. Comprehensive registration and authorisation regimes now allow surveyed countries to monitor vessels and effectively eliminate fishing operations in contravention of applicable laws (Sections 2 and 3). Widespread implementation of port state measures is cutting access to offloading areas to operators of vessels involved in IUU fishing (Section 4). The use of market measures and improved alignment of economic incentives is also on the rise (Section 5). For instance, nearly all surveyed countries practise catch documentation and certification schemes to prevent IUU fishing products from entering the market. Targeted marketing campaigns are also contributing to raising consumers' awareness of the problem of IUU fishing. Increasing awareness among consumers of the importance of seafood origins in terms of social responsibility improves the competitiveness of fishers committed to legal activity because it increases demand for their products and creates incentives to fish legally. It is also increasingly common for countries to investigate financial transactions related to the seafood trade for fraudulent sourcing.

The reforms already undertaken are giving rise to comprehensive laws on preventing IUU fishing, which provide a strong foundation for effective enforcement (Section 6). The countries surveyed use a variety of enforcement tools to police waters and deter IUU fishing.¹⁴ Implementing a comprehensive mixture of monitoring, control and surveillance (MCS) tools and sanctioning systems in line with best practices puts authorities in a better position to fight IUU fishing.

There has been also notable progress on the international co-operation front (Section 7). Most of the countries noted the importance of sharing information on detected illegal activities on the high seas between each other and have designated channels to exchange information with RFMOs regarding owners, operators and crews of vessels suspected of IUU fishing. This suggests that reducing IUU fishing is a broadly accepted goal and resulting efforts have been streamlined for the effective conservation of marine resources.

¹⁴ Data on enforcement were not collected in 2005 and thus no comparison can be made.

Figure 1.1. Progress in implementing best policies and practices against IUU fishing in surveyed countries (2005 and 2016)



Note: Policy indicators based on weighted average of responses to the OECD questionnaire on measures against IUU fishing. Results limited to the subset of questions where data were available for both 2005 and 2016. The enforcement indicator is not included because the respective data were not collected in 2005. Results include OECD member countries participating in the data survey. For details on methodology, refer to Annex A.

Source: OECD 2017 data collection on measures against IUU fishing.

However, the results also highlight the fact that some areas need further attention. The comprehensiveness of vessel registration requirements still varies widely between countries. For example, only about half of the OECD countries surveyed require information about the beneficial owner for vessels fishing on the high seas (see Section 2.1), and even less (39%) for vessels fishing in domestic waters (see Section 3.2). Mandatory use of unique vessel identifiers is not universal and required by 91% of the OECD countries participating in the survey. Among OECD countries, regulations applicable to fishing-related activities, such as transshipment, remain more permissive than those governing fishing. For operations in the high seas, although all countries have legislation pertaining to the authorisation of fishing activities, only 78% of the OECD countries surveyed reported having legislation related to the authorisation of fishing-related activities (see Section 2.2). Reporting of transshipments is also less commonly required than reporting of catches, both on the high seas (see Section 2.2) and in domestic EEZs (see Section 3.2). Weak regulations on transshipment and other fishery-related activities open seafood supply chains to IUU fishing operators. In many OECD countries, there is a lack of easily accessible data on fishing authorisations (fishing licences) available to both the public and arms of government other than the main authority responsible for fisheries management. This results in cumbersome processes that hinder the detection of illegal activities (see Sections 2.2 and 3.1). The challenge of regulating access to domestic resources by foreign enterprises through chartering agreements remained untackled 23% of surveyed OECD countries in 2016 (see Section 3.1). In relation to port state measures, the survey found shortcomings in the implementation of mechanisms to prioritise which vessels to inspect and with setting targets in terms of number of port inspections. These measures were fully implemented by only 70% of the OECD countries surveyed (see Section 4). As market states, only 65% of the OECD countries surveyed reported fully functioning mechanisms allowing the use of trade information, e.g. sourced from customs

authorities, to target the movement of IUU fishing products along the value chain. While all the OECD countries surveyed have regulations on the prevention of money laundering that in principle cover the proceeds from IUU fishing, only 26% reported that their regulations specifically considered IUU fishing as a predicate offence for money laundering (see Section 5.2). Not all the surveyed OECD countries (80%) apply restrictions on public support to operators convicted of IUU offences (see Section 5.3).

The survey also found room for improvement in relation to the enforcement mechanisms of fisheries regulations. The lack of universally implemented MCS systems (see Section 6.1) and dissuasive sanctioning systems (see Section 6.3) continues to create loopholes that IUU fishing operators can exploit. Lack of co-ordination between government agencies (see Section 6.2) may diminish the effectiveness of even the most comprehensive legislation. Only 70% of participating OECD member countries reported they had a specialised task force or inter-agency group convened specifically for the purpose of fighting IUU fishing. OECD countries could improve the involvement of tax and customs authorities in the fight against IUU to facilitate the pursuit of related crimes such as money laundering. Currently, customs are involved in detection of IUU fishing in 87% of the OECD countries surveyed, while tax administration only in 26%. In the international arena, co-operative MCS systems and joint actions against alleged IUU operations, as well as participation in regional task forces or groups to combat IUU fishing, are common (87%), but not universal (see Section 7.1).

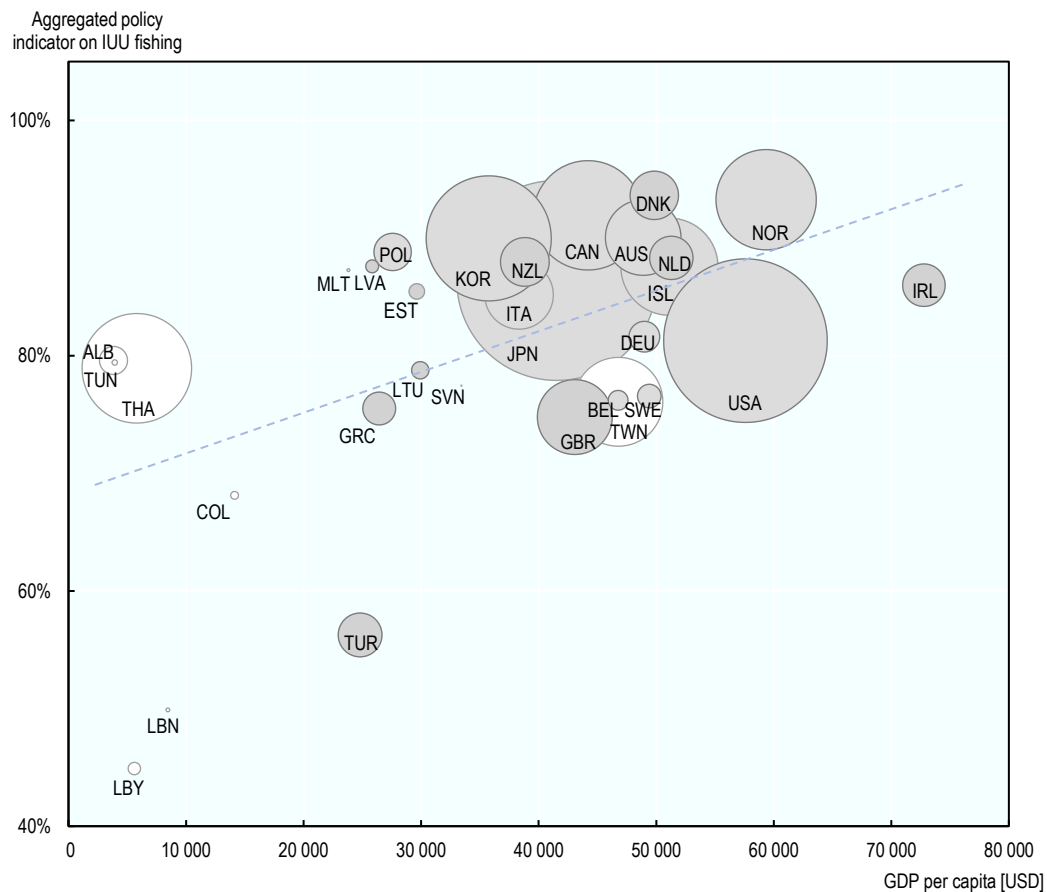
Sections 2 to 7 review in detail the progress made and the remaining scope for improvement in each of the main policies and practices areas serving as a base for the six OECD policy indicators on IUU fishing. Annex C presents the specific results by country, including those which are not OECD members.

1.5. Lessons learned by OECD countries in implementing best practice against IUU fishing could help other fishing nations

Figure 1.2 summarises the information on all the indicators. It shows that most of the OECD countries surveyed appear to be implementing the identified best policies and practices related to their responsibilities as a flag, coastal, port or market state, as well as practices related to enforcement and fostering international co-operation. It is also worth noting that the degree of implementation of policies and practices against IUU fishing appears to be often closely related to gross domestic product (GDP) per capita, used here as a proxy for countries' development. This suggests that countries outside the OECD area are more likely to face larger regulatory gaps and implementation weaknesses.

Given the impact that closing the remaining regulatory gaps and implementation weaknesses in third countries could have on global IUU fishing and on resources and communities, including in OECD countries, this suggests that, alongside continuing efforts to adopt and implement best policies and practices, countries should be interested in co-operating with each other and OECD countries are at the position to guide efforts on improving policies on IUU fishing. This would help to avoid undermining their own efforts and achieve more effective and rapid results. As this report shows, OECD countries are a good source of information about measures that could be considered by other countries, who could use the OECD experience in implementing a comprehensive set of policies and practices against IUU fishing. For such purpose, the survey developed by this project could be used in third countries not yet covered in the report and guide them in identify priorities for bilateral co-operation and assistance.

Figure 1.2. Aggregated indicator for policies and practices against IUU fishing in relation to GDP per capita



Note: GDP per capita sourced from OECD GDP database (OECD, 2018^[23]). Grey bubbles represent OECD countries; white bubbles represent non-OECD countries. The size of the bubble is based on estimated production value (FAO, 2017^[24]; OECD, 2017^[21]); details in footnote 12).

Source: OECD 2017 data collection on measures against IUU fishing.

1.6. The OECD policy indicators on IUU fishing could be a useful tool for policy makers and fisheries managers

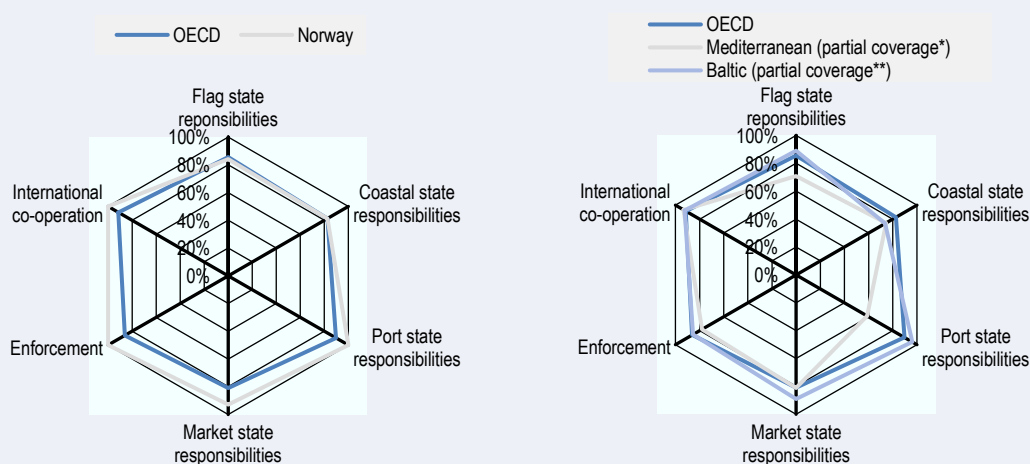
The OECD policy indicators on IUU fishing could be a useful tool for comparing efforts across regions or highlighting successfully implemented policies and any remaining shortcomings of specific countries (Box 1.5). As such, they can be helpful in guiding policy design to reflect recognised best practices in combatting IUU fishing.

Box 1.5. Using the OECD policy indicators on IUU fishing in practice

This box illustrates how the OECD IUU fishing policy indicators can be used in practice for benchmarking efforts at different scales. In addition to identification of gaps in domestic policies and practices, countries may also be interested in investigating the overall level of policies and practices at regional level because of the cross-border nature of IUU fishing impact. For example, Figure 1.3 compares the results for Norway (left hand panel) and the countries surveyed for this project fishing in the Mediterranean Sea and the Baltic Sea (right hand panel) against the OECD average.

As the figure clearly shows, Norway, the country with the highest overall score among OECD countries, is leading efforts against IUU fishing, in particular in terms of advanced enforcement and well-established international co-operation procedures. International co-operation between Mediterranean countries (covered partially by this project) is at high level but measures related to their responsibilities as port states are undermined by gaps in a few surveyed countries within this group. In the Baltic Sea region, port state and market state measures stand at particularly high level. The remaining categories fall close to the OECD average.

Figure 1.3. OECD policy indicators on IUU fishing at regional and national level



Note: *Mediterranean countries (countries on the coast of the Mediterranean Sea) include both OECD member countries that participated in the survey (Greece, Italy, Slovenia and Turkey; these countries also contribute to the OECD average) and non-OECD countries surveyed for this project in coordination with the General Fisheries Commission for the Mediterranean (GFCM): Albania, Lebanon, Libya, Malta and Tunisia. **Baltic countries (countries on the coast of the Baltic Sea) include the following OECD countries surveyed for the project: Denmark, Germany, Estonia, Latvia, Lithuania, Poland and Sweden.

Source: OECD 2017 data collection on measures against IUU fishing.

2. Flag states have improved control over vessels fishing outside their own waters, but laws on fishing-related activities are laxer

The flag state is responsible for exercising jurisdiction over vessels flying its flag, irrespective of the vessel's geographical location (High Seas Convention 1958, United Nations Convention on the Law of the Sea 1982). Exercising jurisdiction does not necessarily mean the flag state implements physical control of vessels at sea, but that it is responsible for enforcing the regulations that apply to the vessel using its flag. Granting a flag to a vessel thus implies the country is responsible for effective control over its fishing and fishing-related activities in the areas beyond national jurisdiction (ABNJ) and in the waters of other countries.¹⁵

Strong flag-state policies and practices ensure that distant water fishing nations (DWFNs) are not contributing to the global IUU fishing problem. Flying a flag of convenience (FOC) – that is, having a vessel registered in a country with lax regulations or enforcement – allows vessel owners and operators to lower costs by exploiting loopholes in environmental or labour regulations, or by avoiding taxes (OECD, 2013^[25]; Liddick, 2014^[5]; NAFIG and INTERPOL, 2017^[26]). Furthermore, FOCs often allow flexible reflagging of vessels operating on the high seas without thorough examination of their possible involvement in IUU fishing (Birnie, 1993^[27]; Gianni and Simpson, 2005^[28]; Miller and Sumaila, 2014^[29]), undermining efforts to efficiently track and control vessels' activities. Indeed, vessels found guilty of engaging in IUU fishing and sanctioned under one jurisdiction can continue to operate under another if they obtain a FOC.

Following the recommendations in OECD (2005^[22]), and in line with the 2014 *FAO Voluntary Guidelines for Flag State Performance* (FAO, 2014^[16]; Erikstein and Swan, 2014^[30]), this report investigates two crucial areas of responsibility for flag states' monitoring of vessels outside their exclusive economic zone (EEZ) (Englander et al., 2014^[31]; Churchill, 2012^[32]; Erceg, 2006^[33]; Kao, 2015^[34]; Erceg, 2006^[33]). The first is the maintenance of comprehensive registries of vessels engaging in fishing and fishing-related activities in the ABNJ or in the EEZs of other countries (Section 2.1). Vessel registration is the process by which a country documents a vessel and assigns it its flag, which allows the vessel to travel internationally but implies the vessel is subject to its domestic laws. The second is the use of authorisation systems for national vessels engaging in fishing and fishing-related activities in the ABNJ or in the EEZs of other countries (Section 2.2). Vessel authorisation is the process of issuing a licence or permit to registered vessels for a specific fishing or fishing-related activity. Authorisations detail the scope of permitted activities, e.g. in terms of target species, fishing techniques or geographical location. Authorisations are often designed to assure compliance with any conservation and management measures (CMMs) in place. While authorisation must be preceded by registration, both systems are complementary and some objectives of IUU fishing prevention can be addressed through either one, by incorporating equivalent measures.¹⁶

¹⁵ A vessel is subject to domestic laws of the country in which it is registered and which flag it flies at all times. However, when the vessel is within territorial jurisdiction of other country, it is subject to that country's laws and both jurisdictions exist concurrently.

¹⁶ For example, verification of a vessel's history of IUU fishing can be a requirement at either the registration or authorisation stage.

2.1. Registries have become standard but could be more comprehensive

The contribution of national registry systems to containing IUU fishing depends on a number of attributes. The more relevant information is requested when registering a vessel, the easier it is to track its activities and the wider the scope of actions that can be taken to prevent IUU fishing activities. Considering a vessel's history – for example, reviewing records of non-compliance with regulations or reflagging, or whether it is already registered in another country, limits the scope for vessels to “hop” from one registry to another in order to avoid facing the consequences related to IUU fishing. Including information on the beneficial owner (BO)¹⁷ of the vessel makes it easier to ensure that the person registering a vessel has no legal, personal, financial or other ties to owners or operators found guilty of IUU fishing, and exercises full control over the vessel. It also allows economic measures to be used against IUU fishing (see Section 5). Including an International Maritime Organization (IMO) number (see Box 2.1) allows data to be cross-checked with other sources, improves MCS and transparency, and makes it more difficult for vessels to operate outside the law. The mandatory use of IMO numbers can also help to deter related crimes, such as human trafficking, especially when vessels use multiple identities, changing flags, names and radio call-signs to avoid detection and sanctions (EJF, 2013^[35]; ILO, 2013^[36]). Frequent updating of the registry increases its relevance, while transparency over the information included reinforces the accountability of flag-granting countries, opening them to public scrutiny (OECD, 2013^[25]; McCauley et al., 2016^[37]; Merten et al., 2016^[38]). Finally, ensuring that vessels conducting fishing-related activities, such as transshipment, are also subject to registration procedures contributes to the effectiveness of IUU detection and prevention. Loose laws on transshipment allow IUU fishing operators to launder their illegal harvest by delivering the product to the market under the paperwork of a vessels not directly associated with illegal activities, making controls at port potentially overdue.

¹⁷ Beneficial owner refers to the natural person(s) who ultimately* owns or controls a customer** and/or the natural person on whose behalf a transaction is being conducted. It also includes those persons who exercise ultimate effective control over a legal person or arrangement. *Reference to “ultimately owns or controls” and “ultimate effective control” refer to situations in which ownership/control is exercised through a chain of ownership or by means of control other than direct control. **This definition should also apply to beneficial owner or a beneficiary under a life or other investment linked insurance policy (FATF/OECD, 2014^[73]).

Box 2.1. Unique vessel identifiers (UVIs)

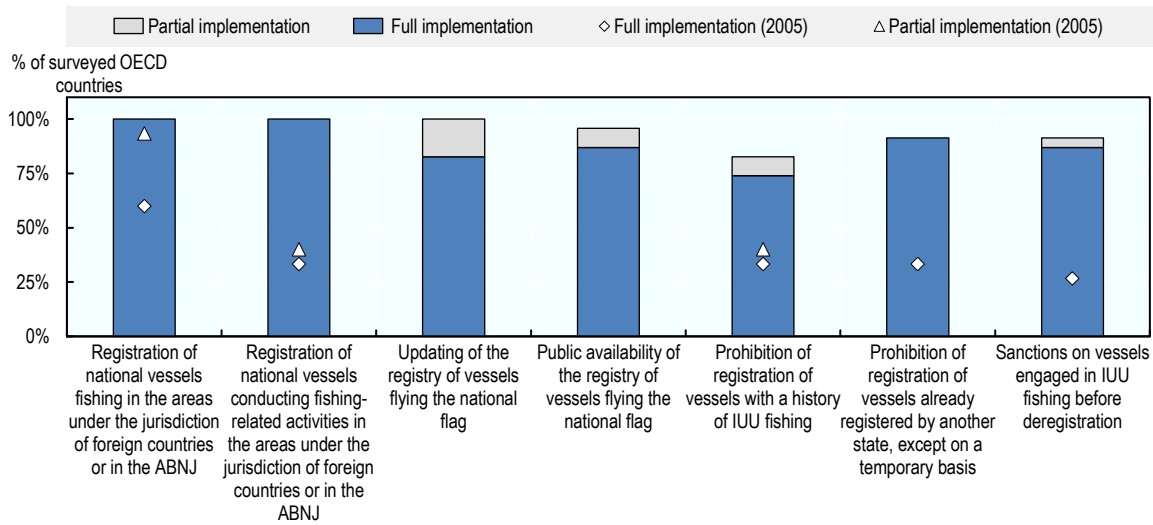
The International Maritime Organization (IMO) ship identification number scheme was introduced in 1987 through adoption of resolution A.600(15) under the *International Convention for the Safety of Life at Sea*. The implementation of the scheme became mandatory as of 1 January 1996, but applied only to passenger ships of 100 gross tonnage (GT) and above and to cargo ships of 300 GT and above. The unique seven-digit vessel number (UVI), preceded by the letters IMO, identifies the vessel and traces its activity over time, irrespective of changes of name, ownership or flag, until it is scrapped.

Following adoption of the *Rome Declaration on Illegal, Unreported and Unregulated Fishing* by the FAO Ministerial Meeting in 2005, which called for a comprehensive record of fishing vessels, the FAO Committee on Fisheries conducted a feasibility study on setting up a Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels (Global Record). The Committee concluded in 2012 that the most feasible tracking method was to add fishing vessels to the IMO ship identification number scheme.

Progress was made in 2013 when the IMO approved a proposal co-sponsored by the FAO and adopted resolution A.1078(28) allowing the voluntary application of the IMO ship identification number scheme to fishing vessels of 100 GT and above. Consequently, the conditions are in place to use the IMO number as a UVI for fishing vessels. This initiative is voluntary and provides reliable information on vessel identification in a timely manner. Since 2013, a number of RFMOs (see Section 7.2), the European Union (EU 1962/2015) and some coastal and flag states have mandated the use of IMO by all eligible vessels (TMT, 2017^[39]).

More on Global Record can be found at www.fao.org/global-record.

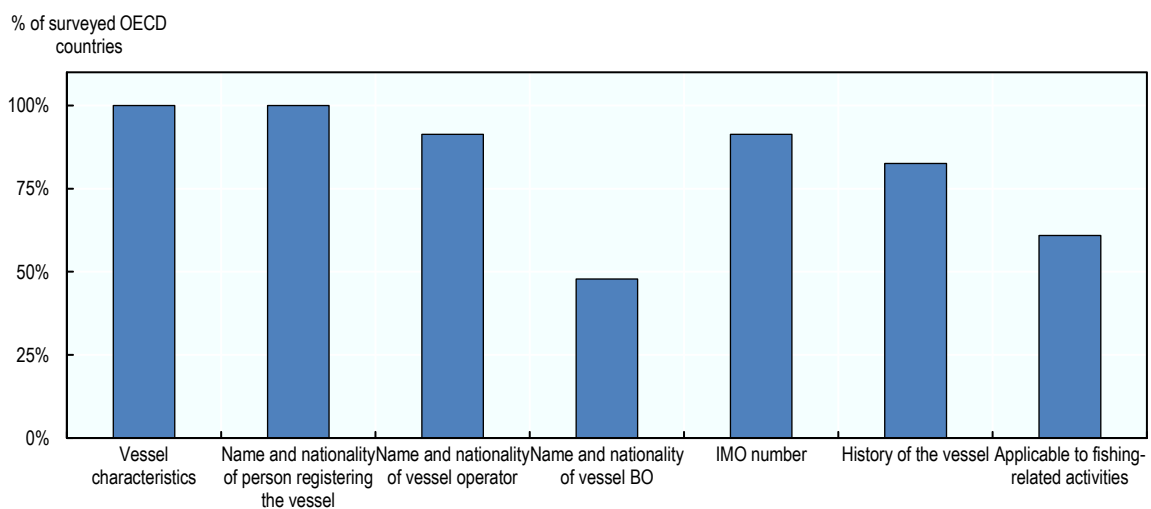
The 2005 OECD report found many flaws in countries' vessel registration processes (OECD, 2005^[22]). The new survey found that significant progress has been made since then. In 2016, all OECD member countries participating in the review reported that they had fully implemented registration processes for national vessels conducting both fishing and fishing-related activities in other jurisdictions or in the ABNJ, up from only 60% and 33% respectively in 2005 (Figure 2.1). Most of the OECD countries surveyed (83%) also reported that their registries were regularly updated. The share of surveyed OECD countries which prohibit registration of vessels with a history of IUU fishing increased from 40% to 83%, while the share prohibiting the registration of vessels already registered by another state (except on a temporary basis) increased from 33% in 2005 to 91% in 2016. The number of countries requiring the mandatory payment of penalties before vessels can be deregistered increased from 27% in 2005 to 91%. Moreover, 87% of OECD participants now make their registries publicly available.

Figure 2.1. Implementation of flag state measures (2005 and 2016)

Note: Questions on updating of the registry and public availability of the registry were not part of the 2005 survey.

Source: OECD 2017 data collection on measures against IUU fishing.

The comprehensiveness of registration requirements still vary widely, however (Figure 2.2). Requesting information on vessel characteristics (such as length, tonnage and power), IMO number, and information about the legal or natural person registering the vessel, is standard. However, only about half of the OECD countries surveyed require the name and nationality of the BO of the vessel. Moreover, in only 61% of countries are the requirements for registering vessels involved in fishing-related activities as comprehensive as those for fishing vessels.

Figure 2.2. Registration requirements for vessels fishing in other countries' national jurisdictions and in the ABNJ

Source: OECD 2017 data collection on measures against IUU fishing.

2.2. Authorisation regimes are increasingly used to support implementation of conservation and management measures

Strict authorisation regimes for fishing and fishing-related activities in the ABNJ or in the jurisdictions of other countries support the implementation of internationally agreed CMMs, as well as other relevant economic and social regulations, in the scope of the granted authorisation. Delineating the area and duration of the authorisation gives countries control over authorised fishing capacity, and consequently allows for better assessment of potential impact and necessary enforcement capacity.¹⁸ Verification of their history of compliance with regulations allows countries to reject applications for authorisation from owners or operators known to be involved in IUU fishing. Verification of UVIs allows vessels' registration history to be cross-checked, even after a change of flag or name. Mandatory use of vessel monitoring systems (VMSs) or requiring on-board observers allow a better understanding of vessels' operations, particularly where they are fishing, and consequently eases enforcement. Requirements related to the maintenance of fishing logbooks, as well as reporting catches and transshipments to authorities, enhance product traceability and thus increase the probability of detecting IUU products entering the market.

Clear authorisation conditions and transparent authorisation systems are also important to ease controls and reduce the incidence of corruption (Hanich and Tsamenyi, 2009_[40]). For example, publicly accessible authorisation lists allow third parties to verify the vessels' right to fish in a given area or cross-check authorisation lists with available lists of IUU vessels (see Section 7.2.2 for more detail on IUU vessel lists).

Additional application criteria can widen the functioning of authorisation systems to prevent fishery-related crimes and support sustainability. For instance, if vessel operators have to demonstrate that working conditions on board comply with national legislation, the authorisation regime can also help to prevent abuses of human rights, many cases of which have been documented in recent years (Surtees, 2013_[41]; EJF, 2015_[42]).

Another example is the introduction of sustainability criteria for eligibility to ensure the protection of marine resources of the high seas (Havice, 2010_[43]). The FAO *Voluntary Guidelines for Flag State Performance* specifically recommend that the flag states only authorise their vessels to fish in third-country waters when these activities do not undermine the sustainability of the fish stocks, both in the case of a bilateral agreement with the third country or outside any agreement (FAO, 2014_[16]).¹⁹ Sustainability criteria may become increasingly important in the context of climate change and the development of new fisheries on the high seas.²⁰

When fishing occurs in the context of bilateral agreements, it is important that the conditions of such agreements are transparent to allow for the assessment of whether enforcement is in line with provisions, and whether the required precautionary measures are implemented to ensure resources are not used excessively (Gagern and Van Den Bergh, 2012_[44]). Fair financial compensations for access to resources support the efforts of countries opening their EEZs to foreign-flagged vessels by providing funds that can be used

¹⁸ As flag state is responsible for vessels flying its flag, its enforcement should be adequate for the capacity of its fleet in the ABNJ. However, enforcement can be agreed at the regional level with collaborating countries that fish in the same area.

¹⁹ SDG 14 also mentions that fishing authorisation should be delivered in line with international commitments regarding sustainable fisheries management (Garcia and Staples, 2000_[140]).

²⁰ This could include, for example, the marine Arctic (Kaiser, Fernandez and Vestergaard, 2016_[143]), where there is currently no RFMO with a mandate to manage stocks.

to support fight with IUU fishing through capacity building and improving MCS actions (Mwikya, 2006^[45]).

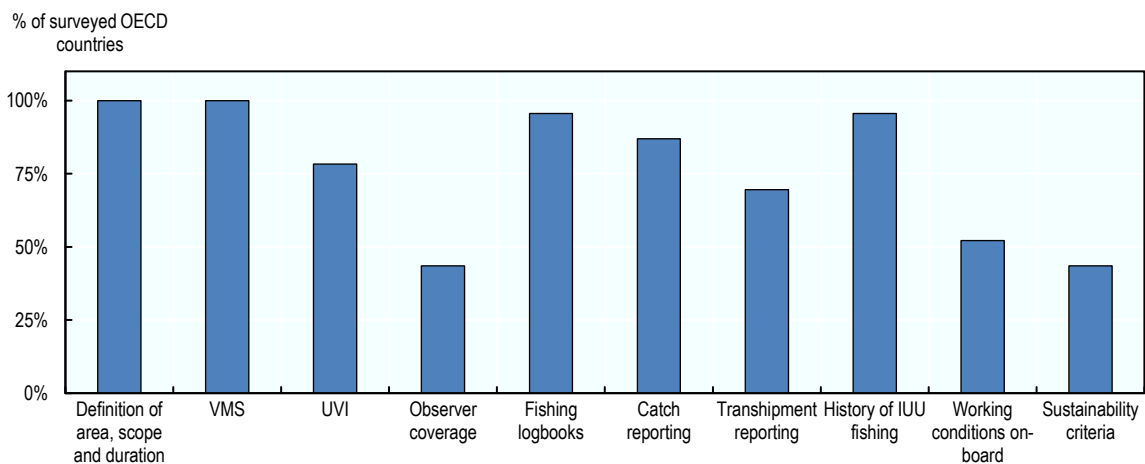
The 2005 OECD report (OECD, 2005^[22]) noted the lack of universally implemented authorisation regimes for fishing and fishing-related activities in the ABNJ and the jurisdictions of other countries. Since then, most of the countries that were lagging behind have improved their legislation. The current survey found that the share of OECD countries with authorisation regimes for fishing activities rose from 87% to 100% and for fishing-related activities from 40% to 78%.

However, mirroring the situation for registration requirements, the comprehensiveness of authorisation requirements varies between countries (Figure 2.3). According to the survey, in 2016 fishing authorisation regimes universally defined the area, scope and duration of the granted authorisation. The majority of the OECD countries surveyed also require vessels to use VMSs, maintain fishing logbooks and report their catch to obtain and maintain a fishing authorisation. A majority of the OECD countries surveyed also consider applicants' compliance with regulations when granting authorisations.

However, there is room for improvement over making UVIs mandatory. Currently 78% of the OECD countries surveyed require universal markings for fishing vessels over a certain size. Observer coverage and reporting of transshipments are also not widely required (43% and 70% respectively). Similarly, sustainability criteria and the verification of working conditions are less frequently requested (43% and 52% respectively).

In terms of transparency, only 38% of the OECD countries surveyed make the full lists of vessels allowed to fish outside national EEZs available to the public, while 91% publish comprehensive lists of bilateral agreements on access to the fishing grounds of third countries (for countries with such agreements in place).

Figure 2.3. Information required for an authorisation to be issued



Source: OECD 2017 data collection on measures against IUU fishing.

3. Coastal states are becoming better stewards of the resources in their own waters

Under the United Nations Convention on the Law of the Sea (UNCLOS), in force since 1994, coastal states, including island nations, have sovereign rights to the natural resources of the waters stretching up to 200 nautical miles from their coasts, an area defined as their exclusive economic zone (EEZ). While this opened new trade opportunities for coastal states, which could sell fishing opportunities in the areas under their newly acquired jurisdiction to DWFNs (Mwikya, 2006^[45]; Le Manach et al., 2013^[46]),²¹ it also introduced a responsibility for coastal states to monitor and control fishing and fishing-related activities in their EEZs.

Registration and authorisation regimes, which are key tools for managing vessels in the ABNJ and foreign EEZs, are also convenient tools for the sustainable management of resources in domestic EEZs. Well-functioning systems to allocate fishing opportunities enable countries to accurately estimate fishing capacity and, consequently, their requirements for MCS, and the potential impact on resources and ecosystems in national waters. Making these systems transparent facilitates the detection and denouncement of unauthorised activities, including by fishers sharing the same waters and committed to legal fishing (Cavalcanti and Leibbrandt, 2017^[47]). Effective pricing of licences or quotas also gives countries the ability to fund the management of resources and enforcement of legislation in waters under their jurisdiction (Arnason, Hannesson and Schrank, 2000^[48]). In contrast, badly designed registration and authorisation systems lead to the overcapacity in coastal waters, incentives to fish beyond sustainable limits, exhaustion of resources and difficulty in enforcing regulations (INTERPOL, 2014^[49]; Hanich and Tsamenyi, 2009^[40]).

3.1. Management of coastal waters is still being undermined by chartering arrangements

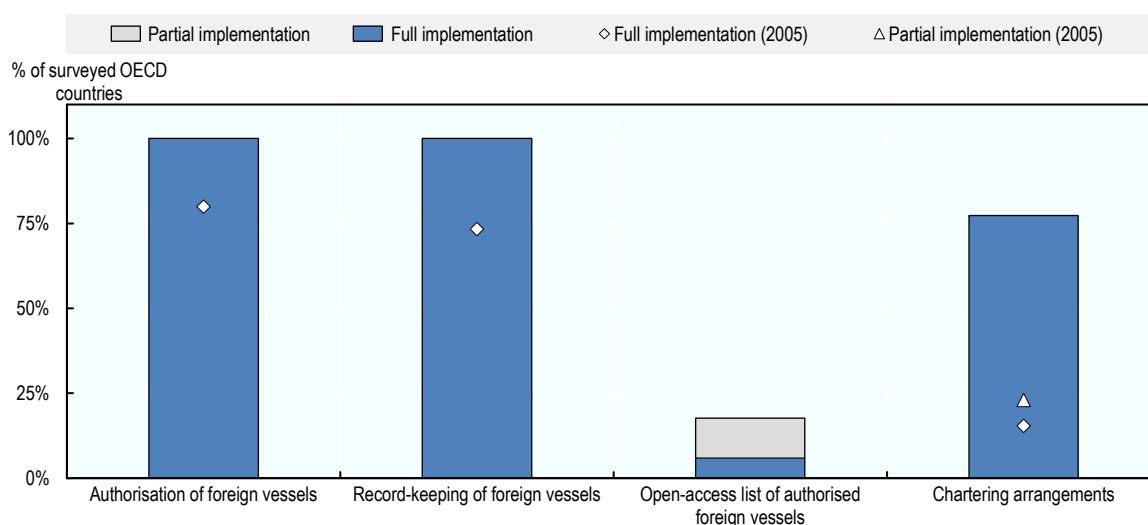
Lack of well-developed authorisation and record-keeping practices over foreign vessels in domestic EEZs leads to reduced oversight of harvest of coastal resources and, consequently, ineffective prevention of IUU fishing in domestic waters. Many foreign enterprises also use chartering agreements under which foreign-flagged vessels fish a share of the resources in a coastal state's EEZ in collaboration with local companies. Lack of control over such arrangements reduces the resources available to local fishers. These arrangements thus need to be regulated to avoid foreign operators using them as a regulatory loophole to access resources that would otherwise not be available to them.

In 2005, 80% of the OECD countries surveyed reported that foreign vessels needed authorisation to operate in their EEZs and 73% reported keeping record of foreign vessels' activity while in the waters under their jurisdiction. However, only a few countries at the time (23%) were regulating access to domestic resources by foreign enterprises through chartering agreements. By 2016, the survey found great progress had been made in management measures directed towards foreign vessels in the domestic EEZ. Authorisation

²¹ Such agreements, either bilateral or involving multiple signing parties, became important tools in co-ordination of fishing activities, especially those focused on straddling and migratory species. Following international agreement between DWFNs and coastal states, foreign vessels are subject to the laws of their host countries, on top of their obligation to follow the laws of their flag countries.

and record-keeping of foreign vessels become universal among the surveyed OECD countries which allowed such practice (Figure 3.1). Moreover, few countries banned foreign vessels from their coastal waters altogether. However, transparency over fishing capacity allowed through fishing agreements with foreign countries is an issue: only 6% of surveyed OECD countries with such agreements in place offer full public access to the list of foreign vessels authorised to fish in their domestic waters. There has been significant progress in regulating chartering arrangements, but 23% of surveyed OECD countries still had not tackled this issue in 2016.

Figure 3.1. Implementation of coastal state measures (2005 and 2016)



Note: Question on open-access list of authorised foreign vessels was not part of the 2005 survey.

Source: OECD 2017 data collection on measures against IUU fishing.

3.2. Countries apply more lenient measures to their large-scale vessels fishing in domestic waters than to those fishing outside their EEZs

Large-scale fishing vessels are characterised by a big harvest capacity and can cause a high degree of environmental disturbance with damaging impact (Jones, 1992_[50]).²² Countries need strong controls over their large-scale vessels fishing in domestic waters to ensure that they meet their conservation and management targets. Comprehensive registration and authorisation requirements for large-scale vessels fishing in the domestic EEZ serve the same purposes for local waters as those described in Sections 2.1 and 2.2 for the ABNJ: improve control over vessels (e.g. VMSs), guarantee harvest traceability (e.g. transshipment reporting) or prevent repeated IUU fishing violations (e.g. verification of any history of IUU fishing).

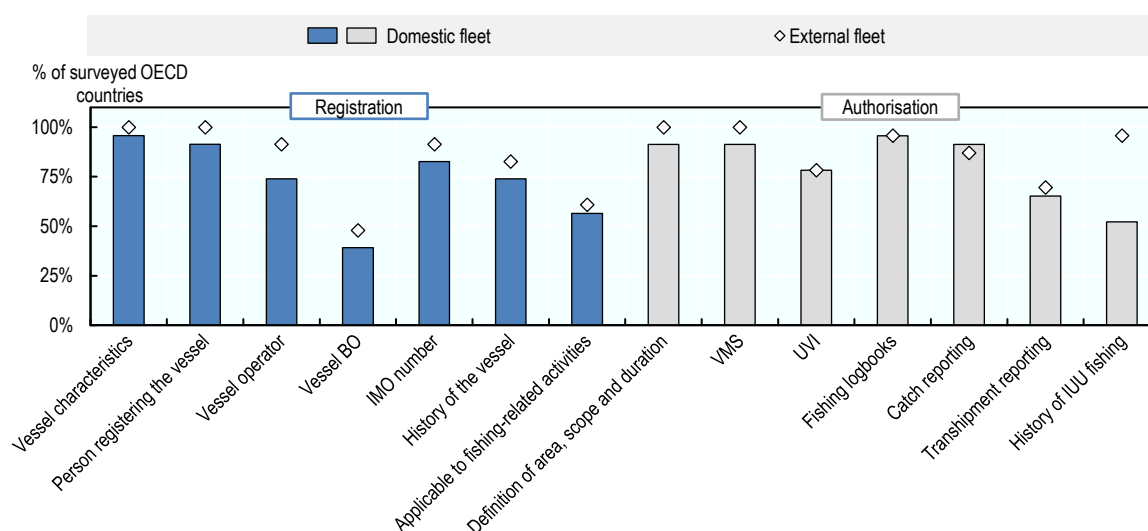
As Figure 3.2 shows, the OECD countries surveyed reported slightly more permissive registration and authorisation laws for large-scale vessels fishing in domestic waters (i.e. the domestic fleet) than for vessels fishing in the jurisdiction of foreign countries or in

²² Distinction between large-scale and small-scale vessel depends on the country-specific definitions that vary across surveyed countries.

the ABNJ (i.e. the external fleet, covered in Section 2).²³ In order to register a vessel, most countries require information about its characteristics and details about the person or entity registering it, as well as the IMO number, but not as widely as for vessels registering for the external fleet. However, as with the external fleets, the survey found considerable legislative gaps in relation to requiring the name and nationality of the BO of the vessel in the registration process, and applicability to vessels conducting fishing-related activities.

In relation to authorisation procedures, a large majority of the OECD countries surveyed require large-scale vessels fishing in domestic waters to adopt VMSs (91%), supply a UVI (78%), maintain fishing logbooks (96%) and report their catch (91%), but a considerably smaller share require the reporting of transshipments (65%) (Figure 3.2). The largest discrepancy between regulations pertaining to the domestic and external fleets is in the verification of the history of IUU fishing during the authorisation process. Only 52% of the surveyed OECD countries reported requiring such a measure for their domestic fleet.

Figure 3.2. Comparison of registration and authorisation requirements for domestic large-scale fleet and the external fleet



Note: Blue bars relate to registration requirements; grey bars to authorisation requirements.

Source: OECD 2017 data collection on measures against IUU fishing.

3.3. Domestic small-scale fisheries often enjoy special exemptions, but most countries are keeping track of their fishing capacity

It is estimated that about two-thirds of the world's catches destined for human consumption originate from small-scale fisheries (FAO, 2015^[51]; Jentoft et al., 2017^[52]). The size of these estimates suggest the need for adequate MCS of these activities, so that these catches do not go unreported and CMMs are respected. Applying registration and authorisation regimes to small-scale fisheries is therefore vital for effective management of harvest capacity in the domestic EEZ. However, rules governing small-scale fisheries are often embedded in historical and cultural contexts and it is important to recognise the local specifics of small-scale fisheries. In some cases, countries have found they need to tailor

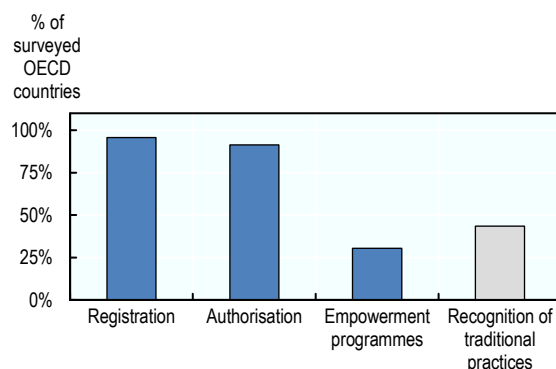
²³ The distinction here is made based on the fishing location, whereas it is recognised that some vessels may fish both in domestic waters and in the ABNJ.

the law to allow traditional practices and special exemptions, in order to assure compliance (Hauck, 2008_[53]).

In 2014, FAO member states endorsed the *Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries* (FAO, 2015_[17]). The guidelines stress the need for states to establish fisheries data collection frameworks, including on IUU fishing, supporting responsible small-scale fisheries and sustainable development. They also call for capacity building and strengthening of MCS systems, and the application of measures reflecting local context.

In relation to regulations governing small-scale vessels in 2016, most of the OECD countries surveyed reported obligations to register the vessel (96%) and obtain authorisation to fish prior to any activity (91%),²⁴ suggesting a general agreement that small-scale fishers should be a subject to MCS (Figure 3.3). Moreover, 30% reported that they had empowerment programmes to combat IUU fishing specifically designed for small-scale fishers. In addition, 43% of the OECD countries surveyed recognise traditional small-scale fishing practices and allow certain exemptions from the regulations. For example, Australia recognises traditional fishing in the Torres Strait Protected Zone under the Torres Strait Treaty (1985), where the harvesting of turtles and dugongs is managed through community based management plans and monitored by Indigenous Rangers.

Figure 3.3. Regulations applicable to domestic small-scale fisheries



Note: Grey bar (recognition of traditional practices) was not included in the indicator for coastal state responsibilities.

Source: OECD 2017 data collection on measures against IUU fishing.

²⁴ Moreover, because small-scale fisheries are more local by nature, the distinction between registration and authorisation is not as pronounced as it is with large-scale vessels; in some cases, authorisation regimes function without fully implemented registration systems.

4. Uneven use of port state measures still allow IUU harvests to enter the global market, but loopholes are being closed

Because enforcement of regulations at sea is expensive, countries are increasingly turning to port state measures (PSMs) and less costly controls at ports²⁵ to combat IUU fishing (Doulman and Swan, 2012^[54]; Kopela, 2016^[55]). The efficient application of PSMs prevents IUU fishing products from entering markets and reduces the incentive to continue illegal activities by increasing the operating costs of vessels not complying with the regulations (Liddick, 2014^[5]; Petrossian, Marteache and Viollaz, 2015^[56]). When IUU vessels are denied port access, or seek to avoid more effective and frequent controls, they are forced to increase fuel use and navigation time in search of non-compliant ports (so-called “ports of convenience”) to offload their IUU harvest (Le Gallic, 2008^[57]).

To encourage better port controls worldwide, the FAO approved a new binding international legal instrument in 2009: the *Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing* (the Port State Measures Agreement or PSMA) (FAO, 2009^[15]).²⁶ This agreement, which came into force in 2016, sets out universal minimum standards to prevent IUU fishing products from being landed in ports by foreign-flagged vessels.²⁷ These include the designation of specific ports with sufficient capacity to conduct inspections for use by foreign-flagged vessels, requirements for prior notice from vessels requesting port entry and procedures allowing port entry to be denied (including denial of landing or transshipment) to vessels suspected of IUU fishing, the development of a system to prioritise which vessels to inspect (risk-based management approach), and setting up targets for the number of port inspections.

The PSMA also encourages co-operation and exchange of information on the implementation of PSMs with all relevant stakeholders, including the authorities of other countries, international organisations and RFMOs, for the better co-ordination of efforts against IUU fishing. In addition to the measures recommended by the PSMA, a number of PSMs contributing to the reduction of IUU fishing are also mandated in the CMMs adopted by RFMOs (Flothmann et al., 2010^[58]). These are addressed in Section 7.2 on co-operation through RFMOs.

Most of the surveyed OECD countries are parties to the PSMA.²⁸ The agreement prompted many countries to considerably improve their measures related to responsibilities as a port state. The survey found that, in 2016, 87% of participating OECD countries had developed lists of ports designated for use by foreign-flagged vessels (up from 27% in 2005), 87%

²⁵ “Port” includes offshore terminals and other installations for landing, transshipping, packaging, processing, refuelling or resupplying.

²⁶ Currently, there are 55 parties to the PSMA (more details at: www.fao.org/port-state-measures/en/)

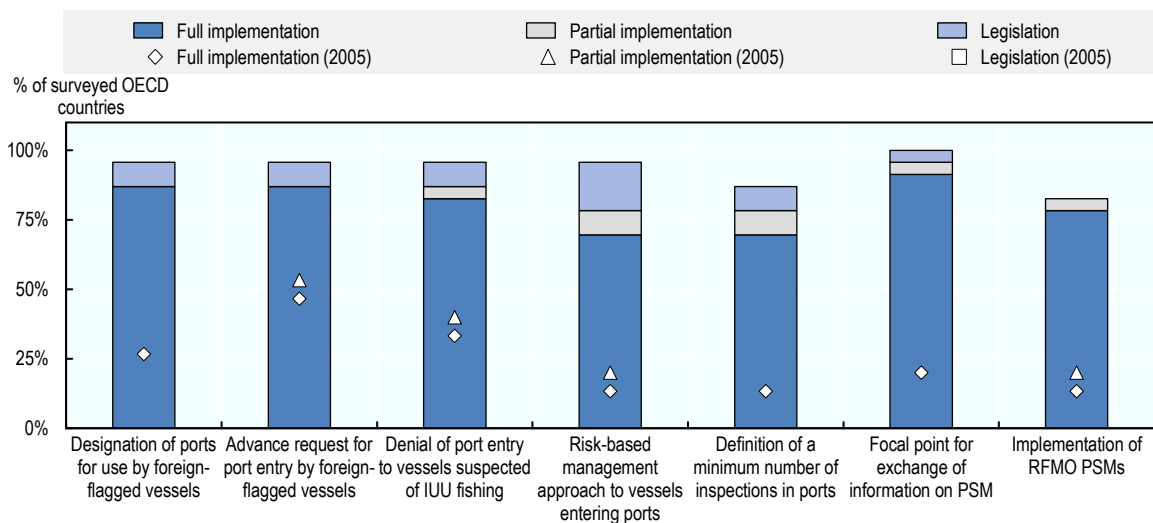
²⁷ PSMA, article 3, paragraph 1: “Each Party shall, in its capacity as a port State, apply this Agreement in respect of vessels not entitled to fly its flag that are seeking entry to its ports or are in one of its ports, except for: (a) vessels of a neighbouring State that are engaged in artisanal fishing for subsistence, provided that the port State and the flag State cooperate to ensure that such vessels do not engage in IUU fishing or fishing related activities in support of such fishing ; and (b) container vessels that are not carrying fish or, if carrying fish, only fish that have been previously landed, provided that there are no clear grounds for suspecting that such vessels have engaged in fishing related activities in support of IUU fishing” (FAO, 2009^[15]).

²⁸ Canada reported on implementation of equivalent measures, i.e. measures with the same goal, introduced to domestic law towards ratifying the PSMA. At this time, Canada has signed the PSMA and is taking the necessary steps to pursue ratification.

required advance requests for port entry from all foreign-flagged vessels (53% in 2005) and 87% had measures in place to deny port access or services to vessels suspected of IUU fishing (40% in 2005) (see Figure 4.1). Moreover, 96% had designated an authority to act as a focal point for the exchange of information on PSM (20% in 2005) and 83% reported fulfilling obligations related to PSMs arising from membership of RFMOs (20% in 2005).

However, despite considerable progress, some gaps remain. Notably, nearly 30% of the countries surveyed do not fully implement risk-based management of vessels entering port or do not set a minimum number of port inspections.

Figure 4.1. Implementation of port state measures (2005 and 2016)



Source: OECD 2017 data collection on measures against IUU fishing.

5. As market states, countries increasingly use economic disincentives to discourage IUU fishing

The continuation of IUU fishing stems significantly from the high profits operators can make and, often, the comparatively low financial risks they face (Sumaila, Alder and Keith, 2006^[59]; Schmidt, 2005^[60]). Thus, policies introducing economic disincentives to engage in IUU fishing by lowering the associated benefits and increasing financial risks effectively complement the traditional measures against IUU fishing described in Sections 2, 3 and 4. Such policies can operate upstream, restricting access to services to IUU vessels (for example, access to marine insurance – see Box 5.1) and downstream, closing access to markets for IUU products, notably by improving the traceability of seafood along the value chain (Section 5.1). In addition, policies allowing to track the BOs of IUU fishing increase the financial risks for IUU fishing operators (Section 5.2), while restricting access to public support for operators practising IUU fishing is a way to cut their benefits (Section 5.3).

Box 5.1. Restricting access to marine insurance: An example of a disincentive to engage in IUU fishing

Restricting or eliminating access to marine insurance for fishing vessels identified as being involved or potentially involved in IUU fishing can be a powerful disincentive to engage in IUU fishing (OECD, 2005^[22]). When access to insurance is limited due to high cost, or removed altogether, this increases operating costs and financial risks which can alter behaviour in favour of compliance with CMMs in place. Miller and colleagues (2016^[61]) propose some practical implementation suggestions which include:

- the imposition of premium rates for insurance of vessels flagged to countries known as FOCs or for vessels sanctioned for IUU fishing in the past
- denial of insurance to IUU fishing vessels (e.g. those listed by RFMOs on IUU vessel lists)

In addition to awareness raising among insurance providers, countries could facilitate the adoption of these suggestions by government actions and suitable changes in national legislation, such as making it compulsory for insurers to consult officially verified IUU vessel lists.

5.1. OECD countries have made significant efforts to improve seafood traceability

Catch documentation schemes (CDSs) enable seafood products to be traced from the point of catch to the point of final sale and can be effective means of preventing products derived from IUU fishing from entering the supply chain (Bush et al., 2017^[62]). Under CDSs, the value of an illegal catch is reduced because it cannot be legally brought to the market, thus reducing the financial incentives to engage in IUU fishing (Hosch, 2016^[63]). CDSs can be also effective in eliminating misreporting,²⁹ in particular when combined with the

²⁹ However, in some cases, trade measures and the use of CDSs only triggered changes in the profile of IUU fishing at the global level, e.g. IUU fishing in tuna fisheries went from illegal to unreported or misreported (Hosch, 2016^[63]). Thus, it is important to consider the potential scope of misreporting when introducing a CDS.

deployment of modern technologies such as electronic logbooks, that has contributed to reducing the risk of falsification or alteration of fishing records at later stage (Visser and Hanich, 2017^[64]). Information gathered through CDSs can be also compiled by the authorities and used as evidence in investigations targeting trade in seafood originating from IUU fishing. The *Voluntary Guidelines for Catch Documentation Schemes* released on 5 April 2017 (FAO, 2017^[18]) constitute a valuable source of guidance for the design of a CDS.

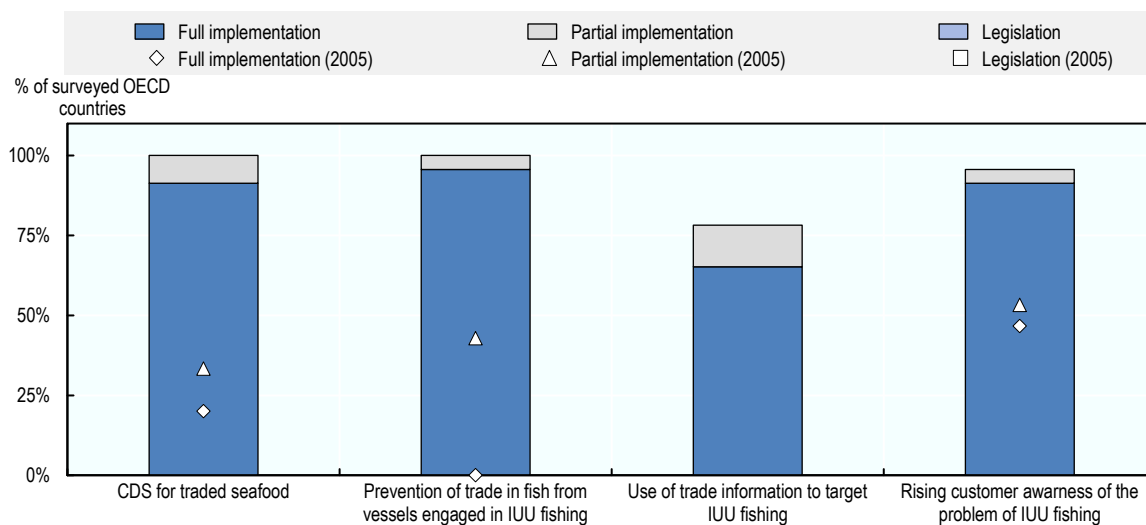
Growing customer awareness of the importance of food origin, both in terms of safety and social responsibility, provides another opportunity to discourage IUU fishing. Increasing demand and premium prices for products certified as sustainable and legally sourced improve the competitiveness of fishers committed to legal operations. Information campaigns directed at consumers about the threat posed by IUU fishing to sustainability can therefore contribute to reducing IUU fishing (Petrossian, Weis and Pires, 2015^[65]).

In 2005, only 33% of the OECD countries surveyed reported that they had systems of multilateral catch documentation and certification requirements for traded fish products, of which 60% were fully implemented. By 2016, demand for more traceability of seafood has led to the universal use of such systems by the surveyed OECD countries, with 91% fully implemented (Figure 5.1).

Measures preventing trading in or importing fish caught by vessels identified as engaged in IUU fishing were still in their infancy in 2005, when only 43% of the OECD countries surveyed had partially implemented such measures. There has been clear improvement in this area: by 2016, 96% of surveyed OECD countries had such measures fully in place. A good example is the European regulation to prevent, deter and eliminate illegal, unreported and unregulated fishing adopted in 2008 (see Box 5.2) or Seafood Import Monitoring Program (SIMP) in the United States (Box 5.3). However, even now, only 65% of the OECD countries surveyed report fully functioning mechanisms allowing the use of trade information, e.g. sourced from customs authorities, to target the movement of IUU fishing products along the value chain.

Progress has also been made in organisation of campaigns against IUU fishing: 96% of the OECD countries surveyed reported running awareness-raising activities in 2016, compared to only 53% in 2005. Moreover, a number of countries (e.g. Iceland, Italy or the Netherlands) indicated that they held regular stakeholder meetings with representatives of the industry, as well as organising campaigns promoting legally sourced seafood. In the United States, the National Ocean Council Committee on IUU Fishing and Seafood Fraud has a range of new public outreach efforts related to IUU fishing. Many governments also promote bottom-up approaches and encourage co-operation between operators in denouncing any IUU fishing activities they detect. For example, in 2013 Colombia created a simplified procedure for filing complaints about illegal fishing activities, which fishers can do in writing, through a direct phone line or on line (OECD, 2016^[66]).

Figure 5.1. Implementation of trade measures (2005 and 2016)



Note: The question on the use of trade information to target IUU fishing was not part of the 2005 survey.
Source: OECD 2017 data collection on measures against IUU fishing.

Box 5.2. The EU system for preventing IUU fishing products from entering the EU market

The Council Regulation EC No 1005/2008 to prevent, deter and eliminate illegal, unreported and unregulated fishing was adopted on 29 September 2008 and entered into force on 1 January 2010. The regulation introduces two major tools to combat IUU fishing.

The first is a **catch certification scheme**, which requires that all fish traded with the EU is accompanied by a catch certificate validated by the flag state of the catching vessel in order to prove the legality of the fish.

The second is a **colour-coded warning scheme** which 1) informs third countries if problems are detected in their fulfilling of international and regional rules related to the prevention of IUU fishing; and 2) introduces provisions for embargoes on fish products originating from countries identified as non-cooperating. The process follows several steps:

- If problems with IUU fishing in a third country are identified, the European Commission (EC) presents the country with a yellow card. The warning opens a formal dialogue which lasts a minimum of 6 months, during which the EC assists the country in its efforts to solve the problems identified.
- If the country improves its policies and practices against IUU fishing, the yellow card can be lifted, or if more time is required for improvements to be achieved, the 6 month period can be extended.
- If the problems are not addressed, the country is identified by the EU as non-cooperating and given a red card. Once such a decision enters into force, none of the seafood products harvested under the flag of the listed country can enter the EU market.

At the time of writing (September 2018), three countries are identified as non-cooperating (Cambodia, Comoros, and St Vincent and Grenadines). Eight countries or economies have been given a yellow card and are in the process of a formal dialogue (Kiribati, Liberia, Sierra Leone, St Kitts and Nevis, Chinese Taipei, Thailand, Trinidad and Tobago, and Viet Nam). Three countries have been delisted as non-cooperating after implementing the required changes (Belize in 2014, and the Republic of Guinea and Sri Lanka in 2016) while 11 countries have seen their yellow cards removed without being given a red card (Curaçao, Fiji, Ghana, Korea, Panama, Papua New Guinea, Togo, Philippines, Solomon Islands, Tuvalu and Vanuatu).

Box 5.3. Functioning of the Seafood Import Monitoring Program (SIMP) in the United States

The Seafood Import Monitoring Program (SIMP), in place since January 1, 2018, establishes reporting and recordkeeping requirements for imports of certain seafood products needed to prevent seafood originating from IUU fishing from entering the United States market. It is a risk-based traceability program, requiring the importer to report key

data from the point of harvest to the point of entry into the market. Affected priority species, species identified as particularly vulnerable to IUU fishing and seafood fraud, include:

- Abalone (SIMP currently not implemented; mandatory from December 31, 2018)
- Atlantic cod
- Blue crab (Atlantic)
- Dolphinfish (mahi mahi)
- Groupers
- King crab
- Pacific cod
- Red snapper
- Sea cucumbers
- Sharks
- Shrimp (SIMP currently not implemented; mandatory from December 31, 2018)
- Swordfish
- Tunas (albacore, bigeye, skipjack, yellowfin, bluefin)

5.2. Despite some progress, few countries are using financial regulations to target beneficiaries of IUU fishing

Financial regulations have a strong potential to affect how IUU fishing develops (Le Gallic, 2008^[57]; Stokke, 2009^[67]; OECD, 2013^[25]). Investigations that consider all the many dimensions of economic crimes that can be linked to IUU fishing operations (e.g. tax crimes, money laundering or corruption) increase the potential to target key players driving the IUU fishing business (Griggs and Lugten, 2007^[68]). Tracing the money generated by IUU fishing can provide critical evidence for law enforcement authorities against behind-the-scenes beneficiaries of IUU activities and their networks (see Box 5.4), and is particularly helpful where vessels are using FOCs (Farabee, 2016^[69]; Telesetsky, 2015^[70]). Thus, considering IUU fishing as a predicate for money laundering is essential to tackling the multiple corporate structures responsible for the illegal exploitation of marine resources. One key limitation in this respect is the fact that a considerable share of the proceeds from IUU fishing are known to be funnelled through countries known as tax havens and thus difficult to trace (Galaz et al., 2018^[8]). General efforts towards the elimination of tax havens and more transparency of financial transactions³⁰ (OECD, 2014^[71]) are thus particularly relevant to the fight against IUU fishing.

The inclusion of serious IUU fishing violations in laws on money laundering remains rare. While all the OECD countries surveyed have regulations on the prevention of money laundering that in principle cover the proceeds from IUU fishing,³¹ only 26% reported regulations specifically considering IUU fishing as a predicate offense for money laundering. However, considering that in 2005 only Norway reported having such tools in place, the progress is evident.

³⁰ Given the importance of financial transparency in fighting corruption, the G20 recently identified transparency of beneficial ownership of legal persons and arrangements as a key priority action. This follows the adoption of Beneficial Ownership Principles by the G8 in 2013 (Transparency International, 2014^[145]).

³¹ E.g., Directive (EU) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing; New Zealand's Anti-Money Laundering and Countering Financing of Terrorism Act 2009 (AML/CFT Act) or Japan's Act on Prevention of Transfer of Criminal Proceeds from 2007.

Box 5.4. Indicators on the transparency of beneficial ownership

Countries face significant challenges when implementing measures to ensure the timely availability of accurate information on BOs. This is particularly challenging in the fisheries sector which often involves legal persons and legal arrangements divided across multiple jurisdictions (OECD, 2013^[25]; FATF, 2012^[72]).

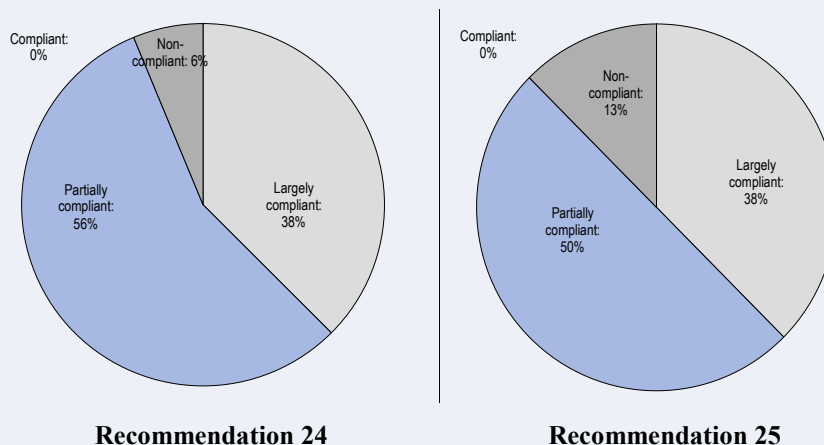
The Financial Action Task Force (FATF) is an inter-governmental body tasked with the identification of national-level vulnerabilities enabling misuse of international financial systems. Among other things, FATF standards on transparency aim to prevent the misuse of corporate vehicles: companies, trusts, foundations, partnerships and other types of legal persons and arrangements. One crucial component is assuring that the authorities have ready access to information about both the legal owner and the BO, the sources of the corporate vehicle's assets and its activities.

Consequently, the FATF developed a guidance on the implementation of two sets of recommendations of importance to combating IUU fishing relating to transparency of BO (FATF/OECD, 2014^[73]):

- Recommendation 24: Transparency and Beneficial Ownership of Legal Person
- Recommendation 25: Transparency and Beneficial Ownership of Legal Arrangements

As shown in Figure 5.2, compliance with the FATF recommendations on transparency of beneficial ownership is not widespread among OECD countries.

Figure 5.2. Technical compliance with FATF recommendations relevant to the fight against IUU fishing by OECD countries



Note: Based on an assessment conducted against the 2012 FATF Recommendations, using the 2013 FATF Methodology (FATF, 2013^[74]). FATF compliance based on limited number of OECD members (16 countries).

Source: FATF (2018^[75]).

5.3. Countries increasingly restrict subsidies to those with a clean record of compliance with regulations

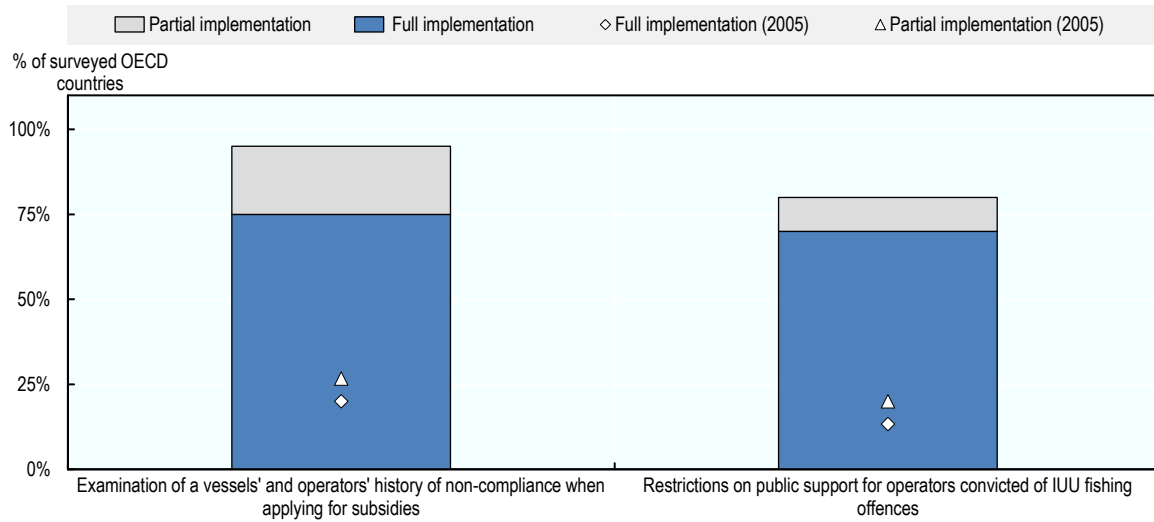
Subsidies to fishing fleets can contribute to IUU fishing by reducing capital costs and making cheap vessels available for purchase by illegal fishers (Liddick, 2014^[5]). Other types of support to fishing operations, such as fuel subsidies, lower the cost of fishing and accelerate overexploitation (Pauly et al., 2002^[76]; Sala et al., 2018^[77]; OECD, 2017^[78]), increasing the risk of fishers engaging in illegal fishing practices when faced with stiffer competition. Lack of transparency over who receives subsidies can exacerbate the misuse of allocated funds (Price, 2005^[79]). Improved screening of those accessing fisheries support, in particular requiring a clean record of compliance with regulations, can help policies to support fisheries to meet their objectives without indirectly contributing to IUU fishing.

Eliminating subsidies that contribute to IUU fishing has become a part of the global conversation (United Nations, 2015^[80]). Negotiations on effective disciplines in relation to fisheries subsidies linked to IUU fishing, overcapacity and overfished stocks continue at the WTO with the goal of adopting an agreement at the 2020 Ministerial Conference (WTO, 2018^[14]). The United Nation's SDG 14.6 calls for the elimination of such subsidies by 2020 (see Box 1.2).

A number of OECD countries have already taken action to improve the management of their fisheries subsidies by introducing policies that restrict access to such support to legal fishers. For example, the European Maritime and Fisheries Fund (EMFF), which funds projects related to the European Union fisheries for 2014-20, specifically excludes applications from operators with a history of IUU fishing.³² About 95% of the OECD countries surveyed indicated that their regulations in 2016 allowed for vessels' and operators' history to be examined for non-compliance when applying for financial support, compared to only 27% in 2005 (Figure 5.3). A slightly smaller share (80%) apply restrictions on public support to operators convicted of IUU offences (up from 20% in 2005).

³² Regulation EU No 508/2014, article 10: Admissibility of applications: "1. An application submitted by an operator for support from the EMFF shall be inadmissible for an identified period of time laid down pursuant to paragraph 4 of this Article, if it has been determined by the competent authority that the operator concerned: (a) has committed a serious infringement under Article 42 of Council Regulation (EC) No 1005/2008 (21) or Article 90(1) of Regulation (EC) No 1224/2009; (b) has been involved in the operation, management or ownership of fishing vessels included in the Union IUU vessel list as set out in Article 40(3) of Regulation (EC) No 1005/2008, or of vessels flagged to countries identified as non-cooperating third countries as set out in Article 33 of that Regulation; (c) has committed a serious infringement of the CFP rules identified as such in other legislation adopted by the European Parliament and by the Council; or (d) has committed any of the offences set out in Articles 3 and 4 of Directive 2008/99/EC of the European Parliament and of the Council (22), where the application is made for support under Chapter II of Title V of this Regulation. 2. The beneficiary, after submitting the application, shall continue to comply with the conditions referred to in points (a) to (d) of paragraph 1 throughout the period of implementation of the operation and for a period of five years after the final payment to that beneficiary. 3. An application submitted by an operator shall be inadmissible for an identified period of time laid down pursuant to paragraph 4 of this Article, if it has been determined by the competent authority that that operator has committed a fraud, as defined in Article 1 of the Convention on the protection of the European Communities' financial interests (23), in the context of the European Fisheries Fund (EFF) or the EMFF.

Figure 5.3. Implementation of policies improving the management of support to fisheries (2005 and 2016)



Source: OECD 2017 data collection on measures against IUU fishing.

6. Countries have a wider portfolio of enforcement options at their disposal

Enforcement refers to a range of procedures and actions taken by a country and its competent authorities to ensure that anybody failing to comply with laws or regulations is brought back into compliance or sanctioned. Multiple commitments in the past few decades have led to concentrated efforts to enforce fisheries regulations effectively (Box 6.1), but ensuring compliance with regulations remains a key challenge.

Robust enforcement of fisheries regulations is challenging, in part because investment in MCS systems is generally not keeping up with fleet capacity and its harvest capabilities. The lack of effective state control over vessels is still considered one of the main causes of IUU fishing (Kao, 2015^[34]; Erceg, 2006^[33]; Englender et al., 2014^[31]; Churchill, 2012^[32]). Authorities need to implement MCS tools to generate valid data on fishing activities and reliable estimates of IUU fishing if they are to govern marine resources (Song, Johnsen and Morrison, 2018^[81]). To understand these difficulties, what follows looks into the use of modern technologies for MCS (Section 6.1) and the role of communication between authorities in making MCS more effective (Section 6.2).

By imposing penalties for illegal fishing, national sanctions regimes discourage illegal fishing and fishing-related operations. However, if the penalties are too low compared to the potential revenue from selling IUU seafood, they will not act as a deterrent and are often factored in by IUU fishing operators as a cost of doing business (Beke, Ackermann and Blomeyer, 2014^[82]; NOAA, 2015^[83]; Beddington, Agnew and Clark, 2007^[84]).³³ Moreover, when sanctioning systems are ill-defined or fail to be implemented uniformly, they create unequal treatment and incentives for corruption (Putt and Nelson, 2009^[85]). Section 6.3 looks into best practices in designing effective sanctioning systems.

³³ This effect is also considered in the OECD report *Informing Fisheries-Related Trade Negotiations: Relative effects of fisheries support policies* (OECD, 2018^[147]).

Box 6.1. Commitment to effective oversight of fishing vessels stemming from key international agreements

1982 UNCLOS (Article 94.1): “Every State shall effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag”

1995 FAO Compliance Agreement (Article 3.1a): “Each Party shall take such measures as may be necessary to ensure that fishing vessels entitled to fly its flag do not engage in any activity that undermines the effectiveness of international conservation and management measures.”

1995 UNFSA (Article 18.1): “A State whose vessels fish on the high seas shall take such measures as may be necessary to ensure that vessels flying its flag comply with subregional and regional conservation and management measures and that such vessels do not engage in any activity which undermines the effectiveness of such measures.”

1995 UNFSA (19.1): “A State shall ensure compliance by vessels flying its flag with subregional and regional conservation and management measures for straddling fish stocks and highly migratory fish stocks.”

1995 FAO Code of Conduct for Responsible Fisheries (Article 8.1.1): “States should ensure that only fishing operations allowed by them are conducted within waters under their jurisdiction and that these operations are carried out in a responsible manner.”

1995 FAO Code of Conduct for Responsible Fisheries (Article 8.2.7): “Flag States should take enforcement measures in respect of fishing vessels entitled to fly their flag which have been found by them to have contravened applicable conservation and management measures, including, where appropriate, making the contravention of such measures an offence under national legislation. Sanctions applicable in respect of violations should be adequate in severity to be effective in securing compliance and to discourage violations wherever they occur and should deprive offenders of the benefits accruing from their illegal activities. Such sanctions may, for serious violations, include provisions for the refusal, withdrawal or suspension of the authorization to fish.”

2001 IPOA-IUU (Article 24): “States should undertake comprehensive and effective monitoring, control and surveillance (MCS) of fishing from its commencement, through the point of landing, to final destination [...]”.

2009 PSMA (Article 24.1): “Parties shall, within the framework of FAO and its relevant bodies, ensure the regular and systematic monitoring and review of the implementation of this Agreement as well as the assessment of progress made towards achieving its objective.”

2014 FAO Voluntary Guidelines for Flag State Performance (Article 31): “The flag State implements a control regime over vessels flying its flag [...]”.

6.1. Modern technology is increasingly used to ease the monitoring of fishing vessels

Effective state control leading to the elimination of IUU fishing requires an adequate set of MCS tools. These need to be deployed along the value chain, in parallel with legislative frameworks, at sea (Sections 2 and 3), in ports (Section 4) and throughout the market

(Section 5), to fully realise the benefits of policies introduced by countries in their roles as flag, coastal, port and market states.

At-sea monitoring methods include the use of observers, independent specialists employed by government agencies to monitor vessel activities, or the use of electronic devices to track vessel movements, i.e. VMSs. Traditionally, observer programmes played a considerable role in fisheries MCS, but now new technologies are gaining ground as new forms of enforcement (Box 6.2). These tools are used to monitor the effort deployed for fishing and detect breaches of regulations related to spatial closures, including restrictions on vessels' presence in marine protected areas (MPAs), or temporal regulations such as closed seasons. Regulations on the size and composition of harvests at landing are predominantly enforced through CDSs and verification of catch logbooks, which note the details of the fishing activity undertaken. Further along the value chain, cross-checking of trade certificates is a common practice to prevent illegally caught seafood from entering markets.

MCS is particularly difficult because of the diversity of fishing operations (Doumbouya et al., 2017^[86]; Erceg, 2006^[33]). These include the use of a variety of fishing gear and specialised devices (e.g. fish aggregation devices or acoustic instruments for detection of schooling fish), means of carrying harvests to landing destinations (also due to complex at-sea transshipment operations), and the varied ways in which seafood products arrive at markets, including landing in domestic ports, and imports from various destinations and in various forms (e.g. as mixed cargo³⁴). This highlights the need for well-designed risk-based management (RBM) procedures³⁵ (Hilborn et al., 2001^[87]) to better prioritise and target the allocation of enforcement efforts. Moreover, MCS data are necessary for the successful use of RBM, as they allow fishing patterns to be analysed and suspicious activities detected.

In order for MCS systems to be successful in practice, they need competent staff responsible for their co-ordination, maintenance and regular updating. Co-operation with the industry and regular consultation with users can improve the functioning of MCS systems by making them more user friendly.

³⁴ A shipment consisting of two or more different types of goods classified under different tariff headings.

³⁵ In this context, RBM aims to evaluate the probability of each activity (e.g. harvest, transshipment, landing or trade) within the area of competence of a given enforcement authority to be illegal, in order to prioritise controls when enforcement resources are limited.

Box 6.2. Monitoring at sea with new technologies

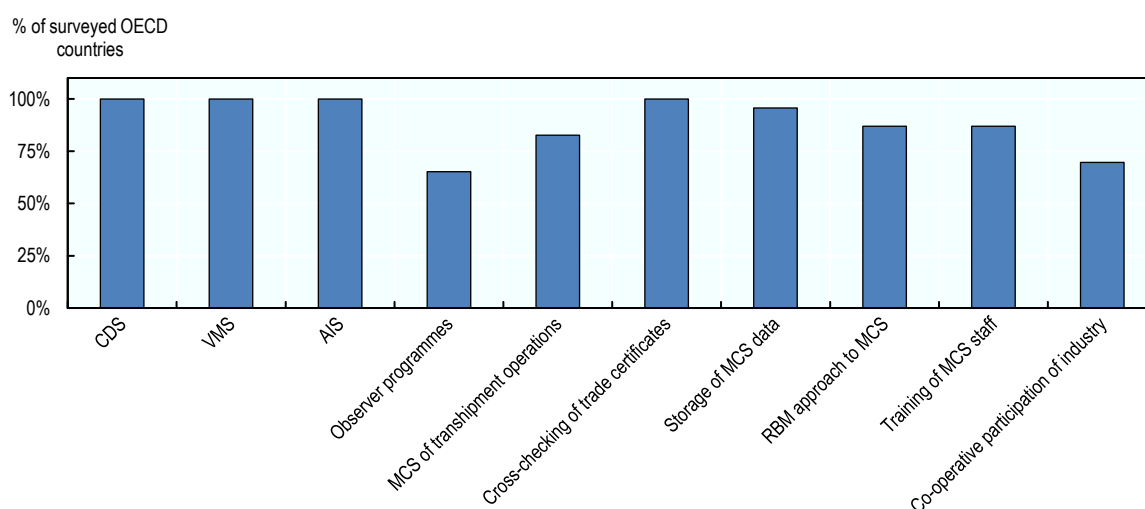
The emergence worldwide of large-scale MPAs means the enforcement of fisheries regulations at sea is increasingly challenging (McCauley, 2014^[88]). The development of next-generation enforcement, such as drone patrols, use of on-board cameras and real-time satellite monitoring, is helping to ensure that the wild-caught seafood that reaches consumers' plates has been harvested legally (Toonen and Bush, 2018^[89]; De Souza et al., 2016^[90]).

Automatic identification systems and vessel monitoring systems

Adopted in 2000 by the IMO, the automatic identification system (AIS) is an effective tool to accomplish navigational safety goals and prevent ship collisions. Vessels carrying AIS transponders broadcast information about their identity, position and course, data which serve coastal surveillance and traffic management. Initially required only on all ships over 300 GT on international voyages, cargo ships over 500 GT, tankers and passenger ships, the device has become popular for insurance, convenience, security and safety reasons (Robards et al., 2016^[91]). Although AIS was not designed to detect IUU fishing activity, the stream of real-time data it generates on vessel positions gives a good understanding of routine vessel operations. Using algorithms developed by machine learning, AIS-derived data can be assessed for potential irregularities, helping to detect IUU activities. Moreover, AIS data are not bound by confidentiality and can be purchased from data vendors. This approach is used by the Global Fishing Watch project (<http://globalfishingwatch.org/>) founded in 2014 by Google, Skytruth and Oceana. The platform, launched in 2016, promotes transparency in the fishing industry by revealing the location and behaviour of commercial fishing fleets through publicly available interactive maps.

VMSs are used in commercial fisheries to allow regulators to track the activities of fishing vessels. The functionality of the system and the associated equipment varies with the requirements imposed by regulations pertaining to fishing in the area in which the vessel is operating. The systems are administered regionally or nationally, and access to the data is restricted. However, a few countries are starting to opt for more transparency on their VMS data. In 2017, Indonesia and Peru decided to provide proprietary information about their fishing vessels for public display on Global Fishing Watch maps.

The OECD countries surveyed universally reported the use of CDSs, VMSs and AIS, and cross-checking of trade certificates in 2016 (Figure 6.1). Many countries increasingly use electronic logbooks as monitoring tools. Observer programmes were less common, however (65%). The majority of countries had developed systems to store MCS data (96%) and 87% reported the use of RBM. Oversight of transshipment remains patchy, with 83% of the OECD countries surveyed reporting MCS of fishing-related activities. Among the other practices to enhance MCS effectiveness, 87% of countries reported training of MCS staff and 70% the co-operative participation of the industry. All of the OECD countries surveyed reported they had fishery monitoring centres responsible for real-time controls of fishing vessels under their flags, both in the domestic EEZ and in the ABNJ.

Figure 6.1. MCS tools in use in fisheries management by OECD countries

Source: OECD 2017 data collection on measures against IUU fishing.

6.2. Co-operation between government bodies fosters the efficient prosecution of IUU fishing

At the national level, fisheries authorities commonly benefit from the collaboration of the port authorities, tax authorities, customs administrations, coastguards, trade authorities, police and other law enforcement authorities. There are a range of organisational models for sharing of responsibilities across agencies, each with distinct features. Among the OECD countries surveyed, 70% reported having a functioning inter-agency task force specifically responsible for detecting violations under the IUU fishing umbrella. The example of Norway's co-operation mechanism, The Norwegian Task Force against Organised Fisheries Crime and IUU Fishing (Box 6.3), illustrates the benefits of inter-agency co-operation.

Box 6.3. The Norwegian Task Force against Organised Fisheries Crime and IUU Fishing – a value chain approach

Establishment of an inter-agency co-operation body

The decision to establish the Norwegian Task Force against Organised Fisheries Crime and IUU Fishing was an initiative by the former Fisheries Minister, Helga Pedersen, in agreement with the Minister of Defence, the Minister of Finance, the Minister of Justice and the Minister of Foreign Affairs, who agreed on the design and the composition of the advisory group. The group was first established as a temporary project in 2009, as a measure to ensure closer co-operation between different agencies, and to produce updated and cross-sectoral analyses on IUU fishing and organised fisheries crime. After an internal evaluation, it was made a permanent entity in the Ministry of Trade, Industry and Fisheries in 2014. This required no changes to the law or the participating institutions' statutes or mandates, but the new initiative did demand some adaptability and greater co-operation, both internally and between different agencies.

The main objective of the Task Force is to detect crimes along the entire fisheries value chain, detecting illegal fishing, corruption, tax and customs fraud, money laundering, embezzlement, document fraud, and human trafficking. MCS officials had found that detecting such crimes needed greater use of cross-sectoral analyses focusing on the actors, corporate structures, money flows and the commodity trade to get a fuller picture of the crimes taking place in the fisheries sector.

The term "IUU fishing" refers to conduct that undermines fisheries management and conservation measures, which may be criminal but need not be. The Norwegian experience is that it is easier to facilitate inter-agency co-operation between law enforcement agencies using the broader term "fisheries crime", for crimes committed by actors in the entire fisheries value chain.

The institutional setup (Figure 6.2)

The Task Force secretariat is responsible for national co-ordination and following international processes in the field of fisheries crime. The secretariat collects, co-ordinates and distributes relevant information to the steering group and the contact group. It is led by a project leader in the ministry who reports to the steering group.

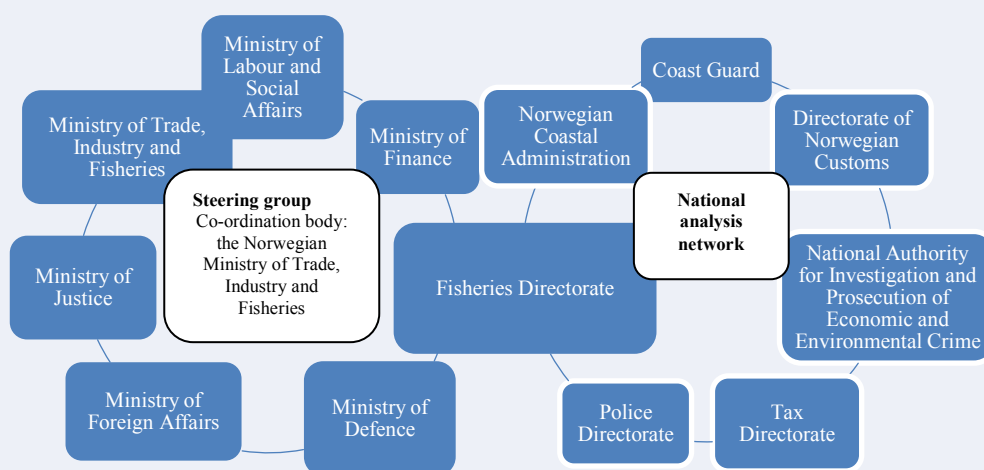
The steering group is composed of the Ministry of Labour and Social Affairs, the Ministry of Finance, the Ministry of Defence, the Ministry of Foreign Affairs, the Fisheries Directorate, the Ministry of Justice, the Ministry of Trade, Industry and Fisheries, and the Director of Public Prosecutions. The steering group approves the task force's annual work plan and makes necessary clarifications related to its work. The group meets as needed.

In addition, a national analysis network consisting of the relevant underlying agencies is established with the Fisheries Directorate, the Police Directorate, the Tax Directorate, the Directorate of Norwegian Customs, the Coast Guard and the Norwegian Coastal Administration. There is also a contact group led by the Directorate of Fisheries, which consist of members from the operative agencies. They meet around five times a year, and carry out the following tasks:

- facilitating cross-agency operational co-operation in potential cases of fisheries crime throughout the value chain
- assessing and recommending the use of intergovernmental operational co-operation between the agencies in the Task Force and involve other actors when relevant
- reporting to the steering group about co-operation and specific issues that are being addressed or initiated.

The contact group has established two working groups: the Crime Prevention group, which is led by the Tax Directorate, and the Tracking group, which is led by the Norwegian Unit of Analysis.

Figure 6.2. Institutional setup of the Norwegian Task Force against Organised Fisheries Crime and IUU Fishing



Key procedures for inter-institutional co-operation

The Task Force does not carry out operations, but works to improve co-operation and co-ordination between different agencies. For instance, it has carried out two workshops in which agencies come together and work on fisheries crime cases. These have been useful for identifying areas for mutual co-operation and information sharing, improving the co-ordination between agencies. Legislation for each agency has now set up guidelines for information exchange and co-operation. Since its start, the agencies in the Task Force have gained greater direct access to information from other government agencies, and much information is now automatically shared between agencies although some can still only be provided on request when there is suspicion of criminal activity.

Difficulties in the practicalities of co-operation

The Task Force has considered the risk of duplication since the start, and has previously adapted its mandate to avoid duplicating or conflict with other inter-agency groups, existing institutions or analysis networks. For instance, after the first review of the Task Force, it was decided to make the division of work between its co-ordinating and the operational bodies clearer. The Task Force has also identified certain laws and regulations related to privacy and data protection that impede information sharing and cross-agency co-operation.

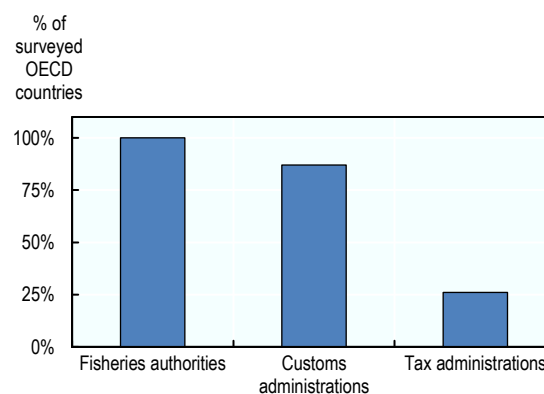
Benefits and results from inter-agency co-operation

The value chain approach, which follows the fish and collects data from each point of control – the financing and procurement of vessels and fishing gear, gaining participant access, registering and providing information about fishing, the actual catching of fish, and distribution and sales – makes it easier to analyse and gather intelligence and evidence, and has also spurred greater interest within the police in dealing with fisheries crime. Agencies have increased awareness and knowledge about the issue both nationally and internationally, improved their analytical capacities, improved their capacity to use surveillance tools, improved co-operation and co-ordination, and improved information sharing between institutions.

Good communication between different authorities can on its own reduce the overall cost of opposing IUU fishing by avoiding duplication of effort and enhancing enforcement capacity. As fisheries authorities' mandates are often limited, the involvement of other executive government bodies, in particular customs and tax authorities, can enhance the tracking of illicit trade and beneficial owners of IUU fishing activities, helping reveal the scale of tax evasion and speed up prosecution (Liddick, 2014^[5]).

For inter-agency information sharing to occur, there must be legal gateways to do so that at the same time respect the confidentiality of information and the integrity of the work carried out by each agency. In 2016, all the OECD countries surveyed had fisheries authorities working on the detection of IUU fishing, but bridging communication gaps between executive government bodies and exchanging compatible data remained challenging: 87% reported exchanging information with customs, but only 26% with tax administrations (Figure 6.3).

Figure 6.3. Authorities involved in information sharing at the national level



Source: OECD 2017 data collection on measures against IUU fishing.

6.3. Fines for IUU fishing remain low compared to potential profits

While the FAO's IPOA-IUU urges countries to adopt sufficiently severe penalties, in 2005, fines for IUU fishing were considered too low to have a major deterrent effect, when compared to the value of IUU catches (OECD, 2005^[22]; Sumaila, Alder and Keith, 2006^[59]). Calls for tougher sanctions on operators (e.g. at the *Our Ocean Conference*, organised in 2017 by the European Union in Malta), have not yet been reflected in prompt

regulatory changes (Druel and Polti, 2017^[92]). Indeed, in many parts of the world, the high market value of many species is often sufficient to offset the risk of being caught and fined, even when added to the other costs IUU fishing vessels typically face, such as the cost of avoiding being caught (including by bribing officials), and reputational costs when they are indeed caught or just sighted, such as being included in a list of IUU fishing vessels (Clarke, Milner-Gulland and Bjørndal, 2007^[93]; Polacheck, 2012^[94]; Purcell et al., 2013^[95]; Valenzuela-Quiñonez et al., 2015^[96]). Table 6.1 gives examples of the prices fetched by some high-value species threatened by illegal fishing, but many violations also occur in ordinary fisheries (Druel and Polti, 2017^[92]).

Table 6.1. Prices for species targeted by IUU fishing

Species	Price [USD per kg]	Source
Bluefin tuna	Up to 790	(Kurtenbach, 2018 ^[97])
Shark fins	100 (up to 650)	(Havocscope, 2011 ^[98] ; Shark Truth, 2018 ^[99])
Totoaba swim bladders	20 000	(Carrington, 2017 ^[100])
Abalone (endangered white and black abalone)	50-100	(Havocscope, 2012 ^[101] ; Armstrong, 2016 ^[102])
Raw black coral	350	(United States Department of Justice, 2011 ^[103])
Sea cucumbers	435 - 1 000	(China Daily, 2016 ^[104])

Note: These prices are intended to show the extent of the potential revenue from IUU fishing, but are not exhaustive.

All of the OECD countries surveyed reported that their national legal frameworks included sanctions for IUU fishing, while 83% allowed nationals to be sanctioned for IUU fishing violations, regardless of the vessel's flag. The various types of sanctions noted included monetary penalties, confiscations (of vessels, fishing gear and other equipment, or catches), rescinding fishing authorisations (temporarily and permanently), ordering the repayment of financial aid and imprisonment. However, the data about the specifics of prosecutions are fragmented and do not allow an assessment of whether the ratio of risks to benefits are in favour of the authorities. In order to improve transparency and impose reputational costs, 78% of survey participants reported they established lists of vessels engaged in IUU fishing that are maintained and used at national level.

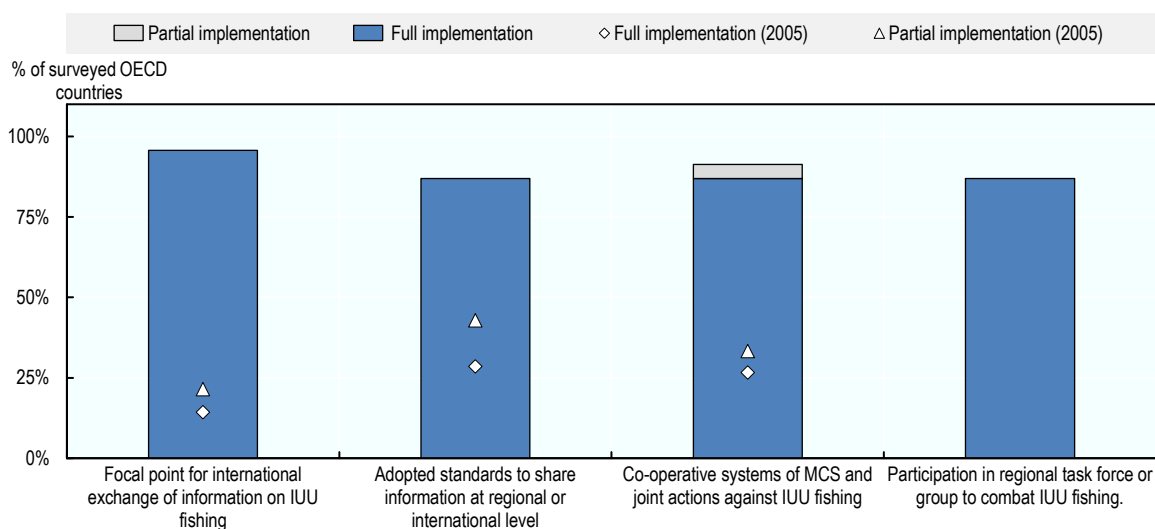
7. Multilateral co-operation and co-ordinated actions are becoming the standard way to combat IUU fishing

IUU fishing operators constantly adapt to the changing mix of economic incentives and regulatory environments. Their ability to swiftly move between jurisdictions enables them to exploit any weaknesses and loopholes in the relevant laws and enforcement systems. Thus, co-operative efforts against IUU fishing are vital to assure that conservation and management goals are achieved globally (Ardron et al., 2014^[105]). However, domestic fisheries authorities and international bodies responsible for fisheries, such as the RFMOs, often act in relative isolation, with responsibilities limited to their respective jurisdictions or areas of management. This relative isolation is, in turn, an impediment to the gathering of data, MCS and imposition of sanctions (Gilman and Kingma, 2013^[106]) – especially when it is possible to reflag a vessel if one country improves its responsiveness to IUU fishing-related violations (NAFIG and INTERPOL, 2017^[26]; Liddick, 2014^[5]).

It is therefore crucial to have co-operation among countries and between countries and RFMOs or other international organisations such as the International Criminal Police Organization (INTERPOL), as well as well-functioning international structures aimed at curbing IUU fishing, to limit the economic incentives for operators to engage in IUU fishing and improve the effectiveness of controls and sanctions along the entire global fisheries value chain. This section reviews the progress made among the countries surveyed in sharing information and co-operating on MCS (Section 7.1) and surveys the RFMOs' practices directly aimed at preventing and eliminating IUU fishing (Section 7.2).

7.1. Countries are implementing provisions to support multilateral co-ordination and co-operation

The 2005 OECD report on fish piracy (OECD, 2005^[22]) emphasised the importance of co-operation and the co-ordination of MCS and enforcement among countries. With fisheries management and the fight against IUU fishing high on the international agenda, notably in the context of SDG 14, the willingness of countries to engage with each other and with RFMOs to fight IUU fishing has increased substantially (Figure 7.1). Among the OECD countries surveyed for this project, 96% reported having designated channels to exchange information with RFMOs regarding owners, operators and crews of vessels suspected of IUU fishing in 2016, up from 21% in 2005. Improved readiness to co-operate is also reflected in the increased number of countries which have adopted standards for sharing information at regional or international level. Implementation of such standards was reported by 87% of surveyed countries, which is a considerable improvement on 2005 when 43% had done so. Co-operative systems on MCS and joint actions against alleged IUU operations were reported by 91% of countries, up from 33% in 2005. Participating in regional task forces or groups to combat IUU fishing was reported by 87% of the OECD countries surveyed.

Figure 7.1. Implementation of international co-operation measures (2005 and 2016)

Note: No data on participation in regional task forces or groups to combat IUU fishing were collected in 2005.

Source: OECD 2017 data collection on measures against IUU fishing.

7.2. RFMOs are making progress in adopting best practice to prevent IUU fishing

RFMOs play a key role in global fisheries governance. Bringing together countries with a common interest in managing a particular fish stock or the fish resources of a particular region and agreeing to adoption of binding CMMs, they are the primary mechanism for co-operation between fishing countries and coastal states in line with the requirements and responsibilities under UNCLOS (UNCLOS, 1982_[107]) and the United Nations Fish Stock Agreement (UNFSA) (UNFSA, 1995_[108]). The role of RFMOs is particularly important for the conservation of straddling and highly migratory fish stocks, which migrate through or occur in multiple jurisdictions (Allen, Joseph and Squires, 2010_[109]).

The 2005 OECD report on fish piracy (OECD, 2005_[22]) identified a number of measures that RFMOs could take to prevent IUU fishing. These included the use of catch and trade documentation schemes, which seek to keep track of legal catches, trade embargoes on seafood products from non-compliant countries, the use of lists of vessels permitted to fish within the RFMO area, expanded scope of on-board observer programmes, and minimum standards for port state controls stipulating the closure of ports and associated services to identified IUU vessels. The report noted that such measures contributed effectively to the global fight against IUU fishing, but found that they only a limited number of organisations used them, and encouraged RFMOs to adopt and implement them more widely. The report further suggested that RFMOs could also consider reducing the benefits of membership of the RFMO for the flag state of any vessel involved in illegal activity, or even excluding such countries (OECD, 2005_[22]).

To measure the progress achieved since 2005 and identify areas for improvement, this section reviews key RFMO practices directly aimed at preventing and eliminating IUU fishing, namely the development of MCS minimum standards (Section 7.2.1), IUU vessel listing mechanisms (Section 7.2.2), decision-making procedures (Section 7.2.3), co-operation between RFMOs (Section 7.2.4), and processes for reviewing compliance with obligations arising from membership (Section 7.2.5). The analysis focuses on the

provisions available in adopted CMMs, as well as transparency of reporting on compliance and follow-up procedures. A few elements which RFMOs noted to be important for reduction of IUU fishing at regional level were not evaluated as they were outside the OECD's mandate. In particular, the analysis did not cover the effectiveness of MCS tool in use or the joint MCS and enforcement capacity of RFMOs and their members. The evaluation details can be found in Annex D. A graphical representation of the results is presented in Figure D.1.

The analysis is restricted to the RFMOs with the capacity to adopt management measures with respect to marine fisheries. These were:

- The Commission for the Conservation of Southern Bluefin Tuna (CCSBT)
- The General Fisheries Commission for the Mediterranean (GFCM)
- The Inter-American Tropical Tuna Commission (IATTC)
- The International Commission for the Conservation of Atlantic Tunas (ICCAT)
- The Indian Ocean Tuna Commission (IOTC)
- The Northwest Atlantic Fisheries Organization (NAFO)
- The North East Atlantic Fisheries Commission (NEAFC)
- The North Pacific Fisheries Commission (NPFC)
- The South East Atlantic Fisheries Organisation (SEAFO)
- The Southern Indian Ocean Fisheries Agreement (SIOFA)
- The South Pacific Regional Fisheries Management Organisation (SPRFMO)
- The Western and Central Pacific Fisheries Commission (WCPFC)

The Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) is also included, as an organisation that has a mandate to monitor fisheries in the area of its competence.³⁶ Table D.3 lists the membership of each of these organisations.

7.2.1. MCS minimum standards established by RFMOs

MCS systems are vital for achieving compliance with RFMOs' CMMs. However, MCS procedures are often applied unequally by member countries. This is related to countries' capacity and capital available for investment, as well as, in some cases, to varying general levels of government dedication to eliminating non-compliance (Cabral et al., 2018_[12]). RFMOs are uniquely positioned to develop international standards for MCS which can help countries develop efficient MCS systems and facilitate co-ordinated efforts to ensure effective implementation of CMMs (Table 7.1).

The commonest MCS tool to improve control over fishing operations under an RFMO's management is the use of an authorised vessel list. Such lists serve as transparent records of vessels which are recognised by their flag states as operating in compliance with the rules. They ease logistical issues in tracking the activities of eligible vessels at sea. They can be also used to restrict access to RFMO-managed resources by vessels and their beneficiaries that have been recognised as engaged in IUU fishing in other regions, or tied to them legally, personally or financially (more details on IUU vessel lists in Section 7.2.2). Today, all the surveyed RFMOs require their members to provide such lists in accordance with adopted guidelines. To effectively enforce the participation of only authorised vessels,

³⁶ CCAMLR was established as a response to unregulated increases in krill catches in the Southern Ocean and their impact on Antarctic marine ecosystems, particularly for seabirds, seals, whales and fish that depend on krill for food. Thus, its objective is broader than those typically associated with RFMOs.

RFMOs are also increasingly adopting mandatory use of unique vessel identifiers through the IMO. GFCM is the last of the surveyed RFMOs not yet mandating the use of IMO numbers, although it has already approved a new resolution and such a requirement will be in place as of 2019.³⁷ Moreover, all but two RFMOs (NAFO and NEAFC) have opted for transparency on fishing capacity and make their list of authorised vessels publicly available.

CDSs certify legal catches and, by requiring verification by an authorised official, reduce the risk of IUU fish entering the market. Most RFMOs practise some form of CDS, but to date not all RFMOs have developed measures in line with the FAO *Voluntary Guidelines on Catch Documentation Schemes* (FAO, 2017_[18]). ICCAT has a CDS for Atlantic bluefin tuna, but its latest performance review notes the need to replace its current statistical programme for bigeye tuna with CDSs harmonised with other tuna RFMOs (ICCAT, 2016_[110]). CCSBT has a comprehensive CDS for southern bluefin tuna in place since 2010.³⁸ CCALMR has a CDS for toothfish, which SIOFA is exploring potential co-operation in (SIOFA, 2018_[111]). The only scheme IATTC has adopted and implemented is the IATTC Bigeye Statistical Documentation Program (Resolution C-03-01), which fails to meet the definition of a CDS (ISSF, 2016_[112]). WCPFC, despite working on the development of a CDS for bigeye tuna since 2005, has no such measure for any of the species falling under its management mandate (ISSF, 2016_[112]). NPFC, despite developing two CMMs specifically for species under its management (chub mackerel and Pacific saury), does not have provisions for standardised catch reporting.

Real-time monitoring and well-functioning at-sea control schemes are necessary to prevent some of the most common IUU fishing activities: over-catching of quotas, violations of spatial and temporal closures, non-compliance with CMMs regulating harvest methods and gear restrictions, or disobeying established transshipment procedures. RFMOs use a variety of methods and tools for at-sea MCS. The most common is the requirement to transmit vessel position data round the clock using VMSs. All the RFMOs reviewed require members to use such monitoring systems³⁹ except NPFC, which is planning to launch such a system in January 2019 (NPFC, 2017_[113]). All the surveyed RFMOs also recognise the risks of operators circumventing the law and disguising fish originating from IUU operations through transshipment, and have adopted transshipment monitoring standards.

Among less commonly used at-sea measures are directives regarding inspections schemes and observer programmes. Nevertheless, changes in this domain are also envisioned. For example, NPFC and SIOFA plan to launch a high seas boarding and inspection scheme launch, and IATTC proposed a resolution on boarding and inspection procedures in 2016 (Proposal IATTC-90 H-1 Rev.1, not passed to date).

Port inspections provide an additional opportunity to verify whether catches comply with the CMMs applicable in the given region when IUU operators circumvent inadequacies of at-sea enforcement. Among the RFMOs reviewed, all but IATTC and NPFC have established standards for port inspections. Most RFMOs also mandate their member

³⁷ Mandatory use of IMO number from 2019 was mandated through the Resolution GFCM/41/2017/6; under the Resolution GFCM/33/2009/5 establishing the GFCM regional fleet register, the IMO number was optional.

³⁸ The CDS is used for tracking and validating legitimate southern bluefin tuna product flow from catch to the point of first sale on domestic or export markets. The system requires the unique tagging, measurement and reporting of each whole southern bluefin tuna.

³⁹ However, only some of these RFMOs have a centralised VMS (i.e. directly feeding data to the RFMO), whereas others only require VMSs monitored by flag states, meaning these RFMOs have no ability to independently verify vessel positions. Centrally managed VMS has been practised by SPRFMO and WCPFC.

countries to designate a limited number of ports for landing of species under the RFMO's management. CCAMLR recommends that states designate ports to which fishing vessels may seek entry, but does not follow up on these decisions.

Table 7.1. MCS standards established by RFMOs

RFMO	Lists of authorised vessels	CDS	VMS	Inspections at sea	Observer programmes for fishing	Transshipment monitoring	Inspections in ports	Designation of landing ports
CCSBT	✓	✓	✓		*	✓	✓	✓
GFCM	✓	✓	✓	✓**		✓	✓	✓
IATTC	✓		✓	***	*	✓		
ICCAT	✓	✓ ²	✓	✓	✓	✓	✓	✓
IOTC	✓	✓ ³	✓		*	✓	✓	✓
NAFO	✓ ¹	✓	✓	✓	✓	✓	✓	✓
NEAFC	✓ ¹	✓	✓	✓		✓	✓	✓
NPFC	✓		***	***	✓	✓		
SEAFO	✓	✓	✓	✓	✓	✓	✓	✓
SIOFA	✓		✓	***	*	✓	✓	✓
SPRFMO	✓		✓	✓	*	✓	✓	✓
WCPFC	✓		✓	✓	✓	✓	✓	
CCAMLR	✓	✓	✓	✓	✓	✓	✓	

Note: * Observer programme limited to scientific purpose; ** spatially limited; *** measure implementation in progress (proposal or implementation plan available). ¹ List of authorised vessels not publicly available; ² Limited to Atlantic bluefin tuna; statistical document programmes for bigeye tuna and swordfish are not in line with FAO Voluntary Guidelines on Catch Documentation Schemes (ICCAT, 2016_[110]); ³ Limited to statistical document programme for bigeye tuna with some elements of a CDS (communication with the IOTC Secretariat).

Source: Based on the review of relevant documents and communication with relevant RFMOs.

7.2.2. IUU vessel listing mechanisms

Most RFMOs use lists of IUU fishing vessels as a form of sanction for non-compliance with regional CMMs.⁴⁰ Such lists have been compiled since 2002, following the endorsement by the FAO of the voluntary measures under the IPOA-IUU in 2001 (FAO, 2001_[6]). Well-managed and easily accessible lists of IUU vessels not only serve as a simple tool to publicly discredit vessels involved in illegal fishing operations, but are also a powerful instrument for prioritising inspections, facilitating arrests and condemning vessels involved in IUU fishing activities.⁴¹ For instance, the lists help inspectors in ports to identify which vessels need to be examined or denied port entry and services. These lists thus contribute to preventing IUU fish products from entering markets and reduce the profitability of IUU fishing. In the WTO negotiations on fisheries subsidies, IUU vessel lists are considered as a potential tool for identifying vessels or operators to which a subsidies discipline could apply (Schmidt, 2017_[114]).

⁴⁰ In addition to RFMOs, INTERPOL communicates information regarding vessels wanted for illegal activities by issuing Purple Notices. In 2013, the first Purple Notice was given to a vessel involved in illegal fishing (INTERPOL, 2013_[141]). However, the organisation is mainly concerned with fighting human trafficking and modern slavery in the fisheries sector, and as such will not be analysed along RFMOs listed in this section.

⁴¹ In particular, when such lists include the IMO number. This identification number, which is assigned to the vessels once over its lifetime, improves functionality of lists which are rendered otherwise ineffective when vessel change its name or flag.

Setting up and administrating IUU vessel lists is however challenging. To date, the RFMOs all have their own listing process. The nature of the listing process and discrepancies in RFMOs' processes affect their potential efficacy. This section reviews the key characteristics of the RFMOs' listing procedures with a view to informing future improvements and harmonisation. The analysis focuses on the evidence reporting process, the information contained in IUU lists and any follow-up obligations for flag states after a vessel flagged to them is listed (all criteria are summarised in Table 7.2).

Evidence production

The process of listing a vessel on an IUU vessel list starts with the transmission to the secretariat of the relevant RFMO of the evidence documenting the activities of a vessel that is suspected of being in contravention of the CMMs by which it is bound in the given region. The RFMOs have different rules regarding which entities are allowed to submit such information. The wider the range of parties allowed to submit evidence, the greater the chance of an infraction being documented and, consequently, the greater practical use of the IUU vessel list.

All RFMOs allow evidence transmission by contracting parties (CPs), that is authorities from member countries or economies bound by adopted CMMs. However, only some of them (GFCM, SPRFMO and WCPFC) extend this to co-operating non-contracting parties (CNCPs), that is, the authorities of invited countries or economies showing willingness to co-operate in the region and adhere to CMMs but not formally bound by adopted CMMs through a membership agreement.⁴² Most tuna RFMOs (CCSBT, IATTC, ICCAT and IOTC), as well as the three most recently created multispecies RFMOs (SIOFA, SPRFMO and NPFC), allow evidence transmission by all relevant stakeholders, including those from non-affiliated countries.⁴³

Information content of the IUU lists

Understanding who in practice benefits from IUU activity is key to the efficient investigation of organised IUU fishing operations and related crimes (as discussed in Section 5). Including information about the BO in IUU lists can allow flag states with appropriate legislation to sentence nationals and raise the stakes for potential violators.

Most of the RFMOs surveyed except for NAFO and NEAFC have provisions for including the names of owners and BOs in IUU vessel lists. However, in practice, such information is rarely supplied as a part of the evidence collection and thus rarely published. Moreover, across RFMOs, there is currently no formal definition available on what is considered a BO, making it problematic to use the information for investigating related tax frauds (Lövin, 2012_[115]).

Sharing information on the IUU activities identified, on the basis of the evidence received in the context of IUU vessel listing, can help countries improve their control over vessels in the region under management and identify which MCS measures need to be strengthened.

All the RFMOs studied in this report, except for the GFCM, NAFO and NEAFC, report details of the IUU fishing activities of listed vessels in a transparent manner. The GFCM

⁴² Definitions of status vary by RFMO.

⁴³ E.g., IATTC's Convention states the possibility of using "any other suitably documented information at his [the Director of the RFMO] disposal."

requires the inclusion of a “summary of activities which justify inclusion of the vessel on the IUU vessel list, together with references to all relevant evidence” in its IUU vessel list. In practice, however, this was not available to date.

Follow-up on identified non-compliance

Listing a vessel in an IUU vessel list implies a clear obligation for its flag state to institute legal proceedings, impose adequate sanctions and report to the RFMO on the steps taken to investigate and eliminate the relevant IUU activities. Evaluation of actions taken by flag state against listed vessels should allow RFMO secretariats to investigate whether their policing duties and imposed sanctions are sufficient to deter reoccurrence of similar violations in the future. However, to this date, only NEAFC has provisions for sanctioning flag states for lack of follow-up on non-compliance of vessels flying their flags.⁴⁴ Most of the acts establishing lists of IUU vessels limit the follow-up process to requesting (or “encouraging”, e.g. CCAMLR) the flag state to take adequate and non-discriminatory action. None of the RFMOs list the sanctions applied to vessels by their flag states, so it is not possible to compare the actions taken by responsible countries. Only NAFO’s and CCAMLR’s annual reviews include information on follow-up for each identified infringement by vessel.

⁴⁴ Article 46(3) of NEAFC 2018 Scheme of Control and Enforcement notes a possibility for adopting “multilaterally agreed non-discriminatory trade related measures, consistent with the World Trade Organisation (WTO).”

Table 7.2. IUU vessel listing practices in RFMOs

RFMO (effective date)	Adoption and implementation of IUU lists	Number of vessels currently listed*	Evidence production	Information on the BO	Information on the IUU activities	Follow-up after vessel listing
CCSBT (1994)	Provisions for IUU vessel list since 2013 (CCSBT Res from 17 October 2013); no list to date	-	CP, CNCP	Provisions	Provisions	Flag state is asked to take measures in accordance with the CCSBT Res from 12 October 2017
GFCM (1952)	Provisions for IUU vessel list since 2006 (GFCM 30/2006/4); first own listing from 2016*	66	CP, CNCP	Provisions	Provisions, not practised	Flag state is asked to take measures in accordance with the GFCM 33/2009/8
IATTC (1949)	Provisions for IUU vessel list since 2004 (Res C-04-04); latest listing from 2014	14	CP, CNCP, external	Provisions	Provisions, practised	Flag state is asked to take measures in accordance with the Res C-15-01
ICCAT (1969)	Provisions for IUU vessel list since 1999 (ICCAT, 2000 ^[116]), formal procedures since 2003 (Rec 02-23), latest listing from 2016	102	CP, CNCP	Provisions	Provisions, practised	Flag state is asked to take measures in accordance with Rec 11-18
IOTC (1996)	Provisions for IUU vessel list since 2005 (Res 11-03), latest listing from 2018	74	CP, CNCP, external	Limited to provisions for including owner	Provisions, scant description of IUU activities in the public record	Flag state is asked to take measures in accordance with Res 17/03
NAFO (1979)	Provisions for IUU vessel list since 2005 (GC Doc 05/03), latest listing from 2011; no own listing to date*	7	CP; only against non-cooperating parties	No provisions	No provisions for listing IUU activities	Flag state is asked to take measures in accordance with NAFO CEM 2018; follow-up on detected infringements listed case by case in compliance report (but vessels were not included on the IUU vessel list)
NEAFC (1982)	Provisions for IUU vessel list since 2004 (Rec 8:2004), latest listing from 2012	9	CP; only against non-cooperating parties	No provisions	No provisions for listing IUU activities	Flag state is asked to take measures in accordance with NEAFC Scheme of Control and Enforcement; provisions for trade sanctions for lack of follow-up by flag states whose vessels appear on the IUU vessel list
NPFC (2015)	Provisions for IUU vessel list since 2017 (CMM 2017-02); latest listing from 2018	27 [#]	CP, CNCP, external	Provisions	Provisions, practised	Flag state is asked to take measures in accordance with CMM 2017-02
SEAFO (2003)	Provisions for IUU vessel list since 2006 (CM 08/06); latest listing from 2017	25	CP, external	Provisions	Provisions, practised	Flag state is asked to take measures in accordance with CM 08/06
SIOFA (2012)	Provisions for IUU vessel list since 2016 (CMM 06-2016); latest listing from 2018	2	CP, CNCP, external	Provisions	Provisions, practised	Flag State is asked to take measures in accordance with CMM 06-2018 (binding from 8 October 2018)
SPRFMO (2012)	Provisions for IUU vessel list since 2013 (CMM 1.04); latest listing from 2016	3	CP, CNCP, external	Provisions	Provisions, practised	Flag state is asked to take measures in accordance with CMM 04-2017
WCPFC (2004)	Provisions for IUU vessel list since 2006 (CMM 2006-09); latest listing from 2010	3	CP, CNCP, external	Provisions	Provisions, practised	Flag state is asked to take measures in accordance with CMM 2010-06
CCAMLR (1982)	Provisions for IUU vessel list since 2002 (10-06 2002); latest listing from 2016	16	CP, external	Provisions	Provisions, practised	Flag state is asked to take measures in accordance with CM 10-06 2016; includes provisions for evaluating CP follow-up

Note: * State for September 3, 2018; includes cross-listed vessels if practised, more details in Section 7.2.4;
[#] effective 17 November 2018.

Source: Based on communication with relevant RFMOs.

7.2.3. Decision-making procedures at RFMOs

The validation of IUU vessel lists and other decisions related to the implementation of measures against IUU fishing lie in the hands of the RFMO members. Decision-making procedures at RFMOs are thus key to the implementation of effective measures deterring IUU fishing on a global scale. In this light, this section assesses their decision-making processes against recognised best practices (Table 7.3), particularly against the risks identified in the literature as inherent to decision processes based on consensus, and of voting systems with provisions for vetoing or opting out of conservation measures (Lodge et al., 2007_[117]; Ceo et al., 2012_[118]; Koehler, 2016_[119]).

The advantages of consensus-based decision-making include the protection of the interests of minority views within the RFMO and the creation of a sense of ownership over the managed resource, which in principle should improve compliance (CCSBT, 2008_[120]).⁴⁵ Although it is the most co-operative decision-making model, it has its limitations as, if there is misalignment of interests and competing positions, it tends to support the status quo by impeding the decision-making process (Moss Adams LPP, 2016_[121]).⁴⁶ As a consequence, final recommendations tend to be toned down and not fully aligned with the original scientific advice (Allen, Joseph and Squires, 2010_[109]).

Majority voting, on the other hand, treats all members equally and allows a balance to be found between conflicting objectives. However, in practice, even when procedures allow for voting, RFMOs commonly seek to reach a consensus (Morrin, 2014_[122]; McDorman, 2005_[123]). For example, ICCAT has not used the voting option with respect to IUU list validation to date (ICCAT Secretariat, personal communication, Feb 28, 2018).

Objection procedures embedded in the voting process allow states to opt-out of RFMO decisions and consequently pose a risk of undermining the adopted decision, particularly those related to allocation of fishing opportunities, and complicate the task of achieving the overarching goal of regulating harvest for sustainable use in the area of competence. In certain cases, however, objection procedures can facilitate the adoption of a CMM where only a limited number of members have signalled a difficulty with a proposed measure (McDorman, 2005_[123]). They protect objecting states from being bound by decisions they do not agree with and are provided by all the RFMOs with established voting protocols.

The objection procedures observed in the reviewed RFMOs take various forms. In IOTC, NAFO, NEAFC⁴⁷ and CCAMLR, the objection process is unconditional and there is no formal obligation to justify why a measure is contested. Such frameworks neither facilitate common understanding within RFMOs, nor build the trust needed to regulate jointly harvested stocks. On the other hand, the need to justify an objection promotes transparency and is required by the rules of procedure of the GFCM, ICCAT, NAFO, NPFC, SPRFMO and WCPFC.

Limiting the scope of the objection by defining a specific objection framework further eases the decision-making process. ICCAT, NAFO, NPFC, SPRFMO and WCPFC consider

⁴⁵ However, CCSBT notes that consensus-based management did not prevent significant overfishing and under-reporting of Southern bluefin tuna (CCSBT, 2008_[120]).

⁴⁶ For example, IATTC performance review notes: “The consensus model of governance has limitations that impact the Commission’s decision-making ability.” (Moss Adams LPP, 2016_[121]).

⁴⁷ In 2003, the European Commission proposed amendment to the NEAFC Convention (D(2003)-11384) to require a statement of the reason for the objection (*Proposal to a NEAFC Recommendation concerning the procedures of Articles 12 and 13 of the NEAFC*). This change was not included in the amendments to the Convention that were adopted in 2006 and entered into force in 2013.

inconsistency with the convention or unjustified discrimination against the objecting party as the only admissible grounds for an objection. Moreover, ICCAT, NAFO, NPFC and SPRFMO require objectors to present alternative measures consistent with the objective of the debated CMM. Provisions for objection review processes are available in NAFO, NPFC SPRFMO and WCPFC, with most of these RFMOs only establishing a review panel at the request of a CP. Currently, only SPRFMO has an automatic objection review procedure in place and thus is considered to have an exemplary decision-making model in use.

Table 7.3. Decision-making processes in RFMOs

RFMO	Procedure	Objection	Justification of the objection	Specific framework for the objection	Objection review process	Comments
CCSBT	Consensus	-	-	-	-	Rules of procedure updated in 2017.
GFCM	Majority vote	Allowed	Required	Not specified	Not specified	Agreement amended in 2014
IATTC	Consensus	-	-	-	-	Performance Review from 2016 highlights the limitations of the IATTC's model of governance (Moss Adams LPP, 2016 ⁽¹²¹⁾)
ICCAT	Majority vote	Allowed	Required	Specified	Not specified	However, decisions are normally reached by consensus (e.g. to date voting has not been required for IUU list)
IOTC	Majority vote	Allowed	Not specified	Not specified	Not specified	
NAFO	Majority vote	Allowed	Required	Specified	Established (at the request of a CP)	The new NAFO convention was adopted in 2007 and entered into force in 2017.
NEAFC	Majority vote	Allowed	Not specified	Not specified	Not specified	Amendment on required justification of objection proposed in 2003 but not adopted to date
NPFC	Majority vote	Allowed	Required	Specified	Established (at the request of a CP)	Some decisions require consensus, e.g. on terms and conditions for any new fisheries in the Convention Area (including allocation of fishing opportunities). Commission invites minimum two non-member experts for a requested review
SEAFO	Consensus	-	-	-	-	Decisions on matters of substance are taken by consensus and default to consensus in case of lack of agreement on the importance of the decision
SIOFA	Consensus	-	-	-	-	
SPRFMO	Majority vote	Allowed	Required	Specified	Established (automatic)	However, decisions are normally reached by consensus
WCPFC	Majority vote	Allowed	Required	Specified	Established (at the request of a CP)	However, decisions are normally reached by consensus
CCAMLR	Consensus	-	-	-	-	

Note: Text in bold indicates best practice.

Source: Based on the review of relevant documents and communication with relevant RFMOs.

7.2.4. Co-operation and sharing of information

Exchange of information between RFMOs is important to prevent vessels listed as engaged in IUU fishing in one RFMO from operating in others. The development of a centralised list of IUU vessels, or the mutual recognition of the IUU vessel lists established by each RFMO, is a cost-efficient way to exchange information and co-operate on excluding the catches of these vessels from the global seafood supply chain.⁴⁸ However, protocols for sharing IUU vessel lists currently in place are not standardised and practices vary (Table 7.4). SPRFMO is the only RFMO automatically recognising the IUU vessel lists of all other RFMOs.⁴⁹ A number of other RFMOs have provisions for cross-listing, but limited to a few RFMOs⁵⁰ or subject to conditions. In the conditional cross-listing model, vessels listed by other RFMOs are cross-listed only if there is no objection raised by their member countries. Such a model is used by CCSBT, GFCM, ICCAT, NAFO, SEAFO and SIOFA.⁵¹ In practice, however, the IUU vessel list of the CCSBT been empty since it was established in 2013. A number of RFMOs which do not practise cross-listing (CCSBT, IATTC, IOTC⁵² and NPFC), instead reference a selection of links to other RFMOs' IUU vessel lists on their websites.⁵³ CCAMLR and WCPFC have no provisions for cross-listing nor do they communicate about other RFMOs' lists.

⁴⁸ E.g., the latest performance review of IOTC (IOTC, 2009_[142]) noted that IOTC Secretariat staff did not attend many of the meetings held by other RFMOs due to limitation of available resources.

⁴⁹ Regulation CMM 04-17 Establishing a List of Vessels Presumed to Have Carried Out Illegal, Unreported and Unregulated Fishing Activities in the SPRFMO Convention Area states “measures [against IUU fishing vessels] referred to in paragraph 14 shall apply mutatis mutandis to fishing vessels included in the final IUU list established by another RFMO and operating in the SPRFMO Convention Area.”

⁵⁰ NEAFC and SEAFO have provisions for cross-listing, but these are limited to recognising each other's list and those of two other RFMOs (CCAMLR and NAFO), and not always applied in practice (e.g. CCAMLR IUU listed vessels are not on NEAFC's list; as the NEAFC Secretariat explained, CCAMLR parties were unable to agree reciprocal arrangements with NEAFC to date). NAFO recognises the IUU list of NEAFC and, because it has not listed any vessels itself, its list is based solely on vessels listed by this RFMO. In addition, NAFO has a separate list sourced from NEAFC and CCAMLR, and links to all other IUU vessel lists (with the exception of the GFCM).

⁵¹ SIOFA's provisions for cross-listing came into force in October 2018 (CMM 2018-06). Thus, this report was unable to assess its practice.

⁵² Provision for cross-listing has been included in the recently adopted CMM (Resolution 18/03), which, if there is no objection, will come into force on 4 October 2018.

⁵³ However, this is not currently mandated in the resolution on IUU vessel lists of CCSBT and IOTC.

Table 7.4. Cross-listing of IUU vessel lists practices across RFMOs.

Cross-listed ↓	CCSBT	GFCM	IATTC	ICCAT	IOTC	NAFO	NEAFC	NPFC	SEAFO	SIOFA	SPRFMO	WCPFC	CCAMLR
GFCM	Dark blue	Light blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Light blue	Dark blue	Dark blue
IATTC	Dark blue	Light blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Light blue	Dark blue	Dark blue
ICCAT	Dark blue	Light blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Light blue	Dark blue	Dark blue
IOTC	Dark blue	Light blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Light blue	Dark blue	Dark blue
NEAFC	Dark blue	Light blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Light blue	Dark blue	Dark blue
NPFC	Dark blue	Light blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Light blue	Dark blue	Dark blue
SEAFO	Dark blue	Light blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Light blue	Dark blue	Dark blue
SIOFA	Dark blue	Light blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Light blue	Dark blue	Dark blue
SPRFMO	Dark blue	Light blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Light blue	Dark blue	Dark blue
WCPFC	Dark blue	Light blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Light blue	Dark blue	Dark blue
CCAMLR	Dark blue	Light blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Dark blue	Light blue	Dark blue	Dark blue

Note: CCSBT (currently no vessels on its IUU vessel list) and NAFO (currently only vessels cross-listed from NEAFC on its IUU vessel list) have been removed from the list of cross-listed RFMOs. Light blue (■) indicates cross-listing is practised or the lists of other RFMOs are recognised. Medium blue (■) indicates reference to the list of other RFMOs (i.e. links on the website). Dark blue (■) indicates none of these.

7.2.5. Review of compliance with CMMs

The need for regular reviews of compliance with CMMs and data submission requirements is well recognised by RFMOs.⁵⁴ Compliance review processes create incentives for adherence by member countries to adopted measures by building an objective base for sanctioning. The application of sanctions when infractions are found through compliance reviews, is key to increasing the incentive to comply (Gilman and Kingma, 2013_[106]). Moreover, obligations for the transparent reporting of identified non-compliance and follow-up actions, including sanctions, has a further deterrent impact on members by imposing a cost of adverse publicity. However, RFMOs vary in the extent and nature of their compliance reviews, their use of sanctions when non-compliance is identified, and their reporting to the public on detected non-compliance and follow-up actions (Table 7.5).

Most of the surveyed RFMOs, including all tuna RFMOs, have established specialised compliance committees (COCs) tasked with assessing how the actions of CPs and CNCPs conform to agreed CMMs. However, there is clear scope for improvement in terms of reporting the outcomes of COC meetings. Not all RFMOs publish detailed annual compliance review reports that compile data on the status of implementation of adopted CMMs by member countries.

The effectiveness and credibility of RFMOs in their fight against IUU fishing also depend on the strength of their deterrence mechanisms. Provisions allowing COCs to impose adequate sanctions embedded in the text of each CMM give RFMOs power to follow-up on identified non-compliance. Transparency on the sanctions imposed for non-compliance with CMMs and data submission requirements assures fairness of treatment between RFMO members.

However, the use of sanctions by RFMOs is not common. Only a few RFMOs have provisions for imposing sanctions on member countries for not adhering to adopted CMMs.

⁵⁴ For example, the latest performance review of the IOTC recommends “a structured, integrated approach to evaluate the compliance of each of the Members against the IOTC Resolutions in force” (IOTC, 2009_[142]). Development of a compliance monitoring system is also listed as a priority for the period 2017-20 for the Technical and Compliance Committee of the recently established NPFC.

Moreover, even when provisions are in place, the implementation and reporting does not appear systematic.⁵⁵ Among the RFMOs reviewed, there are some good practices to be recognised. ICCAT prohibits its member countries from harvesting some or all species following a lack of or incomplete reporting (Rec 11-15).⁵⁶ CCSBT can ask a member to repay its excess catch in the following year at a 1:1 ratio and it publishes summaries of corrective actions. However, to date, it has reported repayment of excess catch only twice, both times in relation to Australia (2012 and 2014). No repayment of excess catch has occurred in relation to identified non-compliance by South Africa, Indonesia or the Philippines. Several RFMOs recognise the shortcomings of their lack of clear follow-up procedures and have stated the need for improvement.⁵⁷

⁵⁵ For example, IOTC Resolution 16/06 on measures applicable in case of non-fulfilment of reporting obligations establishes provisions for prohibiting CPs and CNCPs from retaining catch in the year following a lack of or incomplete reporting. However, there is no evidence of any such actions being taken in response to listed shortcomings in data provision.

⁵⁶ However, provisions to impose trade sanctions on CPs/CNCPs which do not comply with ICCAT prohibitions (Rec 06-13) have not been used to date (communication with ICCAT Secretariat).

⁵⁷ For example, the last SEAFO performance review (SEAFO, 2016_[144]) states the need for the development of “procedures for follow-up on infringements detected under a system of observation, inspection, compliance and enforcement that includes standards of investigation, reporting procedures, notification of proceedings, incentives and/or sanctions and other enforcement actions.”

Table 7.5. Compliance reviews, transparent reporting and sanctions across RFMOs

RFMO	Compliance review body	Compliance review – transparent reporting of identified non-compliance	Sanctions – provisions and reporting
CCSBT	Compliance Committee gathering annually since 2006, Independent Quality Assurance Review auditor	Summary note on non-compliance with CMMs, including national allocations of TAC, identified by CPs and CNCPs	Summary on corrective actions taken available (indicates whether catch taken in excess of allocation was paid back)
GFCM	Compliance Committee gathering annually since 2007	Annual COC report include status of implementation of CMMs and data transmission table	Not available
IATTC	Working Group on Compliance gathering annually since 2000	No compliance report available (only minutes of the COC meetings published)	Not available
ICCAT	Compliance Committee gathering annually since 1996; COC replaced Infractions Committee established in 1982	Annual COC report includes status of implementation of CMMs and data transmission table	Provisions for prohibiting retention of catch for non-fulfilment of RFMO reporting obligations; history of corrective actions taken publicly available
IOTC	Compliance Committee gathering annually since 2003	Annual COC report includes status of implementation of CMMs and data transmission table	Provisions for prohibiting retention of catch for non-fulfilment of RFMO reporting obligations; no report on corrective actions taken
NAFO	Standing Committee on International Control gathering annually since 2007	Annual compliance review lists occurrences of non-compliance with CMMs with related follow-up and imposed sanctions; no data transmission table	Provisions for corrective actions for taking catch in excess of the allocated quota
NEAFC	Permanent Committee on Monitoring and Compliance gathering annually since 2016	Annual report lacks details on implementation of CMM by CP/CNCPs or data transmission table	Not available
NPFC	Technical and Compliance Committee gathering annually since 2016	Report on non-compliance to be delivered (1st issue)	Not available
SEAFO	Compliance Committee gathering annually since 2008	Annual report includes only general information on compliance with TACs; no data transmission table	Not available
SIOFA	Compliance Committee gathering annually since 2017	No compliance report available (provisions for compliance reporting available in CMM 2017/09)	Provisions for corrective actions
SPRFMO	The SPRFMO Commission adopts a compliance report since 2016	Final Compliance Report identifies non-compliance with CMMs and data submission requirements by CP/CNCP (only report from 2016 available; 2017 report not published)	Not available
WCPFC	Compliance Monitoring Scheme Review Panel gathering annually since 2011	Final Compliance Monitoring Reports identify non-compliance with CMMs and data submission requirements by CP/CNCP	Not available
CCAMLR	Standing Committee on Implementation and Compliance (SCIC) annually since 2003; SCIC replaced Standing Committee on Observation and Inspection (SCOI) established in 1988	CCAMLR Compliance Report (annex to the annual meeting report) identifies non-compliance with CMMs (including data reporting) by CP/CNCP	Not available

Source: More details available in Table D.2 of the annex.

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Annex A. Evaluation methodology

The empirical analysis is based on answers provided through the questionnaire by participating countries and economies. The questionnaire consisted of three types of questions:

- contextual questions which were analysed qualitatively and not included in the quantitative analysis;
- questions on the implementation of policies and measures recognised as best practices in terms of deterring IUU fishing;
- multiple choice (checkbox) questions describing modalities associated with the implementation of policies and measures recognised as best practices in terms of deterring IUU fishing;

The criteria for quantitative assessment of the submitted answers are available in Table A.1. Questions are evaluated against established standards provided by the literature (as contained within the column ‘Notes and references’). Each answer was assigned a numerical score according to the transparent key contained in the columns relating to score (“Score 0%”, “Score 20%”, “Score 50%”, “Score 100%”). Responses to the multiple-choice (checkbox) questions were scored as a proportion of implemented options over the total number of possible options for the given question (Table A.2).

For each indicator presented in Table 1.1, scores were aggregated as a weighted average, with the weights provided in Table A.1 (Column “W”). Simple questions on implementation were assigned a weight of 1. Detailed questions on the implementation of each measure, therefore conveying a more comprehensive description of the measure, were assigned a weight of 2.

The final score represents a measure of implementation of a selection of policies intended to deter IUU fishing in percentage terms for participating country or economy. Comparison between 2005 and 2016 (reference year for 2017 data collection) was limited to the subset of questions where data was available for 2005 (Column “C”), based on responses to the previous OECD data collection on IUU fishing (OECD, 2005_[22]).

The aggregation across surveyed countries was done by weighing individual indexes with their respective production values (OECD, 2017_[21]). For countries with production values not available, values were estimated based on production volumes sourced from FAO (FAO, 2017_[20]) and average price calculated based on OECD countries that provided data for the given year (OECD, 2017_[21]).

Table A.1. Evaluation table for the survey on implementation of internationally recognised best policies and practices against IUU fishing

Q	Policy indicator	Criteria	W	C	Score 0%	Score 20%	Score 50%	Score 100%	Notes and references
1	Flag state responsibilities	Registration of national vessels fishing in the areas under the jurisdiction of foreign countries or in the ABNJ	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	NA if there is no long-distance fleet; (FAO, 1993 ^[124] ; FAO, 2014 ^[16] ; Englander et al., 2014 ^[31] ; Churchill, 2012 ^[32] ; Erceg, 2006 ^[33] ; Erikstein and Swan, 2014 ^[30])
2	Flag state responsibilities	Registration of national vessels conducting fishing-related activities in the areas under the jurisdiction of foreign countries or in the ABNJ	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	NA if there is no long-distance fleet; (FAO, 2014 ^[16] ; Kroodsmas, Miller and Roan, 2017 ^[125])
3	Flag state responsibilities	Registration requirements for national vessels fishing in the areas under the jurisdiction of foreign countries or in the ABNJ	2		Multiple-choice (checkbox) question (score depends on the number of checked options) – details in Table A.2				NA if there is no long-distance fleet; (FAO, 2014 ^[16])
4	Flag state responsibilities	Updating of the registry of vessels flying the national flag	1		No updating; irregular updating (e.g. less than once a year); no registry	NA	Updating is periodical; updating follows a predefined schedule	Updating in real or near-real time	(FAO, 2014 ^[16])
5	Flag state responsibilities	Public availability of the registry of vessels flying the national flag	1		Registry is not public	NA	Registry has a limited availability to the public or registry is not complete due to poorly implemented registration system	Registry is public	Refers to basic information allowing vessel identification, e.g. name, IMO, etc.; publication can be at national or supra-national level; limited availability include: limitation to a subset of vessels (e.g. vessel size criteria), availability upon request; (FAO, 2014 ^[16])
6	Flag state responsibilities	Prohibition of registration of vessels with a history of IUU fishing	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(FAO, 2014 ^[16])
7	Flag state responsibilities	Prohibition of registration of vessels already registered by another state, except on a temporary basis	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(FAO, 2014 ^[16])
8	Flag state responsibilities	Sanctions on vessels engaged in IUU fishing before deregistration	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(FAO, 2014 ^[16])

Q	Policy indicator	Criteria	W	C	Score 0%	Score 20%	Score 50%	Score 100%	Notes and references
9	Flag state responsibilities	Authorisation of national vessels to fish in the areas under the jurisdiction of foreign countries or in the ABNJ	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	NA if there is no long-distance fleet; (FAO, 2014 _[16] ; Morin, 2015 _[126] ; Erceg, 2006 _[33])
10	Flag state responsibilities	Authorisation of national vessels to engage in fishing-related activities in the areas under the jurisdiction of foreign countries or in the ABNJ	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	NA if there is no long-distance fleet; (FAO, 2014 _[16] ; Kroodsma, Miller and Roan, 2017 _[125])
11	Flag state responsibilities	Information required for issuing a national vessel with an authorisation to fish in the areas under the jurisdiction of foreign countries or in the ABNJ	2		Multiple-choice (checkbox) question (score depends on the number of checked options) – details in Table A.2				NA if there is no long-distance fleet; (FAO, 1993 _[124] ; FAO, 2014 _[16])
12	Flag state responsibilities	Public availability of the list of vessels flying the national flag authorised to fish (i.e. fishing licence holders) in the areas under the jurisdiction of foreign countries or in the ABNJ	1		List is not public	NA	List has a limited availability to the public or list is not complete due to poorly implemented authorisation system	List is public	Publication can be at national or supra-national level; limited availability include: limitation to a subset of vessels (e.g. vessel size criteria), availability upon request; NA if there is no long-distance fleet; (FAO, 2014 _[16] ; Kroodsma, Miller and Roan, 2017 _[125])
13	Flag state responsibilities	Public availability of the list of bilateral agreements with foreign countries on fishing in the areas under their jurisdiction	1		List is not public	NA	List is public but content or coverage is limited	List is public and its content is comprehensive (e.g. includes details on financial terms)	Includes agreements negotiated at national and supra-national level; NA if there are no such agreements in place; limited coverage includes e.g. no details on financial terms if such are part of the agreement; (FAO, 2014 _[16])
14	Coastal state responsibilities	Authorisation of foreign vessels to fish in the country's EEZ	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	Consider a ban as an applicable legislation
15	Coastal state responsibilities	Record-keeping of the activity of foreign vessels authorised to fish in the country's EEZ	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	E.g. keeping a record of catch, used gear, areas fished etc.; NA if no foreign vessels allowed in the country's EEZ
16	Coastal state responsibilities	Public availability of the list of foreign vessels authorised to fish in the country's EEZ	1		List is not public	NA	List has a limited availability to the public or list is not complete due to poorly implemented authorisation system	List is public	Limited availability include: limitation to a subset of vessels (e.g. vessel size criteria), availability upon request; NA if foreign vessels banned in the country's EEZ

Q	Policy indicator	Criteria	W	C	Score 0%	Score 20%	Score 50%	Score 100%	Notes and references
17	Coastal state responsibilities	Chartering arrangements	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(EJF; OCEANA; Pew Charitable Trusts; WWF, 2016 _[127])
18	Coastal state responsibilities	Registration requirements for large-scale vessels fishing in the country's EEZ	2		Multiple-choice (checkbox) question (score depends on the number of checked options) – details in Table A.2				NA if no large-scale fleet
19	Coastal state responsibilities	Information required for issuing a large-scale vessel with an authorisation to fish in the country's EEZ	2		Multiple-choice (checkbox) question (score depends on the number of checked options) – details in Table A.2				NA if no large-scale fleet
20	Coastal state responsibilities	Measures applicable to small-scale fisheries	2		Multiple-choice (checkbox) question (score depends on the number of checked options) – details in Table A.2				(Suebala et al., 2015 _[128] ; FAO, 2015 _[17])
21	Port state responsibilities	Designation of ports with sufficient capacity to conduct inspections for use by foreign-flagged vessels and publication of such lists	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(FAO, 2009 _[15] ; Swan, 2016 _[129] ; Witbooi, 2014 _[130])
22	Port state responsibilities	Advance request for port entry by foreign-flagged vessels and confirmation requirement from the flag state	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(FAO, 2009 _[15] ; Swan, 2016 _[129] ; Witbooi, 2014 _[130])
23	Port state responsibilities	Denial of port entry or use (including landing, transshipments and access to other port services or inspection) to vessels suspected of IUU fishing	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(FAO, 2009 _[15] ; Swan, 2016 _[129] ; Witbooi, 2014 _[130])
24	Port state responsibilities	Risk based management approach to vessels entering ports	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(FAO, 2009 _[15] ; Swan, 2016 _[129] ; Witbooi, 2014 _[130])
25	Port state responsibilities	Definition of a minimum number of vessel inspections in ports	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(FAO, 2009 _[15] ; Swan, 2016 _[129] ; Witbooi, 2014 _[130])
26	Port state responsibilities	Designation of an authority that act as focal point for exchange of information on port state measures with other national authorities, international organisations and RFMOs	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(FAO, 2009 _[15] ; Swan, 2016 _[129] ; Witbooi, 2014 _[130])
27	Port state responsibilities	Implementation of RFMO's ports state measures	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(Swan, 2016 _[129] ; Witbooi, 2014 _[130] ; Flothmann et al., 2010 _[58])

Q	Policy indicator	Criteria	W	C	Score 0%	Score 20%	Score 50%	Score 100%	Notes and references
28	Market state responsibilities	Prevention of trade of fish caught by vessels identified as engaged in IUU fishing	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(Le Gallic, 2008 ^[57] ; Stokke, 2009 ^[67] ; Lövin, 2011 ^[131] ; Young, 2016 ^[132] ; Hosch, 2016 ^[63])
29	Market state responsibilities	System of multilateral catch documentation and certification requirements for traded fish products	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(FAO, 2017 ^[18])
30	Market state responsibilities	Use of trade information to target IUU fishing trade	1		No process in place	NA	Process in place for main species only	Process in place for all species	Applicable process include, e.g., cross-check of trade data or risk analysis conducted to directly target IUU fishing; (FAO, 2001 ^[6])
31	Market state responsibilities	Inclusiveness of stakeholders along the value chain and awareness-raising among stakeholders to deter trade of IUU fishing products	1	1	No relevant programs	There are provisions for relevant programs, but no implementation in practice	Relevant programs in place, but with limited reach	Relevant programs in place	(FAO, 2017 ^[18] ; Petrossian, Weis and Pires, 2015 ^[65])
32	Market state responsibilities	Consideration of IUU fishing as a predicate offense for money laundering	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	Partial implementation may include inclusion of relevant provisions in regulation on broader set of products (i.e. not specifically referring to IUU fishing) (UNODC, 2011 ^[11] ; OECD, 2013 ^[25] ; Griggs and Lugten, 2007 ^[68] ; Österblom, 2014 ^[3])
33	Market state responsibilities	Examination of a vessels and operators' history of non-compliance when applying for financial transfers/support from the government	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation or no subsidies	NA if no governmental support available to fishers; (Griggs and Lugten, 2007 ^[68])
34	Market state responsibilities	Restrictions on public support for operators convicted of IUU fishing offences	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation or no subsidies	NA if no governmental support available to fishers; (Sumaila, 2013 ^[133] ; Schmidt, 2017 ^[114])
35	Enforcement	Existence of task force or inter-agency group to combat IUU fishing	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(OECD, 2013 ^[25] ; Szigeti and Lugten, 2015 ^[134])
36	Enforcement	Authorities involved in sharing information on IUU fishing at national level	2		Multiple-choice (checkbox) question (score depends on the number of checked options) – details in Table A.2				(OECD, 2013 ^[25] ; Szigeti and Lugten, 2015 ^[134])
37	Enforcement	Control regime over vessels in the EEZ and the ABNJ	2		Multiple-choice (checkbox) question (score depends on the number of checked options) – details in Table A.2				

Q	Policy indicator	Criteria	W	C	Score 0%	Score 20%	Score 50%	Score 100%	Notes and references
38	Enforcement	Fisheries monitoring centre and near real-time controls of fishing vessels in the EEZ and the ABNJ	1		No monitoring	NA	Monitoring is limited (e.g. to domestic EEZ)	Monitoring in real time, 24/7	Monitoring limitations may include (1) no full coverage, (2) delayed processing of information, (3) limited monitoring time frame; (Beke, Ackermann and Blomeyer, 2014 ^[82] ; Cacaud, Kuruc and Spreij, 2003 ^[135])
39	Enforcement	Publication of IUU vessel list	1		No lists published	NA	Country contributes to RFMOs' IUU vessel lists	Lists published (nationally or by supra-nationally)	(Beke, Ackermann and Blomeyer, 2014 ^[82] ; Cacaud, Kuruc and Spreij, 2003 ^[135] ; Erceg, 2006 ^[33])
40	Enforcement	IUU fishing sanctions within the national legal framework	1		No legislation	NA	NA	Legislation available	(Putt and Nelson, 2009 ^[85] ; Kao, 2015 ^[34] ; Selbe, 2014 ^[136])
41	Enforcement	Sanctions on nationals	1		Not included in legislation	NA	NA	Included in legislation	Refers to legislation including sanctions on nationals on-board of fishing vessels on the high seas and BO, regardless where the vessel is registered; (Putt and Nelson, 2009 ^[85] ; Kao, 2015 ^[34] ; Selbe, 2014 ^[136] ; Erceg, 2006 ^[33])
42	International co-operation	Adoption of standards to share information at international level	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(Gilman and Kingma, 2013 ^[106])
43	International co-operation	Existence of a focal point to exchange information with other countries on matters relevant to IUU fishing	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(Gilman and Kingma, 2013 ^[106])
44	International co-operation	Participation in an international task force or group to combat IUU fishing	1		No participation	NA	NA	Participation	(OECD, 2016 ^[137])
45	International co-operation	Co-operative systems of monitoring, control and surveillance at regional level	1	1	No legislation	Legislation but no implementation	Partial implementation of legislation	Full implementation of legislation	(Lodge et al., 2007 ^[117])

Note: Column 'W' indicates weight of given question in calculation of indicator score. Column 'C' indicates whether question is part of quantitative comparative analysis between 2005 and 2016, i.e. whether data was collected in 2005. Partial implementation implies either (1) implementation to limited subset of fisheries, (2) no sufficient enforcement tools to assure full implementation of the policy. NA indicates no applicability.

Source: OECD 2017 data collection on measures against IUU fishing.

Table A.2. Options for multiple-choice (checkbox) questions presented in Table A.1

Question	Option	Option
3	a	Characteristics of the vessel e.g. length, tonnage, fishing methods, powers, date of build
3	b	Name and nationality of legal or natural person in whose name the vessel is registered
3	c	Name and nationality of legal or natural person responsible for managing the operations of the vessels
3	d	Name and nationality of legal or natural person with beneficial ownership of the vessel
3	e	IMO number when registering the vessels
3	f	History of the vessel
3	g	Requirements also applying to fishing-related activities
11	a	Definition of area, scope and duration of the authorisation
11	b	VMS
11	c	UVI
11	d	Observer coverage
11	e	Maintenance of fishing logbooks
11	f	Reporting of catch
11	g	Reporting of transshipment (when permitted)
11	h	History of compliance with regulations and IUU fishing
11	i	Working conditions on-board
11	j	Sustainability criteria
18	a	Characteristics of the vessel e.g. length, tonnage, fishing methods, powers, date of build
18	b	Name and nationality of legal or natural person whose name the vessel is registered
18	c	Name and nationality of legal or natural person responsible for managing the operations of the vessels
18	d	Name and nationality of legal or natural person with beneficial ownership of the vessel
18	e	IMO number when registering the vessels
18	f	History of the vessel
18	g	Requirements also applying to fishing-related activities
19	a	Definition of area, scope and duration of the authorisation
19	b	VMS
19	c	UVI
19	d	Maintenance of fishing logbooks
19	e	Reporting of catch
19	f	Reporting of transshipment (when permitted)
19	g	History of compliance with regulations and IUU fishing
20	a	Registration of the vessel
20	b	Authorisation to fish
20	c	Empowerment programs to combat IUU fishing
20	d	Other traditional practices in place*
36	a	Fisheries authorities
36	b	Customs administrations
36	c	Tax administrations
36	d	Any other relevant authority or agency with interests in the fisheries sector*

Question	Option	Option
37	a	Catch documentation scheme
37	b	VMS (where appropriate)
37	c	AIS (where appropriate)
37	d	Observer programs (where appropriate)
37	e	MCS of transshipment operations
37	f	Cross-check of authenticity of trade certificates
37	g	Storage of MCS data
37	h	Risk based management approach to MCS
37	i	Training programs for MCS staff
37	j	Co-operative participation of industry
37	k	Other*

Note: * Option “Other” or similar, when available, was not used in quantitative assessment. ¹Only taken into account if a system of such payments is in place.

Source: OECD Data Collection 2017.

Annex B. Compilation of answers to the survey on implementation of internationally recognised best policies and practices against IUU fishing

Table B.1. Compilation of survey results – answers to the questions presented in Table A.1

Q	A U S	B E L	C A N	D E U	D E N K	E S T	G B R	G R C	I R L	I S L	I T A	J P A	K O R	L T U	L V A	N L D	N O R	N Z L	P O L	S V N	S W E	T U R	U S A	A L B	C O L	L B N	L B Y	M L T	T H A	T U N	T W N			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
3	1.4	2	1.7	1.7	1.7	1.4	1.4	0.9	1.7	1.4	1.7	1.7	2	1.4	1.1	1.7	1.7	2	1.7	2	2	1.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7		
4	0.5	1	1	1	1	1	0.5	1	1	1	1	1	1	0.5	1	1	1	1	1	1	1	0.5	1	1	1	0	0.5	0.5	0.5	1	0			
5	0.5	1	1	1	1	1	1	1	1	1	1	1	0.5	1	1	1	1	1	1	1	1	0	1	0	1	0	1	0.5	0	0	0	0		
6	1	1	1	1	1	1	0.2	0.2	1	1	0.2	0.5	1	1	0.5	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	NA	1		
7	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0.5	1	1	1		
8	1	1	1	1	1	0.5	0.2	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1		
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	1	1	1	1	1	0.5	1	1	0.5	1	1	0.5	NA	NA	1	1	0	1
10	1	1	1	0.2	1	0.2	0.2	0.2	1	0	1	1	1	0.5	1	1	0	0	1	0.2	0.2	0	0	1	0.5	NA	NA	1	1	1	1	1		
11	1.8	1.6	2	1.2	1.6	1.6	1.8	1.4	1.6	1.8	1.8	2	2	1.2	1.4	1	1.4	1.8	2	1.6	1	1	0.6	1.6	1.8	NA	NA	1.2	0	NA	2			
12	0.5	NA	1	0.5	0.5	1	0.5	1	0.5	1	0.5	1	0	0.5	1	0.5	1	0.5	0	NA	0.5	0	1	1	0.5	NA	NA	1	0	0	1			
13	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	NA	NA	NA	NA	1	NA	NA	0.5	0.5		
14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
15	NA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
16	NA	0	0	0	0	NA	0	NA	0	1	0	0.5	0	0	0	0	0.5	NA	0	NA	0	NA	0	0	1	1	1	1	1	1	1	1	1	
17	1	0	1	1	1	1	0	0	1	1	0	0	1	1	1	1	1	1	1	1	0	1	1	M	0	1	0	1	1	0	1	1	1	
18	1.4	2	1.7	0.9	1.1	1.4	0.6	1.1	1.7	1.4	1.7	1.7	1.7	0.6	1.1	1.7	1.7	1.7	1.1	2	2	1.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	
19	1.7	0.9	2	0.9	1.7	2	1.7	1.7	1.7	1.7	1.7	2	1.7	1.7	1.7	0.9	1.7	1.1	2	1.4	1.7	1.4	2	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	
20	1.3	0.7	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2	2	2	2	0.7	1.3	1.3	1.3	1.3	2	1.3	2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	
21	1	0.2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.2	1	0	1	1	0	1	0	1	1	1	1	1	
22	1	1	1	1	1	1	1	0.2	1	1	1	1	1	1	0.5	1	1	1	1	1	0.2	1	0	1	1	1	1	1	0	1	1	1	1	
23	1	1	1	1	1	1	1	1	1	1	0.2	1	1	1	1	1	1	1	1	1	0.2	1	0	1	1	1	1	1	1	1	1	1	1	
24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.2	1	0.5	1	1	1	1	0	0	1	1	1	1	
25	1	1	1	1	1	1	1	0.2	0.2	0.5	0.5	1	1	1	1	1	1	1	1	1	0.2	0.2	0	1	1	1	1	0	0	0.5	1	0.5	1	

26	1	0	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0.2	1	0	0	1	1	1	1		
27	1	1	1	0.5	1	1	1	0.2	1	1	0.5	0	1	1	1	1	1	1	1	0.2	1	0	0	1	1	1	1	1	1	1	1		
28	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1	1	1	1		
29	1	1	1	1	1	1	1	1	1	1	1	0.5	1	1	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1	1	1	1		
30	0.5	0	1	0	1	1	1	0	1	1	1	1	1	1	0.5	1	1	0	0.5	1	1	0	1	1	1	0	0	1	1	0	0.5		
31	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1		
32	0.5	0.5	1	0.5	1	1	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0	0	0.5	0	0		
33	NA	0.5	0.5	1	1	1	1	1	1	0	1	0.5	1	1	1	0.5	1	NA	1	1	1	NA	1	NA	0	NA	0	1	1	1	0		
34	NA	0.5	0.5	1	1	1	0.2	0.2	1	0	1	0	1	1	1	1	1	NA	1	1	1	NA	1	NA	0	NA	0	1	0	1	0		
35	1	0	1	0.5	1	0	0	0.5	0.5	0	1	0.5	1	0	1	1	1	1	1	0	1	0	0.5	1	1	1	0.5	0.5	1	1	1	1	
36	2	0.7	2	1.3	2	2	2	1.3	1.3	1.3	1.3	1.3	0.7	1.3	1.3	1.3	2	1.3	1.3	1.3	1.3	0.7	1.3	2	2	1.3	1.3	1.3	1.3	1.3	1.3		
37	2	1.8	2	1.8	1.8	1.8	2	1.4	1	2	1.6	2	2	1.8	1.6	1.8	2	2	2	1.6	1.2	1.6	2	1.8	1.4	0	1.8	1.6	2	1.8	2		
38	1	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5		
39	0.5	1	0.5	1	1	1	1	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1	1	1	0.5	0.5	0.5	0	0.5	0.5	1	0	1	0.5
40	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
41	1	1	1	0	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	
42	1	1	1	1	1	0.2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.2	1	0	1	0	1	0.5	0.5	1	1	0	
43	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
44	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	
45	1	1	1	1	1	1	0	1	1	1	1	1	0.5	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	

Note: Follows criteria presented in Table A.1. NA indicates non-applicability; M indicates missing data.

Source: OECD 2017 data collection on measures against IUU fishing.

Table B.2. Compilation of survey results – answers to the multiple-choice (checkbox) questions presented in Table A.2

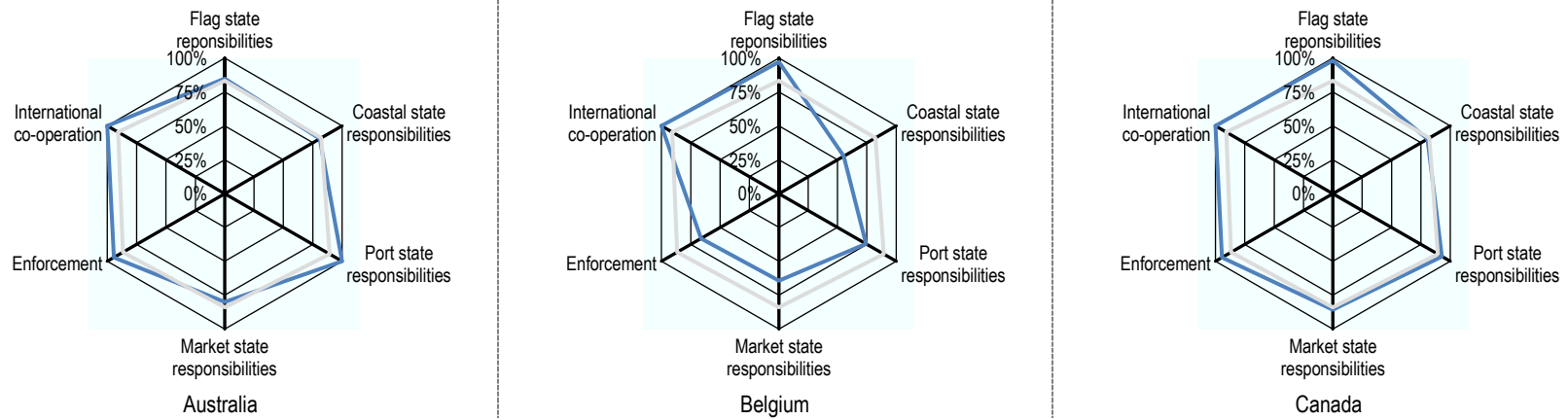
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3	a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
3	b	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
3	c	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
3	d	0	1	1	0	1	0	0	0	1	1	1	0	1	0	0	0	1	1	0	1	1	0	0	1	0	1	0	1	1	1	1		
3	e	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	NA	NA	1	0	1	1	
3	f	0	1	1	1	1	1	1	0	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
3	g	1	1	1	1	0	0	1	0	0	0	0	1	1	0	0	1	1	1	1	1	1	1	0	1	1	1	NA	NA	1	1	0	1	
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11	b	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
11	c	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	0	0	0	1	1	NA	NA	1	0	1	1
11	d	1	0	1	0	0	1	1	0	0	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	NA	NA	0	0	1	1
11	e	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	
11	f	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	NA	NA	1	0	1	1	
11	g	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	1	1	0	0	0	0	1	0	1	NA	NA	1	0	1	1	
11	h	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
11	i	0	1	1	0	0	0	1	0	1	1	1	1	1	0	0	0	1	1	1	1	0	0	0	1	1	1	NA	NA	0	0	1	1	
11	j	1	0	1	0	1	0	0	1	0	1	1	1	1	0	0	0	0	0	1	1	0	0	0	1	1	1	NA	NA	0	0	0	1	
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18	b	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
18	c	1	1	1	0	0	1	0	0	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	
18	d	0	1	1	0	0	0	0	0	1	0	1	0	1	0	0	0	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	
18	e	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
18	f	0	1	1	0	1	1	0	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
18	g	1	1	1	0	1	0	0	0	1	0	0	1	1	0	0	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	
19	a	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
19	b	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
19	c	1	0	1	0	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	
19	d	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
19	e	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
19	f	1	0	1	0	1	1	1	1	1	0	0	1	1	1	1	0	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	
19	g	0	0	1	1	0	1	0	0	0	1	1	1	1	0	0	0	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	
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20	b	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
20	c	1	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
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36	b	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	
36	c	1	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

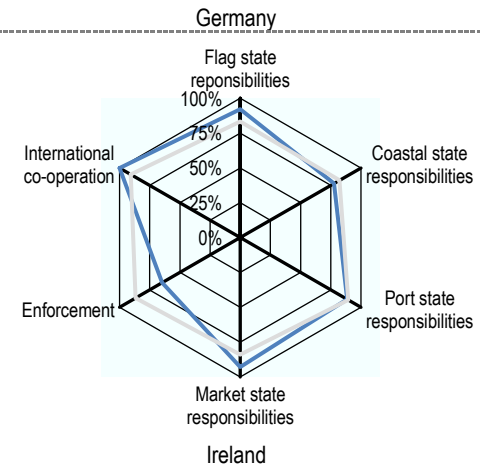
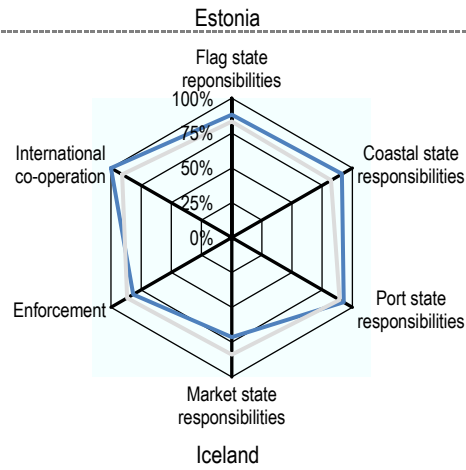
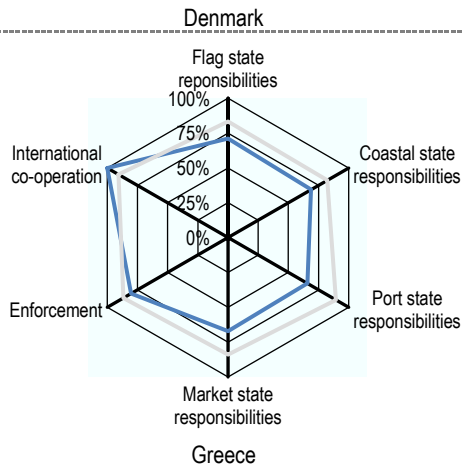
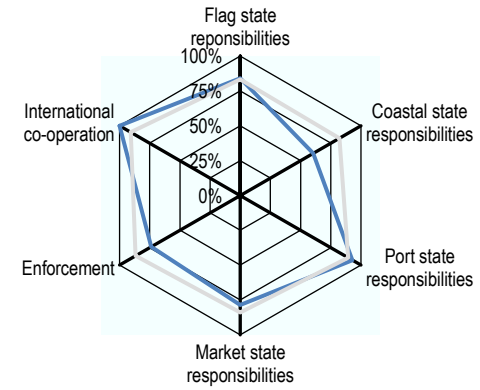
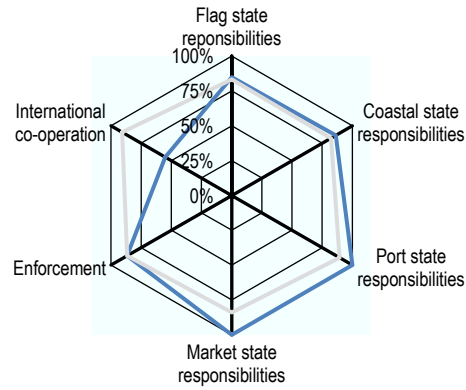
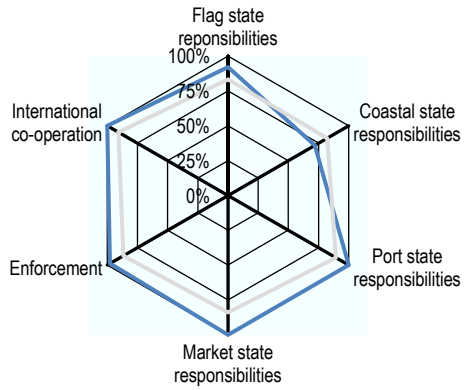
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37	a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37	b	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37	c	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37	d	1	0	1	0	0	1	1	0	0	1	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1
37	e	1	1	1	1	1	1	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1
37	f	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37	g	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37	h	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0	0	0	0	1	1
37	i	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
37	j	1	1	1	1	1	0	1	0	0	1	0	1	1	1	0	1	1	1	1	0	0	1	1	0	1	1	1	1	1	1
37	k	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

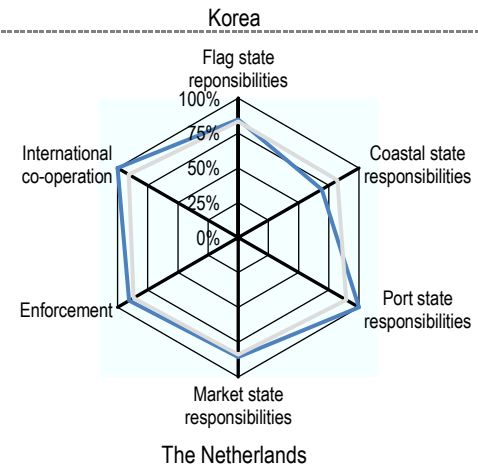
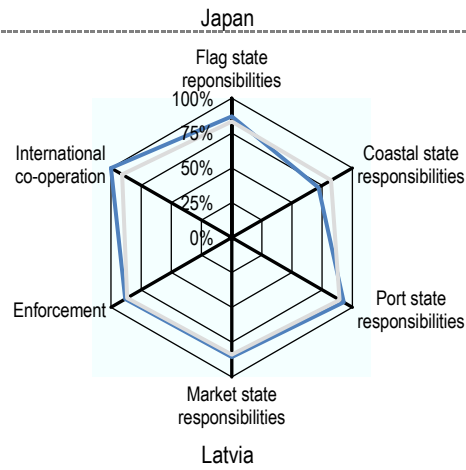
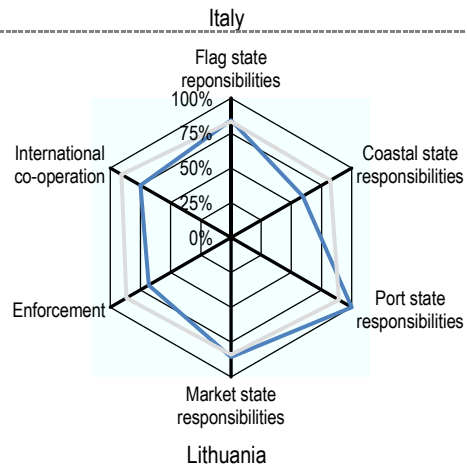
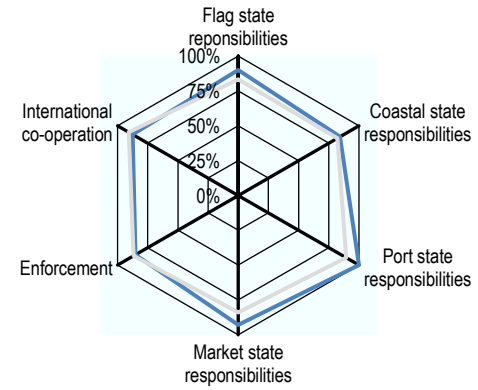
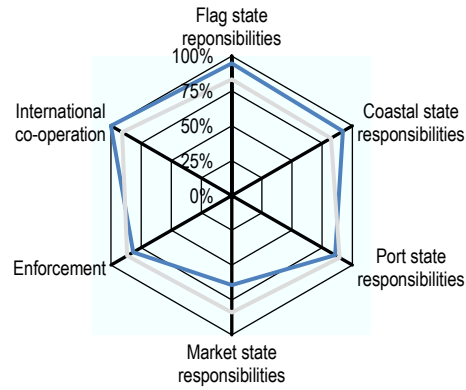
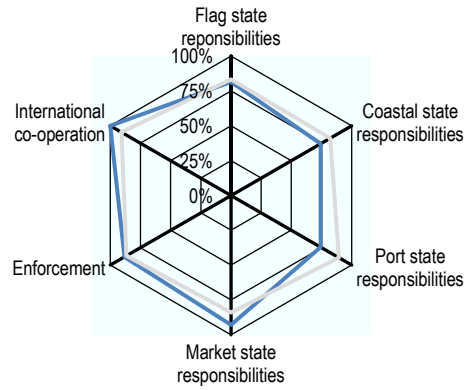
Note: Follows criteria presented in Table A.2. NA indicates non-applicability; M indicates missing data.
Source: OECD 2017 data collection on measures against IUU fishing.

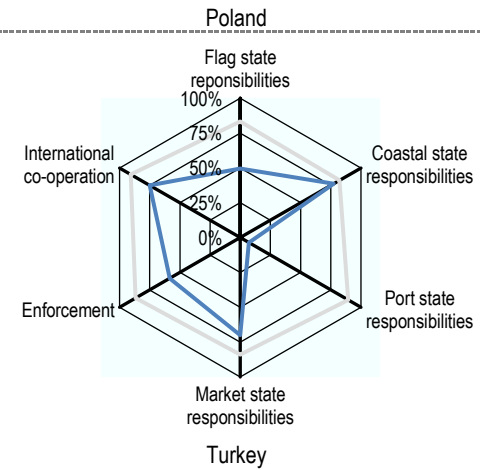
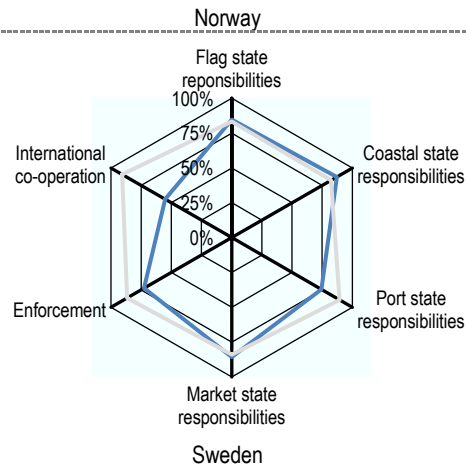
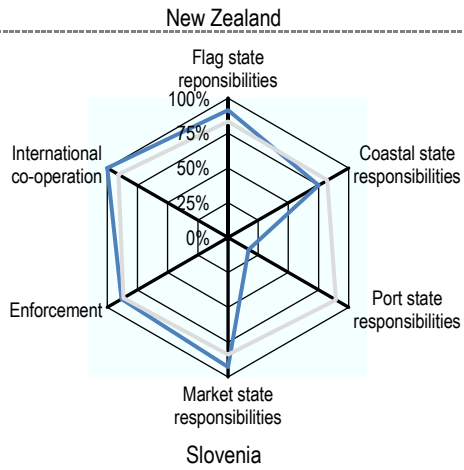
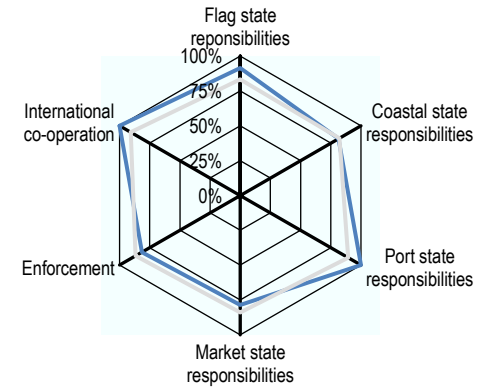
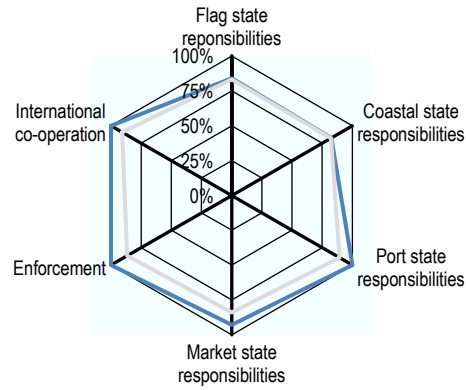
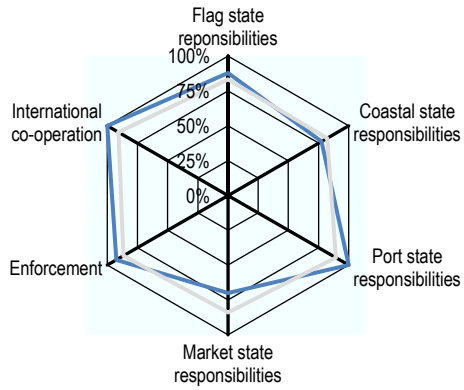
Annex C. OECD indicators on IUU fishing – results by country

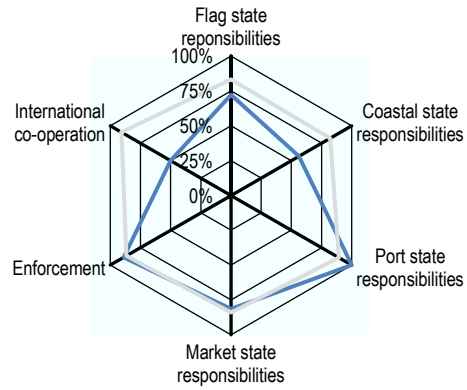
Figure C.1. OECD indicators on IUU fishing – results by country in comparison with OECD average (grey line)



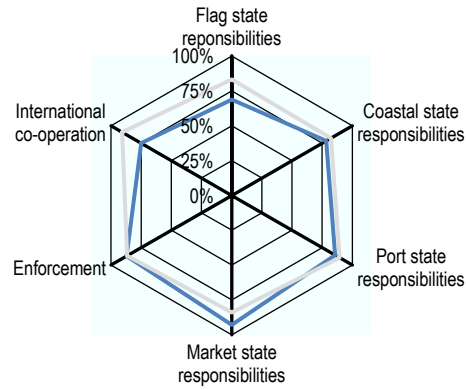




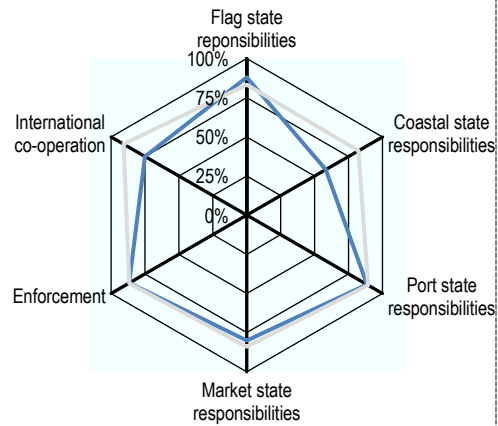




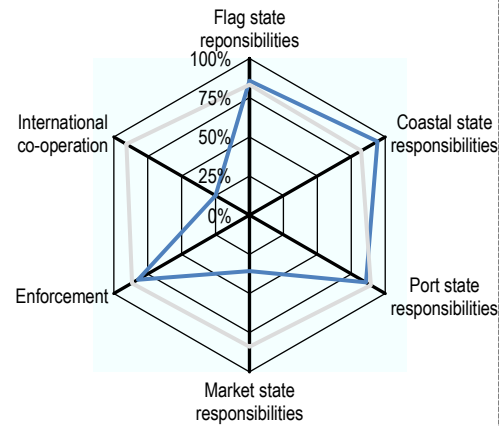
The United Kingdom



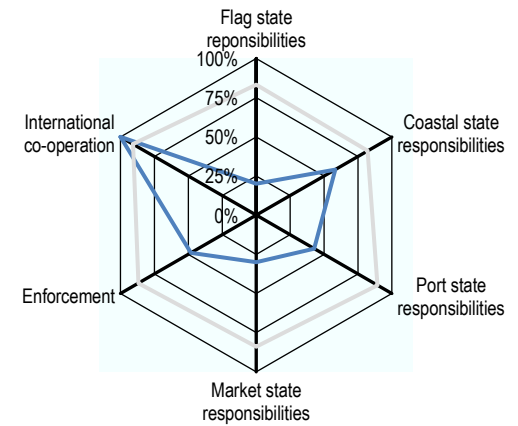
The United States



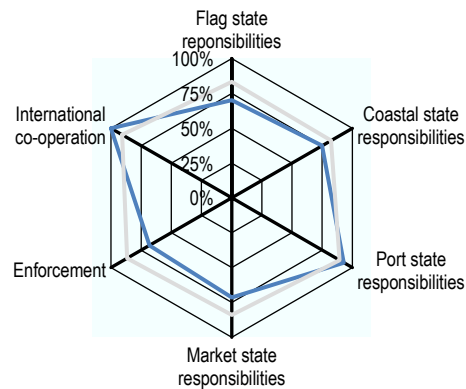
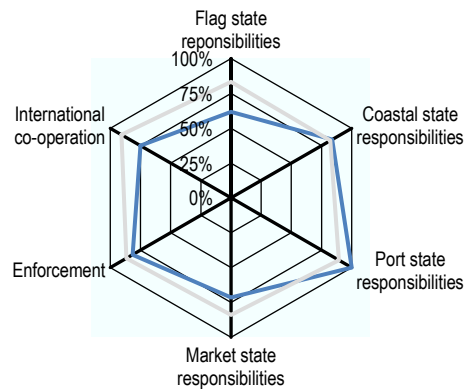
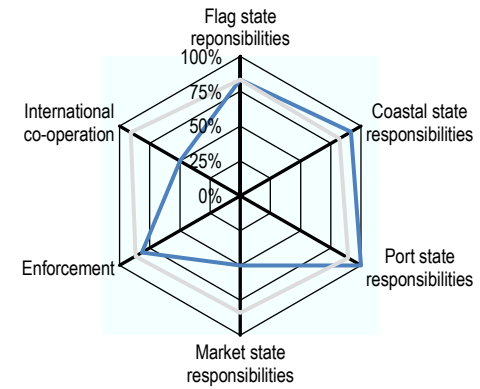
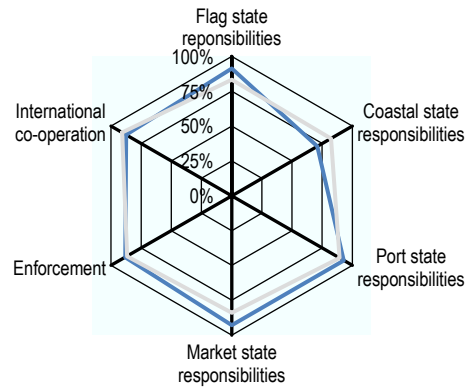
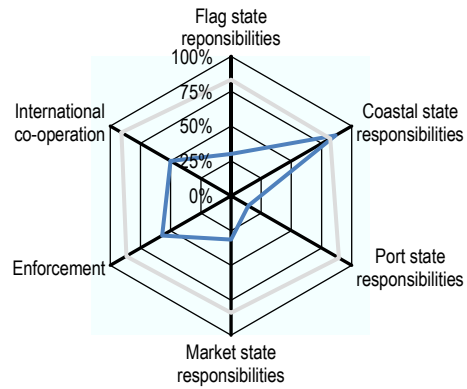
Albania



Colombia



Lebanon



Annex D. Compilation of RFMO-level supporting information

The criteria for quantitative assessment of RFMOs are available in Table D.1. Each evaluated component was assigned a numerical score of maximum 1 according to the transparent key contained in the columns “Justification”. For each category, scores were aggregated as a weighted average, with the weights provided in (Column “W”). The final score represents a measure of implementation of a selection of policies intended to deter IUU fishing in percentage terms for each RFMO.

All information gathered on RFMOs, together with evaluation results presented in column “Score”, is available in Table D.2. A graphical representation of the results is presented in Figure D.1.

Table D.1. Evaluation criteria on implementation of internationally recognised best policies and practices against IUU fishing at regional level by RFMOs

Category	Criteria	W	Justification
MSC minimum standards	Registry of authorised vessels	3	(1) Provisions: Reference to a document establishing a registry of authorised vessels (2) Provisions: Authorisation of a vessel requires IMO number (3) Practice: Registry is available to the public (link to the registry)
	Catch documentation scheme	1	MSC minimum standards established – provide reference to a relevant CMM
	Vessel monitoring System	2	(1) MSC minimum standards established – provide reference to a relevant CMM (2) VMS is centrally administered, i.e. VMS data is being fed directly to the RFMO's Secretariat
	Inspections at sea	1	MSC minimum standards established – provide reference to a relevant CMM (0.5 if spatially limited)
	Observer programme	1	MSC minimum standards established – provide reference to a relevant CMM (or alternative measure with the purpose of on-board monitoring for compliance, e.g. on-board cameras) (0.5 if observer program is established only for scientific purpose)
	Transshipment monitoring programme	1	MSC minimum standards established – provide reference to a relevant CMM
	Inspections in port	1	MSC minimum standards established – provide reference to a relevant CMM
	Designation of landing ports	2	(1) Provisions: Reference to relevant CMM (2) Practice: List of designated ports is available to the public (link to the list)
IUU vessel listing	Document	1	Reference to a relevant resolution
	Link	-	Link to IUU vessel list (not scored, for information)
	Coverage	1	IUU vessel list covers both members (CPs and CNCPs) non-members
	Evidence	1	(1) Evidence of IUU activities delivered to the Secretariat by CP or CNCP (0.5 if CP only). (2) Evidence of IUU activities delivered to the Secretariat by other external sources at the disposal of the Secretariat.
	BO	1	Collection of information on beneficial ownership considered in the relevant resolution
	Listing justification	2	(1) Provisions: Provisions for publishing a description of the IUU activity available (2) Practice: Description of IUU activity available in the IUU vessel list
	Follow-up	4	(1) Information on measures to be applied by CP or CNCP to vessel listed in the relevant resolution (2) Specific mention of trade measures (e.g. prohibition of trade/import of fish from IUU vessels) in the relevant resolution (3) Information on sanctions applied to listed vessels (e.g. included in the published IUU vessel list) (4) Mandate to sanction the flag state for lack of follow-up on non-compliance of a vessel flying its flag (e.g. through fines, loss of quota or loss of voting rights, trade measures)

Decision-making	Document	1	Reference to a relevant resolution
	Voting	1	Voting is allowed (0 if decision-making process is based on consensus)
	Objection	1	If voting is allowed, there are no provisions for objection (0 if the resolution allows for an objections of a decision)
	Justification of the objection	1	If objection is allowed, it requires justification (or if no objection is allowed)
	Framework of the objection	1	The objection is allowed only within certain framework (or if no objection is allowed)
	Review panel	1	Objection is followed by an establishment of a review panel. 1 if establishment of a panel is automatic, 0.5 if panel is established at the request of a CP (or if no objection is allowed)
Co-operation	Co-operation	1	Provisions for co-operation with other RFMOs available in the relevant resolution (0.5 if limited to just few RFMOs)
	Cross-listing	2	(1) Provisions: Provisions for cross-listing with other RFMOs established in the relevant resolution (0.5 if these provisions are conditional or limited). (2) Practice: IUU vessel list includes entries from other RFMOs (0.5 if IUU lists of other RFMOs linked to the page). Alternatively, other IUU vessel lists are automatically recognised following the relevant resolution
Compliance review	Compliance review body and related documents	1	Provisions for regular review of compliance with CMMs by CP/CNCP and establishment of compliance review body (e.g. Compliance Committee in place)
	Summary (implementation of CMMs)	1	Summary of identified non-compliance with CMMs by CP/CNCP (0.5 if out-of-date or self-reported, i.e. submitted directly by CPs/CNCPs)
	Summary (data collection)	1	Summary of identified non-compliance with data submission requirements by CP/CNCP (0.5 if out-of-date or self-reported, i.e. submitted directly by CPs/CNCPs)
	Sanctions	2	(1) Provisions to impose sanctions on CP/CNCP for non-compliance with CMMs and data submission requirements (2) Transparency on imposed sanctions for non-compliance with CMMs and data submission requirements by CP/CNCP (e.g. fines, lost quota, lost voting rights, trade measures)

Table D.2. Information on implementation of internationally recognised best policies and practices against IUU fishing at regional level by RFMOs

Category	Criteria	Score	Justification	
CCSBT				
MSC minimum standards	Registry of authorised vessels	3	(1) Resolution on a CCSBT Record of Vessels Authorised to Fish for Southern Bluefin Tuna (revised at the Twenty-Second Annual Meeting: 15 October 2015) (2) Paragraph 3 (from 2017) (3) Registry is available to the public (https://www.ccsbt.org/en/content/ccsbt-record-authorized-vessels)	
	Catch documentation scheme	1	Resolution on the Implementation of a CCSBT Catch Documentation Scheme (revised at the Twenty-First Annual meeting: 16 October 2014)	
	Vessel monitoring System	1	(1) Resolution on establishing the CCSBT Vessel Monitoring System (2017) [1] (2) Includes minimum standards, managed by countries individually [0]	
	Inspections at sea	0	Not available	
	Observer programme	0.5	CCSBT Scientific Observer Program Standards (revised 2015) - for <u>scientific</u> purpose only [0.5]	
	Transshipment monitoring programme	1	Resolution on Establishing a Program for Transshipment by Large-Scale Fishing Vessels (2017)	
	Inspections in port	1	Resolution for a CCSBT Scheme for Minimum Standards for Inspection in Port (effective from 2017)	
	Designation of landing ports	2	(1) Resolution for a CCSBT Scheme for Minimum Standards for Inspection in Port (2) https://www.ccsbt.org/en/content/ccsbt-register-designated-ports-and-contacts	
	IUU vessel listing	Document	1	Resolution on Establishing a List of Vessels Presumed to have Carried Out Illegal, Unreported and Unregulated Fishing Activities For Southern Bluefin Tuna (SBT) (revised at the 24th Annual Meeting, 12 October 2017)
		Link	-	https://www.ccsbt.org/en/content/iuu-vessel-lists (but no vessels listed by CCSBT to this date)
Coverage		1	Paragraph 1: "At each annual meeting, the Extended Commission will identify those vessels which have engaged in fishing activities for SBT in a manner which has undermined the effectiveness of the Convention and the CCSBT measures in force. [...]"	
Evidence		1	(1) Paragraph 3: "For the purposes of this Resolution, the vessels are presumed to have carried out SBT IUU fishing activities, inter alia, when a Member or CNM presents suitably documented evidence [...]" [1] (2) Paragraph 5: "This list and evidence shall be based, inter alia, on information collected by Members and CNMs" [0]	
BO		1	ANNEX III: Information to be Included in all CCSBT IUU Vessel Lists, point iii: "Owner / Beneficial Owner/s (previous owner/s, if any), and owner's place of registration (if any)"	
Listing justification		1	(1) Annex III(ix): "Summary of the activities which justify inclusion of the vessel on the List, together with references to all relevant supporting documents and evidences" [1] (2) No record of listed vessels [0]	

	Follow-up	2	(1) Paragraph 18: "Members and CNMs shall take all necessary non-discriminatory measures" [1] (2) Paragraph 18(g): "Ensure that SBT from vessels included in the CCSBT IUU Vessel List are not landed, farmed, transhipped and/or traded internationally and and/or domestically " [1] (3) Not available [0] (4) Not available [0]
Decision-making	Document	1	Text of the Convention for the Conservation of Southern Bluefin Tuna (entered into force on 20 May 1994) (Rules of Procedure of the Commission for the Conservation of Southern Bluefin Tuna; Updated October 2017)
	Voting	0	Article 7: "Each Party shall have one vote in the Commission. Decisions of the Commission shall be taken by a unanimous vote of the Parties present at the Commission meeting."
	Objection	0	NA
	Justification of the objection	0	NA
	Framework of the objection	0	NA
	Review panel	0	NA
Co-operation	Co-operation	1	CMM on IUU vessel list, par 19: "[...] the Executive Secretary will transmit the CCSBT IUU Vessel List to appropriate regional fisheries organisations for the purposes of enhanced co-operation between CCSBT and these organisations in order to prevent, deter and eliminate IUU fishing."
	Cross-listing	1	(1) CMM on IUU vessel list, par 20: "The Extended Commission <u>may consider</u> cross-listing IUU vessel lists with all other tuna Regional Fisheries Management Organisations and relevant organisations on a case by case basis as agreed by the Extended Commission" [0.5] (2) Other RFMOs linked to the page (https://www.ccsbt.org/en/content/iuu-vessel-lists) [0.5]
Compliance review	Compliance review body and related documents	1	Compliance Committee gathers annually since 2006 (https://www.ccsbt.org/en/content/reports-past-meetings); The Corrective Action Policy (2016) regulates publicizing non-compliance data and sanctions; CCSBT publishes summary document "Non-compliance with National Allocations of the global TAC for Southern Bluefin Tuna" ; Quality Assurance Review of 1-2 Members each year by independent auditor to assess how well Members' management systems function with respect to their CCSBT obligations and to provide recommendations on where improvement is needed; Annual report by Secretariat on Compliance with CCSBT Measures (available on request).
	Summary (implementation of CMMs)	1	Non-compliance with national allocations of TAC identified by CPs and CNCPs
	Summary (data collection)	1	Compliance with submission of monthly catch reports available in compliance with CCSBT Management Measures document (CCSBT-CC/1710/04), which is available upon request
	Sanctions	2	(1) The Corrective Action Policy (last updated in 2016) gives guidelines for corrective actions (2) Summary of corrective actions available

GFCM			
MSC minimum standards	Registry of authorised vessels	2	(1) Recommendation GFCM/33/2009/5 on the establishment of the GFCM regional fleet register [1] (2) Resolution GFCM/41/2017/6 on the application of an International Maritime Organization number (from 2019); optional under GFCM/33/2009/5 [0] (3) http://www.fao.org/gfcm/data/fleet-avl/en/ [1]
	Catch documentation scheme	1	Recommendation GFCM/35/2011/1 concerning the establishment of a GFCM logbook, amending Recommendation GFCM/34/2010/1
	Vessel monitoring System	1	(1) Resolution GFCM/38/2014/1 on Guidelines on VMS and related control systems in the GFCM area of competence [1] (2) Res GFCM/38/2014/1, par 6: “[...] the GFCM Secretariat will establish a central VMS that will play a multi-faceted role [...]” This has been explained by the GFCM Secretariat in the following way: (a) Countries with a FMC in place shall be in the position to receive VMS data from relevant transponder providers’ gateways, thus being the first party to process such information through national monitoring IT platforms. These will be able to relay either real-time or deferred data to the regional VMS in line with regional standards in place; (b) Countries still devoid of a FMC will be able to install transponder units on respective fleets: in this case, the regional VMS will retrieve transponder data in their native formats, process relevant information and provide such CP/CNCPs with online consultation means. This implies that data can be still processed by CP/CNCP [0]
	Inspections at sea	0.5	Recommendation GFCM/41/2017/8 on an international joint inspection and surveillance scheme outside the waters under national jurisdiction in the Strait of Sicily (geographical subareas 12 to 16; following the communication with the GFCM Secretariat, more schemes could be adopted in the future (both regional and sub-regional schemes) – limited area [0.5]
	Observer programme	0	Art 9 of the draft GFCM Recommendation on a regional plan of action to combat illegal, unreported and unregulated fishing in the GFCM area of application mentions observers, but no measures in place
	Transshipment monitoring programme	1	Recommendation [05-06] establishing a programme for transshipment by large-scale longline fishing vessels (GFCM/2006/8 (C))
	Inspections in port	1	Rec. GFCM/40/2016/1 on a regional scheme on port State measures to combat illegal, unreported and unregulated fishing activities in the GFCM area of application
	Designation of landing ports	2	(1) Rec. GFCM/40/2016/1 on a regional scheme on port State measures to combat illegal, unreported and unregulated fishing activities in the GFCM area of application (2) http://www.fao.org/gfcm/data/ports

IUU vessel listing	Document	1	Recommendation GFCM/33/2009/8 on the establishment of a list of vessels presumed to have carried out IUU fishing in the GFCM area of application repealing Recommendation GFCM/30/2006/4
	Link	-	http://www.fao.org/gfcm/data/fleet-iuu-vessel-list/en/
	Coverage	1	Par 1: "For the purpose of this recommendation, the fishing vessels flying the flag of a non-contracting party, contracting party or cooperating non-contracting party are presumed to have carried out IUU fishing activities in the GFCM area of application [...]"
	Evidence	1	(1) Par 1: "[...] contracting party or cooperating non-contracting party (CPC) presents evidence [...]"; Par 3: "CPCs shall transmit every year to the GFCM Executive Secretary [...] information [...]" [1] (2) Par 4: "On the basis of the information received pursuant to paragraph 3, the GFCM Executive Secretary shall draw up a draft IUU vessel list" [0]
	BO	1	Information to be included in all IUU vessel lists: point 3 "Name and address of owner(s) of vessel and previous owner(s), including beneficial owner(s), and owner's place of registration"
	Listing justification	1	(1) Annex 1(9): "Summary of activities which justify inclusion of the vessel on the IUU vessel list, together with references to all relevant evidence" [1] (2) No description of IUU activity available in the IUU vessel list [0]
	Follow-up	2	(1) Paragraph 12(b): "take all necessary measures to eliminate the relevant IUU fishing activities including, as appropriate, the cancellation of the registration and/or the fishing license(s) of these vessels, and inform the GFCM Secretariat of the measures taken." [1] (2) Paragraph 14(d): "prohibit the imports, or landing and/or transshipment, of any fish from vessels included in the IUU vessel list" [1] (3) Not available [0] (4) Not available [0]
Decision-making	Document	1	Agreement for the Establishment of the General Fisheries Commission for the Mediterranean (fourth amendment 2014)
	Voting	1	Article 13(1): "The recommendations referred to in Article 8(b), shall be adopted by a two-thirds majority of the Contracting Parties of the Commission present and voting. [...]"
	Objection	0	Article 13(3): "Any Contracting Party of the Commission may, within one hundred and twenty days from the date of notification of a recommendation, object to it and, in that event, shall not be under obligation to give effect to that recommendation. [...]"
	Justification of the objection	1	Article 13(3): "[...] The objection should include a written explanation of reasons for objecting, and where appropriate, proposals for alternative measures. [...]"
	Framework of the objection	0	Not specified
	Review panel	0	Not specified

Co-operation	Co-operation	1	GFCM/33/2009/8, par 15 “[...]The GFCM Executive Secretary shall transmit the IUU vessel list to other regional fishery bodies as appropriate for the purpose of enhanced cooperation between the GFCM and these organizations in order to prevent, deter and eliminate IUU fishing.”
	Cross-listing	1.5	(1) GFCM/33/2009/8, par 16: “Upon receipt of an IUU vessel list adopted by another regional fisheries management organization (RFMO) and any information regarding such list, the GFCM Executive Secretary shall circulate this information to the contracting parties and ensure it appears on the GFCM website. Vessels that have been added or deleted from such lists shall be incorporated into or deleted from the GFCM IUU vessel list as appropriate, <u>unless any CPC objects</u> [...]” [0.5] (2) IUU vessel list includes entries from other RFMOs [1]
Compliance review	Compliance review body and related documents	1	Compliance Committee gathers annually since 2007 (http://www.fao.org/gfcm/meetings/en/); latest annual report available: Report of the eleventh session of the Compliance Committee Rome, Italy, 29–30 June 2017
	Summary (implementation of CMMs)	1	Status of implementation of GFCM decisions in the annual compliance report
	Summary (data collection)	1	Data transmission table in the annual compliance report
	Sanctions	0	(1) Not available (2) Not available

IATTC

MSC minimum standards	Registry of authorised vessels	3	(1) Resolution C-14-01 (Amended) on a Regional Vessel Register (2) Paragraph 2(p) (from 2016) (3) Registry is available to the public (https://www.iattc.org/VesselRegister/VesselList.aspx?List=RegVessels&Lang=ENG)
	Catch documentation scheme	0	There is no catch documentation scheme adopted and implemented in IATTC; the IATTC Bigeye Statistical Documentation Program (Resolution C-03-01) is the only related measure (ISSF, 2016 _[112])
	Vessel monitoring System	1	(1) Resolution C-14-02 (Amended) on the Establishment of a Vessel Monitoring System (VMS) (since 2016 [1] (2) Res C-14-02, par 2(b): “The information in paragraph 2.a) above shall be collected at least every four hours for longliners and two hours for other vessels by the land-based Fisheries Monitoring Centre (FMC) of the flag CPC.” [0]
	Inspections at sea	0	Proposal IATTC-90 H-1 Rev.1 on Resolution on Boarding and Inspection Procedures (2016) – measure in progress
	Observer programme	0.5	Resolution C-11-08 on Scientific Observers for Longline Vessels – for scientific purpose only [0.5]
	Transshipment monitoring programme	1	Resolution C-12-07 Amendment to Resolution C-11-09 on Establishing a Program for Transshipment by Large-scale Fishing Vessels
	Inspections in port	0	Not in place (Fabra et al., 2011 _[138]); no new measures on port inspections found to this date
	Designation of landing ports	0	(1) IATTC has not include any obligation for port States to designate ports for entry of vessels (Fabra et al., 2011 _[138]); no new measures on designation of landing ports found (2) List not available

IUU vessel listing	Document	1	Resolution C-15-01: Amendment to Resolution C-05-07 on Establishing a List of Vessels Presumed to Have Carried Out Illegal, Unreported and Unregulated Fishing Activities in the Eastern Pacific Ocean
	Link	-	https://www.iattc.org/VesselRegister/IUU.aspx?Lang=en
	Coverage	1	Paragraph 1: "At each Annual Meeting, the Commission shall identify those vessels that have participated in fishing activities for species covered by the IATTC Convention in the Convention Area in a manner that undermines the effectiveness of the Convention and the IATTC Conservation measures in force [...]"
	Evidence	2	(1) Paragraph 3: "[...] vessels fishing for species covered by the IATTC Convention within the IATTC Convention Area are presumed to have carried out IUU fishing activities when an IATTC Member or cooperating non-Member (collectively "CPCs") presents suitably document information [...]" (2) Paragraph 6: "On the basis of the information received pursuant to paragraph 4, <u>and any other suitably documented information at his disposal</u> , the Director shall draw up a draft IATTC IUU Vessel List [...]"
	BO	1	Paragraph 7(iii): "Name and address of owner of vessel and previous owners, including beneficial owners, if any, and owner's place of registration;"
	Listing justification	2	(1) Annex A; B. Details of Alleged IUU Activity (2) Description of IUU activity available in the IUU vessel list
	Follow-up	2	(1) Paragraph 15: "Once the IATTC IUU Vessel List is adopted by the Commission, the Commission shall ask non-Members with vessels on the IATTC IUU Vessel List to take all the necessary measures to eliminate these IUU fishing activities, including, if necessary, the withdrawal of the registration or the fishing licenses of these vessels, and to inform the Commission of the measures taken in this respect. The Director shall ask each CPC and non-CPC with vessels on the Final IUU List to notify the owners of the vessels of their inclusion in the list and of the consequences of the vessels being included in the IATTC IUU list." [1] (2) Paragraph 16(f): "prohibit commercial transactions ¹ , imports, landings and/or transshipment of species covered by the IATTC Convention from vessels on the IATTC IUU Vessel List;" [1] (3) Not available [0] (4) Not available [0]
Decision-making	Document	1	Inter-American Tropical Tuna Commission Convention for the Strengthening of the Inter-American Tropical Tuna Commission Established by the 1949 Convention between the United States of America and the Republic of Costa Rica ("Antigua Convention")
	Voting	0	Article IX(1): "Unless provided otherwise, all decisions made by the Commission at meetings convened pursuant to Article VIII of this Convention shall be by consensus of members of the Commission present at the meeting in question." "The consensus model of governance has limitations that impact the Commission's decision-making ability." (Moss Adams LPP, 2016 _[121])
	Objection	0	NA
	Justification of the objection	0	NA
	Framework of the objection	0	NA
	Review panel	0	NA

Co-operation	Co-operation	1	Res C-15-01, par 17: "Furthermore, the Director shall transmit the IATTC IUU Vessel List as soon as possible to other regional fisheries management organizations (RFMOs) for the purposes of enhancing co-operation between the IATTC and these organizations aimed at preventing, deterring and eliminating IUU fishing."
	Cross-listing	0.5	(1) Res C-15-01, par 18: "Upon receipt of the final IUU vessel list established by another RFMO managing tuna or tuna-like species and supporting information considered by that RFMO, and any other information regarding the listing determination, the Director shall circulate this information to the CPCs." (no provisions for cross-listing) [0] (2) Other RFMOs linked to the page (https://www.iattc.org/Otras-INN-listas-Other-IUU-list.htm) [0.5]
Compliance review	Compliance review body and related documents	1	Working Group on Compliance gathers annually since 2000 (https://www.iattc.org/Minutes/IATTC-AIDCP-Minutes-ReportsENG.htm); it publishes only minutes of the meetings; Note: the IATTC has established a Compliance Committee, but it is unclear what action the Commission has directed based on information provided by the Committee (Moss Adams LPP, 2016 _[121]).
	Summary (implementation of CMMs)	0	No compliance report available
	Summary (data collection)	0	No compliance report available
	Sanctions	0	(1) Not available (2) Not available

ICCAT			
MCS minimum standards	Registry of authorised vessels	3	(1) Rec 13-13 Concerning the Establishment of an ICCAT Record of Vessels 20 Meters in Length Overall or Greater Authorised to Operate in the Convention Area (Additional provisions in Rec. 13-14, Rec. 14-04, Rec 14-10, Rec 16-01, Rec 16-03, Rec 16-04, Rec. 16-05, Rec 16-06, Rec 16-07, Rec 16-15) (2) Rec 13-13, Par 5bis (from 2016) (3) Registry is available to the public (https://www.iccat.int/en/vesselsrecord.asp)
	Catch documentation scheme	0.5	Catch Documentation System (Rec 11-20) - The Panel recommends that ICCAT works towards replacing all SDPs with electronic CDPs that are harmonized among tuna RFMOs where appropriate - in particular for bigeye tuna - while taking account of the envisaged FAO Voluntary Guidelines on Catch Documentation Schemes (ICCAT, 2016 ^[110]) [0.5]
	Vessel monitoring System	1	(1) Rec 14-09 Concerning Minimum Standards for the Establishment of a Vessel Monitoring System in the ICCAT Convention Area (2) Rec 14-09, par 1(b): "require its fishing vessels to be equipped with an autonomous system able to automatically transmit a message to the Fisheries Monitoring Center (hereinafter referred to as FMC) of the flag CPC allowing continuous tracking of the position of a fishing vessel by the CPC of that vessel." [0]
	Inspections at sea	1	Rec 14-04, Rec 16-05 "Inspections shall be carried out by inspectors designated by the Contracting Governments." There also a list of designated inspection vessels, but need access.
	Observer programme	1	Multiple documents: Rec 04-10, Rec 10-07, Rec 11-08, Rec 13-14, Rec 14-04, Rec 15-01, Rec 15-05
	Transshipment monitoring programme	1	Rec 16-15 on Transshipment
	Inspections in port	1	Rec 12-07 by ICCAT for an ICCAT Scheme for Minimum Standards for Inspection in Port
	Designation of landing ports	2	(1) Rec 12-07 for an ICCAT Scheme for Minimum Standards for Inspection in Port (2) https://www.iccat.int/en/Ports.asp
IUU vessel listing	Document	1	Recommendation 11-18 by ICCAT Further Amending Recommendation 09-10 Establishing a List of Vessels Presumed to Have Carried Out Illegal, Unreported and Unregulated Fishing Activities in the ICCAT Convention Area
	Link	-	http://www.iccat.int/en/IUU.asp
	Coverage	1	Paragraph 22: "This Recommendation shall apply <i>mutatis mutandis</i> to vessels referred to in paragraph 12 flying the flag of CPCs." Note: The recommendation is somewhat confusing, as paragraph 2 states "CPCs shall transmit every year to the Executive Secretary at least 120 days before the annual meeting, the list of vessels flying the flag of a non-Contracting Party presumed to be carrying out IUU fishing activities in the Convention Area during the current and previous year, accompanied by the supporting evidence concerning the presumption of IUU fishing activity." This follows from the fact, that the original measure adopted in 2002 (Rec 02-23) was exempting contracting parties. This was amended in 2006 (Rec 06-12).
	Evidence	1	(1) Paragraph 2: "CPCs shall transmit every year to the Executive Secretary at least 120 days before the annual meeting, the list of vessels flying the flag of a non-Contracting Party presumed to be carrying out IUU fishing activities in the Convention Area during the current and previous year, accompanied by the supporting evidence concerning the presumption of IUU fishing activity. [...]" [1] (2) Paragraph 3: "On the basis of the information received pursuant to paragraph 2, the ICCAT Executive Secretary shall draw up a Draft IUU List. [...]" [0]
	BO	1	Annex 1, point iii: "Name and address of owner of vessel and previous owners, including beneficial owners, and owner's place of registration"

	Listing justification	2	(1) Annex 1, point ix: "Summary of activities which justify inclusion of the vessel on the List, together with references to all relevant documents informing of and evidencing those activities" (2) Description of IUU activity available in the IUU vessel list
	Follow-up	2	(1) Paragraph 9: "CPCs shall take all necessary measures, under their applicable legislation: [...]" [1] (2) Paragraph 9(7): "To prohibit the imports, or landing and/or transshipment, of tuna and tuna-like species from vessels included in the IUU list;" [1] (3) Not available [0] (4) Not available [0]
Decision-making	Document	1	International Commission for the Conservation of Atlantic Tunas Basic Text, 6th revision, 2017 Resolution 12-11 Regarding the Presentation of Objections in the Context of Promoting Effective Conservation and Management Measures Adopted by ICCAT
	Voting	1	Article III.3: "Except as may otherwise be provided in this Convention, decisions of the Commission shall be taken by a majority of the Contracting Parties, each Contracting Party having one vote. [...]" Rule 9.1: "Each member shall be entitled to one vote."
	Objection	0	Article VIII, paragraph 3(a): "(a) If any Contracting Party in the case of a recommendation made under paragraph 1(b)(i) above, or any Contracting Party member of a Panel concerned in the case of a recommendation made under paragraph 1(b)(ii) or (iii) above, presents to the Commission an objection to such recommendation"
	Justification of the objection	1	Res 12-11, par 2: "Each Contracting Party that presents an objection pursuant to Article VIII of the Convention should provide to the Commission, at the time of presenting its objection, the reasons for its objection [...]"
	Framework of the objection	1	Res 12-11, par 2: "[objection] based on, inter alia, the following grounds: • The recommendation is inconsistent, with UNCLOS, the UN Fish Stocks Agreement, the ICCAT Convention or another ICCAT recommendation still in effect; • The recommendation unjustifiably discriminates in fact or law against the objecting Contracting Party; • The recommendation is inconsistent with a domestic measure that pursues compatible conservation and management objectives and that is at least as effective as the recommendation." Res 12-11, par 3: "Each Contracting Party that presents an objection pursuant to Article VIII of the Convention should, at the same time, to the extent applicable, specify to the Commission the alternative management and conservation measures consistent with the objectives of the Convention it proposes to adopt and implement."
	Review panel	0	Not specified
Co-operation	Co-operation	1	Rec 11-18, par 10: "[...] Furthermore, the ICCAT Executive Secretary will transmit the IUU Vessels List to other regional fisheries organizations for the purposes of enhanced co-operation between ICCAT and these organizations in order to prevent, deter and eliminate illegal, unreported and unregulated fishing."
	Cross-listing	1.5	(1) Rec 11-18, par 11: "[...] Vessels that have been included on or deleted from the respective lists shall be included on or deleted from the ICCAT IUU Vessel List as appropriate, <u>unless any Contracting Party objects</u> to the inclusion on the final ICCAT IUU list [...]" [0.5] More details in separate Res 14-11 Establishing Guidelines for the Cross-listing of Vessels Contained on IUU Vessel Lists of Other Tuna RFMOs on the ICCAT IUU Vessel List in Accordance with Recommendation 11-18 (2) IUU vessel list includes entries from other RFMOs; other RFMOs lists linked to the page [1]

Compliance review	Compliance review body and related documents	1	Conservation and Management Measures Compliance Committee holds annual meetings (https://www.iccat.int/en/Meetings.asp); Note: "In its annual process the COC is now examining each CPC to assess how its actions conform to ICCAT measures. In that respect, the COC is following-up on the issue of "infringements" that the 2008 review identifies. The COC, through its Chair, addresses a letter of compliance where warranted to those CPCs in breach of ICCAT measures." (ICCAT, 2016 ^[110])
	Summary (implementation of CMMs)	1	Reports from Compliance Committee meetings (e.g. Doc. No. COC-303 / 2017) summarize occurrences of non-compliance, e.g. overharvest.
	Summary (data collection)	1	Reports from Compliance Committee meetings include partial data on timeliness of required data submissions
	Sanctions	2	(1) Provisions in Rec 11-15 on penalties applicable in case of non-fulfilment of reporting obligations ("CPCs that do not report Task I data, including zero catches, for one or more species for a given year, in accordance with SCRS data reporting requirements, shall be prohibited from retaining such species as of the year following the lack or incomplete reporting until such data have been received by the ICCAT Secretariat."). Moreover, under Rec 06-13, ICCAT has the ability to impose trade sanctions on CPCs which do not comply with its measures. (2) History of prohibitions applied under Rec 11-15 available in Annex 7 of Doc. No. COC-303 / 2017 . No trade sanctions have been imposed to date (communication with the ICCAT Secretariat).
IOTC			
MCS minimum standards	Registry of authorised vessels	3	(1) Resolution 15/04 Concerning the IOTC Record of Vessels Authorised to Operate in the IOTC Area of Competence (2) Resolution 15/04, paragraph 2(b) – since 2016 (3) Registry is available to the public (http://www.iotc.org/vessels/current)
	Catch documentation scheme	0.5	IOTC does not have a CDS, but there is a statistical document programme for bigeye tuna (Resolution 01/06 on the Bigeye Tuna Statistical Document Programme) which has some controlling elements of a CDS [0.5] Other relevant documents include: Resolution 15/01 On the Recording of Catch and Effort by Fishing Vessels in the IOTC Area of Competence and Resolution 15/02 Mandatory Statistical Requirements for IOTC Members
	Vessel monitoring System	1	(1) Resolution 15/03 On the Vessel Monitoring System (VMS) Programme [1] (2) Res 15/03, par 6: "Each CPC shall take the necessary measures to ensure that their land-based national Fisheries Monitoring Center (FMC) receives through the VMS" [0]
	Inspections at sea	0	Not available
	Observer programme	0.5	Resolution 11/04 On a Regional Observer Scheme - <u>only a scientific mandate</u> ; additionally, there is an observer programme for transshipment (Resolution 17/06 On establishing a Programme for Transshipment by Large-scale Fishing Vessels) [0.5]
	Transshipment monitoring programme	1	Resolution 17/06 On Establishing a Programme for Transshipment by Large-scale Fishing Vessels
	Inspections in port	1	Resolution 10/11 on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated fishing
	Designation of landing ports	2	(1) Resolution 10/11 on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated fishing (2) http://www.iotc.org/compliance/port-state-measures

IUU vessel listing	Document	1	Resolution 17/03 on Establishing a List of Vessels Presumed to Have Carried Out Illegal, Unreported and Unregulated Fishing in the IOTC Area Of Competence
	Link	-	http://www.iotc.org/vessels#iuu
	Coverage	1	Paragraph 2: "This Resolution applies to vessels, together with their Owners, Operators and Masters that undertake fishing and fishing related activities, for species covered by the IOTC Agreement, or by IOTC Conservation and Management Measures, within the IOTC area of competence (IOTC Area)."
	Evidence	2	(1) Paragraph 4: "For the purposes of this Resolution a vessel is presumed to have engaged in IUU fishing activities when a Contracting Party or Cooperating Non-Contracting Party (hereinafter referred to as "CPCs") has provided information [...]" (2) Paragraph 7: "When the IOTC Executive Secretary receives <u>information and intelligence from third parties</u> indicating alleged IUU fishing activities, the IOTC Executive Secretary shall transmit the information to the flag State of the vessel and each CPC. [...]"
	BO	0.5	<u>Not included</u> in Annex II: Information to be included in all IOTC IUU vessels lists; only included "Owner (previous Owner/s, if any)" [0.5]
	Listing justification	1.5	(1) Annex 1, point ix: "Summary of activities which justify inclusion of the vessel on the List, together with references to all relevant documents informing of and evidencing those activities" [1] (2) IUU activities often listed as "Contravention of IOTC Resolution 11/03", without providing further details on infraction [0.5]
	Follow-up	2	(1) Paragraph 21: "A CPC shall take all necessary measures, in accordance with its legislation [...]" [1] (2) Paragraph 21(f): "to prohibit the import, landing or transshipment, of tuna and tuna-like species from vessels included in the IUU Vessel List" [1] (3) Not available [0] (4) Not available [0]
Decision-making	Document	1	Agreement for the Establishment of the Indian Ocean Tuna Commission (1996)
	Voting	1	Article VI(2): "Each Member of the Commission shall have one vote. Unless otherwise provided in this Agreement, decisions and recommendations of the Commission shall be taken by a majority of the votes cast. A majority of the Members of the Commission shall constitute a quorum.
	Objection	1	Article IX(5): "Any Member of the Commission may, within 120 days from the date specified or within such other period as may be specified by the Commission under paragraph 4, object to a conservation and management measure adopted under paragraph 1. [...]"
	Justification of the objection	0	Not specified
	Framework of the objection	0	Not specified
	Review panel	0	Not specified

Co-operation	Co-operation	1	Paragraph 29: "[...] Furthermore, the IOTC Executive Secretary shall transmit the IUU Vessel List as soon as possible to the FAO and to other regional fisheries management organisations for the purposes of enhanced co-operation between IOTC and these organisations in order to prevent, deter and eliminate IUU fishing"
	Cross-listing	0.5	(1) Cross-listing not mentioned in the current resolution. However, provision for cross-listing has been included in the recently adopted CMM (Resolution 18/03), which, if there is no objection, <u>will come into force on 4 October 2018</u> . [0] (2) IUU lists of other RFMOs linked to the page: http://www.iotc.org/vessels#iuu [0.5]
Compliance review	Compliance review body and related documents	1	Compliance Committee gathers annually since 2003 (http://www.iotc.org/meetings/search?s=&field_meeting_tid_i18n=110); latest report; latest annual report available: Report of the 15th Session of the Compliance Committee. Bangkok, Thailand 13–15 and 17 May 2018 Resolution 07/01 to Promote Compliance by Nationals of Contracting Parties and Cooperating Non-contracting Parties with IOTC Conservation and Management Measures Resolution 15/02 Mandatory Statistical Reporting Requirements for IOTC Contracting Parties and Cooperating Non-contracting Parties (CPC's)
	Summary (implementation of CMMs)	1	IOTC compliance reports include review of implementation of CMMs by CP/CNCP
	Summary (data collection)	1	IOTC compliance reports include assessment of compliance with data submission requirements by CP/CNCP; list of available documents of the Compliance Committee includes: Implementation of reporting obligations of nominal catch data (IOTC Resolution 16/06)
	Sanctions	1	(1) Resolution 16/06 on measures applicable in case of non-fulfilment of reporting obligations in the IOTC: "[...] the Commission [...] may consider to prohibit CPCs that did not report nominal catch data (exclusively), including zero catches, for one or more species for a given year, in accordance with the Resolution 15/02, paragraph 2 (or any subsequent revision), from retaining such species as of the year following the lack or incomplete reporting until such data have been received by the IOTC Secretariat." [1] (2) No review of applied sanctions to date available. [0]
NAFO			
MCS minimum standards	Registry of authorised vessels	2	(1) Annex II.C Vessel Notification and Authorization of the Northwest Atlantic Fisheries Organization Conservation and Enforcement Measures 2018 describes authorisation regime [1] (2) Annex II.C Vessel Notification and Authorization; 1) Format for register of vessel; NAFO/FC.Doc.14/09 (since 2016) [1] (3) No list of authorised vessels publicly available [0]
	Catch documentation scheme	1	Northwest Atlantic Fisheries Organization Conservation and Enforcement Measures 2018, Article 28
	Vessel monitoring System	1	(1) Northwest Atlantic Fisheries Organization Conservation and Enforcement Measures 2018, Article 29 [1] (2) Par 1: "Every fishing vessel operating in the Regulatory Area shall be equipped with a satellite monitoring device capable of continuous automatic transmission of position to <u>its</u> land-based Fisheries Monitoring Centre (FMC)" [0]
	Inspections at sea	1	Northwest Atlantic Fisheries Organization Conservation and Enforcement Measures 2018, CHAPTER VI At-Sea Inspection and Surveillance Scheme)
	Observer programme	1	Northwest Atlantic Fisheries Organization Conservation and Enforcement Measures 2018, Article 30 (currently under review)
	Transshipment monitoring programme	1	Northwest Atlantic Fisheries Organization Conservation and Enforcement Measures 2018, Annex II.C Vessel Notification and Authorization; 3) Format for authorization to conduct fishing activities

	Inspections in port	1	Northwest Atlantic Fisheries Organization Conservation and Enforcement Measures 2018, Article 43(10-17); Article XII – Port State Duties of 2017 Convention on Cooperation in the Northwest Atlantic Fisheries
	Designation of landing ports	2	(1) Northwest Atlantic Fisheries Organization Conservation and Enforcement Measures 2018, Article 43 (2) https://www.nafo.int/Fisheries/PSC
IUU vessel listing	Document	1	Northwest Atlantic Fisheries Organization Conservation and Enforcement Measures (NAFO CEM) 2018
	Link	-	https://www.nafo.int/Fisheries/IUU
	Coverage	0	Article 48: “The purpose of this Chapter is to promote compliance of non-Contracting Party vessels with recommendations established by NAFO and to prevent, deter and eliminate IUU fishing by non-Contracting Party vessels [...]”
	Evidence	0.5	(1) Article 50(1): “Each Contracting Party with an inspection and/or surveillance presence in the Regulatory Area authorized under the Joint Inspection and Surveillance Scheme [...]” [0.5] (2) No provisions in the document [0]
	BO	0	Not included in the document
	Listing justification	0	(1) Not mentioned in the document (2) No description of IUU activity available in the IUU vessel list
	Follow-up	3	(1) Article 54: “Each Contracting Parties shall take all measures necessary to deter, prevent, and eliminate IUU fishing, in relation to any vessel listed in the IUU Vessel List [...]” [1] (2) Art 54(h): “prohibiting landing and importation of fish from onboard or traceable to such vessel” [1] (3) The annual review includes ‘Disposition/Follow-up’ column for each identified infringement of vessels in NAFO area of competence (no vessels actually listed by NAFO to date) [1] (4) Not available [0]
Decision-making	Document	1	Convention on Cooperation in the Northwest Atlantic Fisheries (2017; ISBN 978-0-9959516-0-0) (NAFO Rules of Procedure & Financial Regulations 2017; ISBN 0-9698167-1-5)
	Voting	1	Article XIII: “1. As a general rule, decision-making within the Commission shall be by consensus. For the purposes of this Article, “consensus” means the absence of any formal objection made at the time the decision was taken. 2. If the Chairperson considers that all efforts to reach consensus have been exhausted, decisions of the Commission shall, except where otherwise provided, be taken by two-thirds majority of the votes of all Contracting Parties present and casting affirmative or negative votes, provided that no vote shall be taken unless there is a quorum of at least two-thirds of the Contracting Parties. Each Contracting Party shall have one vote.”
	Objection	0	Article XIV (2): “Where any Contracting Party presents an objection to a measure [...]”
	Justification of the objection	1	Article XIV(5): “Any Contracting Party that has presented an objection to a measure [...] shall at the same time provide an explanation for its reasons for taking this action.”
	Framework of the objection	1	Article XIV(5): “[...] This explanation shall specify whether it considers that the measure is inconsistent with the provisions of this Convention, or that the measure unjustifiably discriminates in form or fact against it. The explanation shall also include a declaration of the actions it intends to take following the objection or notification, including a description of the alternative measures it intends to take or has taken for conservation and management of the relevant fishery resources consistent with the objective of this Convention.”

	Review panel	0.5	Article XIV(9): “[...] any Contracting Party <u>may request</u> a meeting of the Commission to review the measure adopted by the Commission and the explanation made pursuant to paragraph 5.” [0.5]
Co-operation	Co-operation	1	NAFO CEM 2018, article 53(4)c: “transmits the IUU Vessel List and any relevant information, including the reasons for listing or de-listing each vessel, to other RFMOs, including, in particular, the NEAFC, the South East Atlantic Fisheries Organisation (SEAFO), and the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR);”
	Cross-listing	1	(1) NAGO CEM 2018, “[...] amends the IUU Vessel List consistent with amendments to the NEAFC IUU List, within 30 days of such transmittal; <u>unless within the 30 days the Executive Secretary receives from a Contracting Party a written submission [...]</u> ” - limited[0.5] (2) https://www.nafo.int/Fisheries/IUU , vessels cross-listed from NEAFC [0.5]
Compliance review	Compliance review body and related documents	1	NAFO Rules of Procedure & Financial Regulations 2017, Rule 5: “There shall be a Standing Committee on International Control (STACTIC) consisting of one representative from each Contracting Party, who may be assisted by experts and advisers, and which shall: [...] b. review and evaluate the compliance by Contracting Parties with the Conservation and Enforcement Measures established by the Commission” ; STACTIC is gathers annually since 2007
	Summary (implementation of CMMs)	1	Annual Compliance Review – identifies detected infringements by CP/CNCP
	Summary (data collection)	0	Annual Compliance Review does not identify non-compliance with data submission requirements; NAFO performance review (NAFO, 2018 ₍₁₃₉₎) recommends that NAFO “agrees on a means to respond to instances of non-compliance by a Contracting Party with its reporting requirements, including logbook data.”
	Sanctions	1	(1) NAFO CEM 2018, Article 5(7): “Catch in excess of a quota allocated to a Contracting Party may result in a deduction of allocations of that stock during a future quota period, if so decided by the Commission. [...]” (2) Not available
NEAFC			
MCS minimum standards	Registry of authorised vessels	2	(1) NEAFC Scheme of Control and Enforcement. Article 4 - Authorisation to Fish: Responsibility of CP [1] (2) NEAFC Scheme of Control and Enforcement, Annex II b) Authorisation for Regulated Resources 1) Authorisation to Fish for Regulated Resources; Resolution A.1078(28) – since 2017 [1] (3) No record of authorised vessels [0]
	Catch documentation scheme	1	NEAFC Scheme of Control and Enforcement, Article 9 - Recording of Catch and Fishing Effort
	Vessel monitoring System	1	(1) NEAFC Scheme of Control and Enforcement, Article 11 - Vessel Monitoring System [1] (2) Par 1(a): “transmit messages to a land-based fisheries monitoring centre (FMC) allowing a continuous tracking of the position of a fishing vessel by the Contracting Party of that fishing vessel” [0]
	Inspections at sea	1	NEAFC Scheme of Control and Enforcement, Chapter IV - Inspections at Sea
	Observer programme	0	Not available in NEAFC Scheme of Control and Enforcement
	Transshipment monitoring programme	1	NEAFC Scheme of Control and Enforcement, Article 13 - Communication of Transshipments and of Port of Landing
	Inspections in port	1	NEAFC Scheme of Control and Enforcement, Chapter V - Port State Control of Foreign Fishing Vessels; Article 25 – Inspections

	Designation of landing ports	2	(1) NEAFC Scheme of Control and Enforcement, Article 21: "Contracting Parties shall designate ports where landings or transshipment operations and provisions of port services are permitted. Each Contracting Party shall send to the Secretary the list of such ports. [...]" (2) https://psc.neafc.org/designated-contacts
IUU vessel listing	Document	1	NEAFC Scheme of Control and Enforcement 2018
	Link	-	http://www.neafc.org/mcs/iuu
	Coverage	0	Article 44(1): "Unless its flag State has been accorded the status of co-operating non-Contracting Party provided for under Article 34, a vessel which has been sighted or by other means identified according to information received pursuant to Articles 37, 38 and 40 as engaging in fishing activities in the Convention Area is presumed to be undermining the effectiveness of Recommendations established under the Convention. The same shall apply in the case of information required under Article 41 not being provided by its flag State. The Secretary shall place such a vessel on a provisional list of IUU vessels ('A' list) and promptly inform its flag State accordingly."
	Evidence	0.5	(1) Article 37 (1): "Contracting Parties shall transmit to the Secretary without delay any information regarding non-Contracting Party vessels sighted or by other means identified as engaging in fishing activities in the Convention Area. [...]" [0.5] (2) No provisions in the document [0]
	BO	0	Not included in the document
	Listing justification	0	(1) Provisions for publishing a description of the IUU activity not available in the document (2) Description of IUU activity not available in the IUU vessel list (Although vessel description includes 'IUU Events Log', but it is not filled)
	Follow-up	3	(1) Article 45(1): "Contracting Parties shall take all the necessary measures, under their applicable legislation, in order that vessels appearing on the IUU lists" [1] (2) Article 45(2)e: "prohibit the imports of fish coming from such vessels;" [1] (3) Not available [0] (4) Article 46(3): "The Commission shall decide appropriate measures to be taken in respect of non-Contracting Parties identified under paragraph 1 [that is non-Contracting Parties whose vessels appear on the IUU lists]. In this respect, Contracting parties may co-operate to adopt appropriate multilaterally agreed non-discriminatory trade related measures, consistent with the World Trade Organisation (WTO), that may be necessary to prevent, deter, and eliminate the IUU fishing activities identified by the Commission." [1]
Decision-making	Document	1	Convention on Future Multilateral Cooperation in North-East Atlantic Fisheries (1980) (includes amendments to the Convention that were adopted by the Commission in 2006 and which entered into force in 2013, some amendments adopted in 2004 not yet in force)
	Voting	1	Article 5(1): "The Commission shall, as appropriate, make recommendations concerning fisheries conducted beyond the areas under jurisdiction of Contracting Parties. Such recommendations shall be adopted by a qualified majority"
	Objection	0	Article 12(2)a: "Any Contracting Party may, within 50 days of the date of notification of a recommendation adopted under paragraph 1 of Article 5, under paragraph 1 of Article 8 or under paragraph 1 of Article 9, object thereto. [...]"
	Justification of the objection	0	Not specified
	Framework of the objection	0	Not specified
	Review panel	0	Not specified

Co-operation	Co-operation	1	NEAFC Scheme of Control and Enforcement 2017, Article 44(5): "The Secretariat shall transmit the IUU B-List and any amendments thereto as well as any relevant information regarding the list, to the Secretariats of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), the Northwest Atlantic Fisheries Organization (NAFO) and the South East Atlantic Fisheries Organisation (SEAFO). The Secretary shall also circulate the IUU B-List to other Regional Fisheries Management Organisations."
	Cross-listing	1	(1) NEAFC Scheme of Control and Enforcement 2017, Article 44(6): "After having been notified by CCAMLR, NAFO and SEAFO of vessels that have been confirmed as having been engaged in IUU fisheries, the Secretary shall without delay place the NCP vessels on the NEAFC IUU B-List. Vessels placed on the IUU B-List in accordance with this paragraph may only be removed if the RFMO which originally identified the vessels as having engaged in IUU fishing activity has notified the NEAFC Secretary of their removal from the list." – indicates the process is limited [0.5] (2) IUU vessel list includes entries from SEAFO - limited coverage [0.5]
Compliance review	Compliance review body and related documents	1	Permanent Committee on Monitoring and Compliance (PECMAC; provisions in Article 3(8) of the Convention) gathers annually since 2015 (https://www.neafc.org/past_meetings); NEAFC has recently agreed a more transparent process for publication of reports arising in its key committees throughout the year, this will mean from 2019 reports such as the NEAFC compliance report (redacted for any individual vessel information etc) will become available on via the website.
	Summary (implementation of CMMs)	0	No details on implementation of CMMs by CP/CNCP available in the PECMAC annual report
	Summary (data collection)	0	No data transmission table available in the PECMAC annual report
	Sanctions	0	(1) Not available (2) Not available
NPFC			
MCS minimum standards	Registry of authorised vessels	3	(1) CMM 2018-01 On Information Requirements for Vessel Registration (2) CMM 2016-01, Annex Vessel Information Requirements (3) Registry is available to the public (https://www.npfc.int/compliance/vessels)
	Catch documentation scheme	0	Not available (to be addressed based on the communication with the NPFC Secretariat)
	Vessel monitoring System	0	Part of a NPFC Technical and Compliance Committee Work Plan; moving into Phase 2 for the development of the regional VMS in 2019
	Inspections at sea	0	CMM 2017-09 Conservation and Management Measure for High Seas Boarding and Inspection Procedures for the North Pacific Fisheries Commission (NPFC); HSBI implementation plan adopted in 2018 for full implementation by early 2019
	Observer programme	1	CMM 2017-05 for Bottom Fisheries and Protection of Vulnerable Marine Ecosystems in the Northwestern Pacific Ocean, par 8: "All vessels authorized to bottom fishing in the western part of the Convention Area shall carry an observer on board" – the program is for scientific purpose, but the compliance components may be considered by member countries (adopted in July 2018)
	Transshipment monitoring programme	1	CMM 2016-03 On the Interim Transshipment Procedures for NPFC
	Inspections in port	0	Not available

	Designation of landing ports	0	(1) Not available (2) Not available
IUU vessel listing	Document	1	CMM 2017-02 Conservation and Management Measure to Establish a List of Vessels Presumed to Have Carried Out Illegal, Unreported and Unregulated Fishing Activities in the Convention Area of the North Pacific Fisheries Commission
	Link	-	https://www.npfc.int/npfc-iuu-vessel-list
	Coverage	1	Article 1: "At each meeting, the Commission will identify those vessels which have engaged in fishing activities for species covered by the Convention within the Convention Area [...]"
	Evidence	2	(1) Article 2: "This identification shall be suitably documented, inter alia, on reports from Members/CNCPs [...]" (2) Article 8: "[...] and any other suitably documented information at his disposal [...]"
	BO	1	Article 21(c): "owner and previous owners, including beneficial owners, if any"
	Listing justification	2	(1) Article 21(i): "summary of activities which justify inclusion of the vessel on the list, together with references to all relevant documents informing of and evidencing those activities" (2) 'Summary of activities' column in the IUU vessel list
	Follow-up	2	(1) Article 24: "Members/CNCPs shall take all necessary non-discriminatory measures under their applicable legislation, international law and each Members/CNCPs' international obligations [...]" [1] (2) Article 24(f): "prohibit commercial transactions, imports, landings and/or transshipment of species covered by the Convention from vessels on the IUU Vessel List" [1] (3) Not available [0] (4) Not available [0]
Decision-making	Document	1	Convention on the Conservation and Management of High Seas Fisheries Resources in the North Pacific Ocean (2012)
	Voting	1	Article 8(1-2): "As a general rule, the Commission shall make its decisions by consensus. Except where this Convention expressly provides that a decision shall be taken by consensus, if the Chairperson considers that all efforts to reach consensus have been exhausted: (a) decisions of the Commission on questions of procedure shall be taken by a majority of members of the Commission casting affirmative or negative votes; and (b) decisions on questions of substance shall be taken by a three-quarters majority of members of the Commission casting affirmative or negative votes.
	Objection	0	Article 9(1)c: "A member of the Commission may object to a decision [...]"
	Justification of the objection	1	Article 9(1)e: "Any member of the Commission that makes a notification [...] at the same time, provide a written explanation of the grounds for its position. [...]"
	Framework of the objection	1	Article 9(1)c: "A member of the Commission may object to a decision solely on the grounds that the decision is inconsistent with the provisions of this Convention, the 1982 Convention or the 1995 Agreement, or that the decision unjustifiably discriminates in form or in fact against the objecting member;" Article 9(1)e: "any member of the Commission that makes a notification [...] must also adopt and implement alternative measures that are equivalent in effect to the decision to which it has objected and have the same date of application"

	Review panel	0.5	Article 9(1)g: “[...] a Commission meeting shall take place at the request of any other member to review the decision to which the objection has been presented. The Commission shall, at its expense, invite to that meeting two or more experts who are nationals of non-members of the Commission and who have sufficient knowledge of international law related to fisheries and of the operation of regional fisheries management organizations to provide advice to the Commission on the matter in question. [...]”
Co-operation	Co-operation	1	CMM 2017-02, article 26: “[...] the Executive Secretary shall transmit the NPFC IUU Vessel List to the FAO and to other regional fisheries organizations for the purposes of enhancing cooperation between the NPFC and these organizations aimed at preventing, deterring and eliminating IUU fishing.”
	Cross-listing	0.5	(1) CMM 2017-02, article 27: “Upon receipt of the final IUU vessel list established by another Regional Fisheries Management Organization (RFMO) and any other information regarding the list including its modification, the Executive Secretary shall circulate it to Members/CNCPs and shall place it on the NPFC website.” (no cross-listing indicating the same treatment, just for information) [0] (2) IUU vessel list from other RFMOs linked to the page [0.5]
Compliance review	Compliance review body and related documents	0	Developing a Compliance Monitoring System (CMS) is listed as a priority for the NPFC Technical and Compliance Committee for the period 2017-2020; report on non-compliance to be delivered in the near future (1st issue)
	Summary (implementation of CMMs)	0	Not available
	Summary (data collection)	0	Not available
	Sanctions	0	(1) Not available (2) Not available
SEAFO			
MCS minimum standards	Registry of authorised vessels	3	(1) SEAFO System of Observation, Inspection, Compliance and Enforcement (2017), Article 4 (2) SEAFO System of Observation, Inspection, Compliance and Enforcement (2017), Article 4(d) (3) Registry is available to the public (http://www.seafo.org/Management/Authorized-Vessel-List)
	Catch documentation scheme	1	SEAFO System of Observation, Inspection, Compliance and Enforcement (2017), Article 10
	Vessel monitoring System	1	(1) SEAFO System of Observation, Inspection, Compliance and Enforcement (2017), Article 13 [1] (2) par1(a): “[...] automatically transmit VMS data to the land based Fisheries Monitoring Centre (FMC) of its flag State [...]” [0]
	Inspections at sea	1	SEAFO System of Observation, Inspection, Compliance and Enforcement (2017), Article 17
	Observer programme	1	SEAFO System of Observation, Inspection, Compliance and Enforcement (2017), Article 18
	Transshipment monitoring programme	1	SEAFO System of Observation, Inspection, Compliance and Enforcement (2017), Article 14
	Inspections in port	1	SEAFO System of Observation, Inspection, Compliance and Enforcement (2017), Article 24

	Designation of landing ports	2	(1) SEAFO System of Observation, Inspection, Compliance and Enforcement (2017), Article 20 (2) http://www.seafo.org/Management/Authorized-Ports
IUU vessel listing	Document	1	SEAFO System 2017: Article 27 – Listing of IUU Vessels
	Link	-	http://www.seafo.org/Management/IUU
	Coverage	1	Par 2: “At each Annual Meeting, the Commission shall identify those vessels which have engaged in fishing and fishing related activities for fishery resources covered by the Convention in a manner which is inconsistent with SEAFO conservation and management measures, and shall establish a list of such vessels (the IUU Vessel List), in accordance with the procedures and criteria set out below.”
	Evidence	2	(1) Par 3: “This identification shall be documented, inter alia, on reports from a Contracting Party relating to SEAFO conservation and management measures [...]” (2) Par 3: “This identification shall be documented, inter alia, on [...] trade information obtained on the basis of relevant trade statistics such as Food and Agriculture Organization of the United Nations (FAO) data, statistical documents and other national or international verifiable statistics, as well as <u>any other information</u> obtained from port States and/or gathered from the fishing grounds which is suitably documented.” (that including CNCP)
	BO	1	Par 15(c): “owner and previous owners, including beneficial owners, if any”
Decision-making	Listing justification	2	(1) Par 15(i): “summary of activities which justify inclusion of the vessel on the List, together with references to all relevant documents informing of and evidencing those activities” (2) Description of IUU activity available in the IUU vessel list
	Follow-up	2	(1) Par 16(b): “take all the necessary measures to eliminate these IUU fishing, including, if necessary, the withdrawal of the registration or the fishing licenses of these vessels, and to inform the Commission of the measures taken in this respect” [1]SEAFO System of Observation, Inspection, Compliance and Enforcement (2017); Article 17.4: “[...] In the case where an alleged infringement is detected, all supplementary reports or information provided, and any comments received from the flag State of the vessel, if any, shall be forwarded to all Contracting Parties, by the Executive Secretary, without delay.” [1] (2) Par 17(e): “prohibit commercial transactions, imports, landings and/or transshipment of fisheries resourced covered by the SEAFO Convention caught by vessels on the IUU Vessel List” [1] (3) Not available [0] (4) Not available [0]
	Document	1	Convention on the Conservation and Management of Fishery Resources in the South East Atlantic Ocean (2001)
	Voting	0	Article 17(1): “Decisions of the Commission on matters of substance shall be taken by consensus of the Contracting Parties present. The question of whether a matter is one of substance shall be treated as a matter of substance.” Article 17(2): “Decisions on matters other than those referred to in paragraph 1 shall be taken by a simple majority of the Contracting Parties present and voting.” (Article 17 suggests that on important matters, the decision-making process would default to consensus)
	Objection	0	NA
	Justification of the objection	0	NA

	Framework of the objection	0	NA
	Review panel	0	NA
Co-operation	Co-operation	0.5	SEAFO System 2017, article 27, par 18: "The Executive Secretary shall transmit the IUU Vessel List and any relevant information regarding the list to the secretariats of the Commission for the Conservation of Antarctic Marine Resources (CCAMLR), the Northwest Atlantic Fisheries Organization (NAFO) and the North East Atlantic Fisheries Commission (NEAFC)." - limited to few RFMOs [0.5]
	Cross-listing	1	(1) SEAFO System 2017, article 27, par 19: "Upon receipt of the Final IUU Vessel Lists established by the following RFMOs: CCAMLR, NAFO and NEAFC, any information regarding the lists, the Executive Secretary shall circulate this information to the Contracting Parties. Vessels that have been added to or deleted from the respective lists that are flagged to non-contracting parties shall be incorporated into or deleted from the SEAFO IUU Vessel List as appropriate, <u>unless any Contracting Party objects</u> within 30 days of the date of transmittal by the Executive Secretary [...]" - limited, conditional [0.5] (2) SEAFO cross-lists IUU vessels lists from CCAMLR and NEAFC. SPRFMO IUU vessel list is linked to page. SEAFO 2016 Performance Review also states: "SEAFO should consider amending the article 28 of the System in order to recognise IUU vessel lists of all relevant RFMOs, <u>notably SIOFA.</u> " This has not been added to SEAFO System 2017 - process is limited [0.5]
Compliance review	Compliance review body and related documents	1	Compliance Committee gathers annually since 2008 (http://www.seafo.org/SEAFO-Bodies/Compliance-Committee/Compliance-Committee-Documents); latest annual report available: Report of the 10th Annual Meeting of the Compliance Committee (CC) – 2017
	Summary (implementation of CMMs)	0.5	General information on compliance, e.g. related to TACs: "Total Allowable Catches set by the Commission have been respected" [0.5]
	Summary (data collection)	0	No details on compliance with data submission requirements: SEAFO 2016 Performance Review states: "the Compliance Committee highlighted that inspection reports concerning vessels landing catches from the SEAFO Convention Area should always be made available, in due time, to the Committee in accordance to the System's obligations."
	Sanctions	0	(1) SEAFO 2016 Performance Review: "Procedures for follow-up on infringements detected under a system of observation, inspection, compliance and enforcement that includes standards of investigation, reporting procedures, notification of proceedings, incentives and/or sanctions and other enforcement actions, pursuant to Article 16 (3)(d) of the Convention have yet to be developed." (2) Not available
SIOFA			
MCS minimum standards	Registry of authorised vessels	3	(1) CMM2017/07 Conservation and Management Measure for Vessel Authorisation and Notification to Fish (Vessel Authorisation) (2) CMM2017/07, Article 2(d) (3) Registry is available to the public (http://www.apsoi.org/authorised-vessels)
	Catch documentation scheme	0	No CDS in place, but SIOFA is exploring potential for co-operation with CCAMLR's toothfish CDS (SIOFA, 2018 _[111]) – par 124-125; provisions for reporting on fishing activities included in CMM 2018/10 Conservation and Management Measure for the Monitoring of Fisheries in the Agreement Area (Monitoring), Article 1-3
	Vessel monitoring System	1	(1) CMM 2017/10 Conservation and Management Measure for the Monitoring of Fisheries in the Agreement Area (Monitoring), par 4-10 [1]

			(2) Par 4: "Each Contracting Party, CNCP and PFE shall ensure that all fishing vessels flying its flag that are operating in the Agreement Area are fitted with an operational automatic location communicator (ALC) unit reporting back to its competent authority." [0]
	Inspections at sea	0	SIOFA is in process of developing a High Seas Boarding Inspection Regime (SIOFA, 2018 ^[111]) – Annex X
	Observer programme	0.5	CMM 2017/09, Conservation and Management Measure for Control of fishing activities in the Agreement Area (Control), par 8 (Scientific observer programme) [0.5]
	Transshipment monitoring programme	1	CMM 2017/10 Conservation and Management Measure for the Monitoring of Fisheries in the Agreement Area (Monitoring), par 11-13
	Inspections in port	1	CMM 2017/08 Conservation and Management Measure establishing a Port Inspection Scheme (Port Inspection)
	Designation of landing ports	2	(1) CMM 2017/08 Conservation and Management Measure establishing a Port Inspection Scheme (Port Inspection) (2) http://www.apsoi.org/compliance/port-inspection-scheme
IUU vessel listing	Document	1	CMM 2018/06 Conservation and Management Measure on the Listing of IUU Vessels (IUU List) [binding from 8 October 2018]
	Link	-	http://www.apsoi.org/node/89
	Coverage	1	Par 1: "[...] the Meeting of the Parties shall identify those vessels which have engaged in fishing in the Agreement Area in contravention of SIOFA CMMs and shall establish a list of such vessels [...]"
	Evidence	2	(1) Par 2: "Each Contracting Party, cooperating non-Contracting Party (CNCP) and participating fishing entity (PFE) shall every year, and at least 90 days before each ordinary Meeting of the Parties, transmit to the Secretariat, using the Reporting Form in Annex I, information on vessels presumed to have engaged in IUU fishing activities in the Agreement Area, accompanied by all available supporting evidence concerning the presumption of the IUU fishing activities." (2) Par 6: "On the basis of the information received pursuant to paragraphs 2 or26, and <u>any other information</u> at its disposal, the Secretariat shall draw up a Draft SIOFA IUU Vessel List [...]"
	BO	1	Par 17(c): "owner and previous owners, including beneficial owners, if any"
	Listing justification	2	(1) Par 17(i) "summary of activities which justify inclusion of the vessel on the IUU Vessel List, together with references to all relevant documents informing of and evidencing those activities." (2) Description of IUU activity available in the IUU vessel list
	Follow-up	2	(1) Par 19: "Contracting Parties, CNCPs and PFEs shall take all necessary measures under their applicable legislation [...]" (2) Par 19(g): "prohibit commercial transactions, such as imports, exports or re-exports, landings and transshipment of fisheries resources covered by the Agreement, as well as other operations involving such fisheries resources, from vessels on the IUU Vessel List" (3) Not available (4) Not available
Decision-making	Document	1	Southern Indian Ocean Fisheries Agreement (2006)
	Voting	0	Article 8(1): "Unless otherwise provided in this Agreement, decisions of the Meeting of the Parties and its subsidiary bodies on matters of substance shall be taken by the consensus of the Contracting Parties present, where consensus means the absence of any formal objection made at the time a decision is taken. The question of whether a matter is one of substance shall be treated as a matter of substance"
	Objection	0	NA

	Justification of the objection	0	NA
	Framework of the objection	0	NA
	Review panel	0	NA
Co-operation	Co-operation	1	CMM 2018/06, part 24: “[...] the Secretariat shall transmit said [IUU Vessel] List and any relevant information regarding the IUU Vessel List to the FAO and to the secretariats of the following organisations for the purposes of enhancing co-operation between SIOFA and these organizations aimed at preventing, deterring and eliminating IUU fishing: [...]”
	Cross-listing	0.5	(1) CMM 2018/06, par 25: “upon receipt of the Final IUU Vessel Lists established by CCAMLR, CCSBT, ICCAT, IOTC, IATTC, GFCM, NAFO, NEAFC, NPFC, SEAFO, SPRFMO and WCPFC, and any information regarding the Lists, the Secretariat shall circulate this information to Contracting Parties, CNCPs and PFEs for the purpose of amending the SIOFA IUU Vessel List during the intersessional period in accordance with Rule 13 of the Rules of Procedures of the Meeting of the Parties. Vessels that have been added to or deleted from the respective organisations' Final IUU Vessel Lists shall be incorporated into or deleted, as appropriate, from the IUU Vessel List, <u>unless any Contracting Party objects</u> in writing within 30 days of the date of transmittal by the Secretariat.” - conditional [0.5] (2) IUU vessel list from other RFMOs linked to the page [0.5]
Compliance review	Compliance review body and related documents	1	Compliance Committee gathers annually since 2017 (reports from meetings available at https://www.apsoi.org/node/54); current provisions available in CMM 2018/11 Conservation and Management Measure for the Establishment of a Southern Indian Ocean Fisheries Agreement (SIOFA) Compliance Monitoring Scheme; provisions for data submission requirements available in CMM 2018/02 Conservation and Management Measure for the Collection, Reporting, Verification and Exchange of Data relating to fishing activities in the Agreement Area (Data Standards)
	Summary (implementation of CMMs)	0.5	Self-assessment reports submitted by CPs/CNCPs available on SIOFA's web page [0.5]
	Summary (data collection)	0.5	Self-assessment reports submitted by CPs/CNCPs available on SIOFA's web page [0.5]
	Sanctions	1	(1) CMM 2018/11, par 7: “The Meeting of the Parties will apply Annex I to assign a compliance status and determine any follow-up actions to non-compliance, including any remedial or corrective actions needed.” [1] (2) No available [0]
SPRFMO			
MCS minimum standards	Registry of authorised vessels	3	(1) CMM 05-2016 Establishment of the Commission Record of Vessels Authorised to Fish in the SPRFMO Convention Area (binding 29-04-2016) (2) CMM 05-2016, Annex 1, pt. 2e (since 2016) (3) Registry is available to the public: https://www.sprfmo.int/measures/record-of-vessels/
	Catch documentation scheme	0	Only data collection programme in place: CMM 02-2018 Standards for the Collection, Reporting, Verification and Exchange of Data (from 2018)

	Vessel monitoring System	2	(1) CMM 06-2018 Establishment of the Vessel Monitoring System in the SPRFMO Convention Area (from 2018) (2) CMM 06-2018, par 7: "The Commission VMS shall be administered by the Secretariat under the guidance of the Commission."
	Inspections at sea	1	CMM 11-2015 Boarding and Inspection Procedures in the SPRFMO Convention Area
	Observer programme	0	CMM 16-2018 The SPRFMO Observer Programme (from 2019)
	Transshipment monitoring programme	1	CMM 12-2018 Regulation of Transshipment and Other Transfer Activities (from 2018)
	Inspections in port	1	CMM 07-2017 Minimum Standards of Inspection in Port
	Designation of landing ports	2	(1) CMM 07-2017 Minimum Standards of Inspection in Port (2) https://www.sprfmo.int/measures/points-of-contact/
IUU vessel listing	Document	1	CMM 04-2017 Establishing a List of Vessels Presumed to Have Carried Out Illegal, Unreported and Unregulated Fishing activities in the SPRFMO Convention Area (binding 23-04-2017)
	Link	-	https://www.sprfmo.int/measures/iuu-lists/
	Coverage	1	Par 1: "For the purposes of this CMM, the fishing vessels flying the flag of a non-Member, or a Member or a Cooperating non-Contracting Party (hereafter CNCP), are presumed to have carried out IUU activities in the Convention Area [...]"
	Evidence	2	(1) Par 1: "[...] presumed to have carried out IUU activities in the Convention Area, inter alia, when a Member or a CNCP presents evidence [...]" (2) Par 4: "On the basis of the information received pursuant to paragraph 2 and/or any other suitably documented information at his/her disposal [...]"
	BO	1	Annex I.1(c): "Name and address of owner of vessel and previous owners, including beneficial owners, if any, and owner's place of registration"
	Listing justification	2	(1) Par 1(l): "Summary of any actions known to have been taken in respect of the alleged IUU fishing activities " (2) IUU vessel list includes a line: 'Summary of activities that justify the inclusion of the vessel on the List'
	Follow-up	2	(1) Par 14: "Members and CNCPs shall take all necessary non-discriminatory measures, under their applicable legislation and international law [...]" [1] (2) A Par 14(7): "to prohibit the imports, or landing and/or transshipment, of species covered by the Convention from vessels included in the IUU List" [1] (3) Not available [0] (4) Not available [0]
Decision-making	Document	1	SPRFMO Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean 2015
	Voting	1	Article 16: "1. As a general rule, decisions by the Commission shall be taken by consensus. For the purpose of this Article, "consensus" means the absence of any formal objection made at the time the decision was taken. 2. Except where this Convention expressly provides that a decision shall be taken by consensus, if the Chairperson considers that all efforts to reach a decision by consensus have been exhausted: (a) decisions of the Commission on questions of procedure shall be taken by a majority of the members of the Commission casting affirmative or negative votes; and (b) decisions on questions of substance shall be taken by a three-fourths majority of the members of the Commission casting affirmative or negative votes"

	Objection	0	Article 17(2)a: "Any member of the Commission may present to the Executive Secretary an objection to a decision 60 days of the date of notification "the objection period"."
	Justification of the objection	1	Article 17(2)b: "A member of the Commission that presents an objection shall at the same time: (i) specify in detail the grounds for its objection; (ii) adopt alternative measures that are equivalent in effect to the decision to which it has objected and have the same date of application; and (iii) advise the Executive Secretary of the terms of such alternative measures."
	Framework of the objection	1	Article 17(2)c: The only admissible grounds for an objection are that the decision unjustifiably discriminates in form or in fact against the member of the Commission, or is inconsistent with the provisions of this Convention or other relevant international law as reflected in the 1982 Convention or the 1995 Agreement. Article 17(2)b: A member of the Commission that presents an objection shall at the same time: [...] (ii) adopt alternative measures that are equivalent in effect to the decision to which it has objected and have the same date of application [...]"
	Review panel	1	Article 17(5)a: "When an objection is presented by a member of the Commission pursuant to paragraph 2, a Review Panel shall be established within 30 days after the end of the objection period. The Review Panel shall be established in accordance with the procedures in Annex II."
Co-operation	Co-operation	1	CMM 04-2017, par 15: "[...] the Executive Secretary will transmit the IUU List to the FAO and to appropriate regional fisheries organisations for the purposes of enhanced co-operation between SPRFMO and these organisations in order to prevent, deter and eliminate IUU fishing."
	Cross-listing	2	(1) CMM 04-2017, par 16: "Upon receipt of the final IUU vessel list established by another Regional Fisheries Management Organisation (RFMO), and any other information regarding the list, including its modification, the Executive Secretary shall circulate it to the Members and CNCPs and shall place it on the SPRFMO web site." (2) CMM 04-2017, par 17: "Measures referred to in paragraph 14 shall apply mutatis mutandis to fishing vessels included in the final IUU list established by another RFMO and operating in the SPRFMO Convention Area." (IUU lists of other RFMOs are automatically recognised according to CMM 04-2017) Links to other RFMOs IUU lists available on the SPRFMO page.
Compliance review	Compliance review body and related documents	1	The Commission adopts a Compliance Report in accordance with CMM 10 (Establishment of a Compliance and Monitoring Scheme in the SPRFMO Convention Area, most recently revised in 2018, superseding measure 3.03 from 2015 and measure 4.10 from 2016) annually since 2016 (https://www.sprfmo.int/measures/compliance-reports/); only 2016 final compliance report is available online (SPRFMO COMM-04 (2016) Annex I) Article 24 of the SPRFMO Convention details the Obligations of Members of the Commission and its paragraph 2 states: "Each member of the Commission shall report to the Commission on an annual basis indicating how it has implemented the conservation and management measures and compliance and enforcement procedures adopted by the Commission. In the case of coastal State Contracting Parties, the report shall include information regarding the conservation and management measures they have taken for straddling fishery resources occurring in waters under their jurisdiction adjacent to the Convention Area in accordance with Article 20 paragraph 4 and Article 4. Such reports shall be made publicly available"
	Summary (implementation of CMMs)	1	Latest compliance report (2018) includes assessment of compliance with CMMs by CP/CNCP; individual self-assessment implementation reports available for each CP/CNCP countries
	Summary (data collection)	1	Latest compliance report (2016) includes assessment of compliance with data submission requirements by CP/CNCP; individual self-assessment implementation reports include answers to questions such as 'Were you able to meet the data collection requirements described in CMM 02-2017 (Data Standards) paragraphs 1(b) (c) and (d)? (Being information on fishing activity, non-target species impacts and transshipments/landings)'

	Sanctions	0	(1) CMM 10-2018: "The Commission <u>should develop</u> , as a matter of priority, a process to complement the CMS that identifies a range of specific responses to noncompliance events that may be applied by the Commission through the implementation of the CMS. This shall include penalties and any other actions as may be necessary to promote compliance with the Convention, CMMs and other obligations included in the CMS." (2) No information on sanctions available in the compliance report
WCPFC			
MCS minimum standards	Registry of authorised vessels	3	(1) Conservation and Management Measure for WCPFC Record of Fishing Vessels and Authorizations to Fish (CMM 2017-05) (2) CMM 2017-05, Article 6(s); Resolution 2013-10 (since 2016) (3) Registry is available to the public (https://www.wcpfc.int/record-fishing-vessel-database)
	Catch documentation scheme	0	"WCPFC has not yet implemented a CDS for any species under its mandate, despite work commencing as early as 2005 to develop a CDS for bigeye tuna" (ISSF, 2016 ^[112])
	Vessel monitoring System	2	(1) CMM 2014-02 (Commission Vessel Monitoring System) (2) Par 7(a): "The Commission VMS shall be a stand-alone system: -developed in and administered by the Secretariat of WCPFC under the guidance of the Commission, which receives data directly from fishing vessels operating on the high seas in the Convention Area [...]"
	Inspections at sea	1	CMM 2006-08 (Western Central Pacific Fisheries Commission Boarding and Inspection Procedures)
	Observer programme	1	CMM 2007-01
	Transshipment monitoring programme	1	CMM 2009-06
	Inspections in port	1	CMM 2017-02 (Conservation and Management Measure on Minimum Standards for Port State Measures)
	Designation of landing ports	0	(1) Paragraph 6 of CMM 2017-02 encourages each CP/CNCP to designate ports for the purpose of inspection of fishing vessels suspected of engaging in IUU fishing or fishing related activities in support of IUU fishing, but does not designate landing ports. (2) List not available
IUU vessel listing	Document	1	Conservation and Management Measure 2010-06 to Establish a List of Vessels Presumed to Have Carried Out Illegal, Unreported and Unregulated Fishing Activities in the WCPO
	Link	-	http://www.wcpfc.int/wcpfc-iuu-vessel-list
	Coverage	1	Par 1: "At each annual meeting, the Commission will identify those vessels which have engaged in fishing activities for species covered by the Convention within the Convention Area in a manner which has undermined the effectiveness of the WCPF Convention and the WCPFC measures in force [...]" Par 7: "The Executive Director shall request each CCM and non-CCM with vessels on the draft IUU Vessel List to notify the owner of the vessels of their inclusion in that list, and of the consequences of their inclusion being confirmed in the IUU Vessel List."
	Evidence	2	(1) Par 2: "This identification shall be suitably documented, inter alia, on reports from Members, Cooperating Non-Members and Participating Territories (collectively CCMs) [...]" (2) Par 6: "The Executive Director shall draw up a draft IUU Vessel List incorporating the lists of vessels and suitably documented information received pursuant to para 4, <u>and any other suitably documented information at his disposal</u> "
	BO	1	Par 19(iii): "owner and previous owners, including beneficial owners, if any"

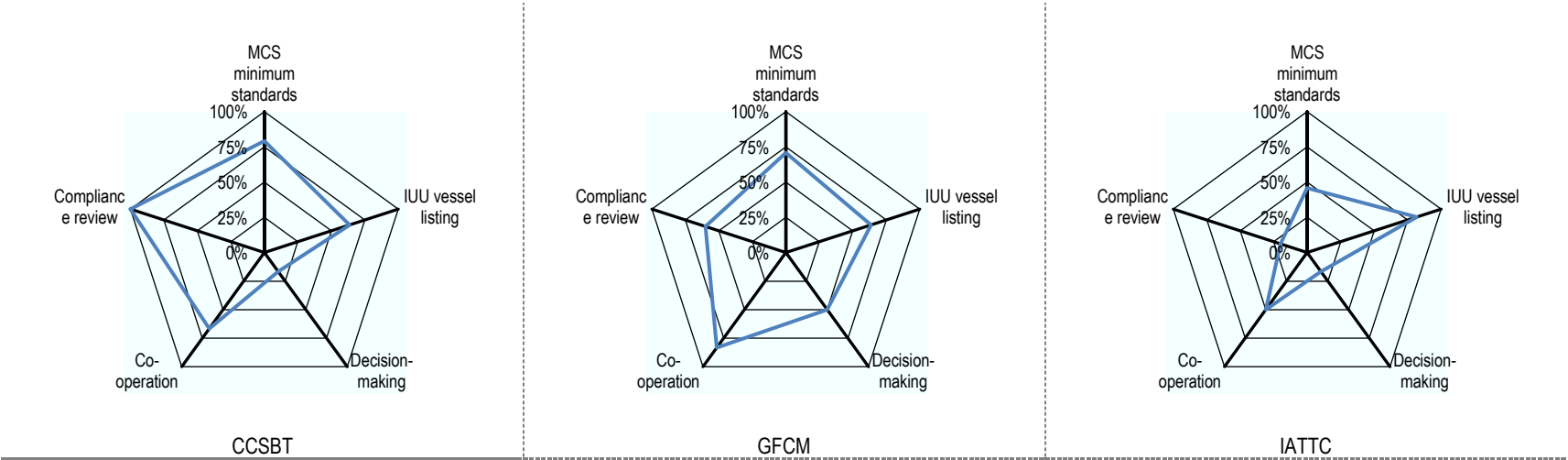
	Listing justification	2	(1) Par 19(ix): "summary of activities which justify inclusion of the vessel on the list, together with references to all relevant documents informing of and evidencing those activities" (2) Description of IUU activity available in the IUU vessel list
	Follow-up	2	(1) Par 22: "CCMs shall take all necessary non-discriminatory measures under their applicable legislation, international law and each CCMs' international obligations, and pursuant to paras 56 and 66 of the IPOA-IUU [...]" [1] (2) Par 22(e): "prohibit commercial transactions, imports, landings and/or transshipment of species covered by the WCPFC Convention from vessels on the WCPFC IUU Vessel List;" [1] (3) Not available [0] (4) Not available [0]
Decision making	Document	1	Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (2000)
	Voting	1	Article 20(1-2): "As a general rule, decision-making in the Commission shall be by consensus. For the purposes of these rules, "consensus" means the absence of any formal objection made at the time the decision was taken. If all efforts to reach a decision by consensus have been exhausted, decisions by voting in the Commission on questions of procedure shall be taken by a majority of those present and voting...."
	Objection	0	Article 20(1): "For the purposes of these rules, "consensus" means the absence of any formal objection made at the time the decision was taken."
	Justification of the objection	1	Although not mentioned directly, implied by the objection framework
	Framework of the objection	1	Article 20(6): "[...] (a) the decision is inconsistent with the provisions of this Convention, the Agreement or the 1982 Convention; or (b) the decision unjustifiably discriminates in form or in fact against the member concerned."
	Review panel	0.5	Article 20(6) : "A member which has voted against a decision or which was absent during the meeting at which the decision was made may, within 30 days of the adoption of the decision by the Commission, seek a review of the decision by a review panel constituted in accordance with the procedures set out in Annex II to this Convention" [0.5]
Co-operation	Co-operation	1	CMM 2010-06, par 23: "[...] the Executive Director shall transmit the WCPFC IUU Vessel List to the FAO and to other regional fisheries organizations for the purposes of enhancing cooperation between the WCPFC and these organizations aimed at preventing, deterring and eliminating IUU fishing."
	Cross-listing	0	(1) No provisions for cross-listing with other RFMOs established in the relevant resolution. (2) No mention of IUU vessel list from other RFMOs
Compliance review	Compliance review body and related documents	1	Compliance Monitoring Scheme was established by CMM 2010-03 and extended with CMM 2017-07; Compliance Monitoring Scheme Review Panel gathers annually since 2011 (https://www.wcpfc.int/compliance-monitoring); latest annual report available: 2017 Final Compliance Monitoring Report (Covering 2016 Activities)
	Summary (implementation of CMMs)	1	Final Compliance Monitoring Reports list compliance with CMMs by CP/CNCP
	Summary (data collection)	1	Final Compliance Monitoring Reports list compliance with data provision requirements by CP/CNCP

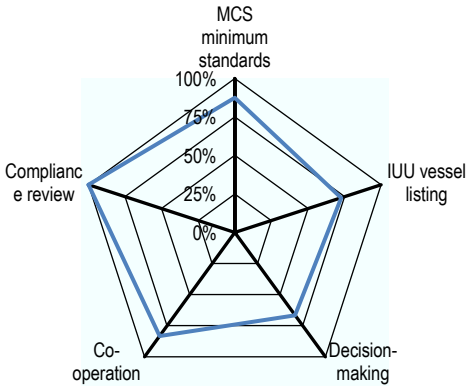
	Sanctions	0	(1) CMM 2017-07, par 38: "The Commission hereby establishes an intersessional working group to develop a process to complement the CMS that shall identify a range of responses to non-compliance that can be applied by the Commission through the implementation of the CMS, including cooperative capacity-building initiatives and, as appropriate, such <u>penalties and other actions as may be necessary to promote compliance</u> with Commission CMMs. [...]" – establishment of provisions in progress (2) "TCC13 recommends that WCPFC14 agree that the information that should be reported generally includes [...] if charged, how was it charged (e.g., verbal warning, written warning, penalty/fine, permit sanction, etc.)"
CCAMLR			
MCS minimum standards	Registry of authorised vessels	3	(1) Conservation Measure 10-02 Licensing and inspection obligations of Contracting Parties with regard to their flag vessels operating in the Convention Area (2) CM 10-02, Article 2 (3) Registry is available to the public (https://www.ccamlr.org/en/compliance/list-authorized-vessels)
	Catch documentation scheme	1	CMM 10—05 Catch Documentation Scheme for <i>Dissostichus</i> spp.
	Vessel monitoring System	1	(1) CMM 10-04 Automated satellite-linked Vessel Monitoring Systems (VMS) [1] (2) CMM 10-04, par 6: "[...] transmits VMS data in accordance with paragraph 2, to the Flag State while the vessel is in the Convention Area [...]"; from CCAMLR web page: All vessels authorised by Members to fish in the Convention Area are required to report VMS data to their Flag State which must then forward this data to the CCAMLR Secretariat. Many vessels also report VMS data directly to the CCAMLR Secretariat in near real-time. [0]
	Inspections at sea	1	CCAMLR System of Inspection
	Observer programme	1	Scheme of International <u>Scientific</u> Observation (CCAMLR) - CCAMLR requires observers on vessel in all fisheries, and while they are there for scientific purposes, they do record other elements of compliance, such as the presence/absence of bands on bait boxes (prohibited in CCAMLR), and these observations can be used in the compliance evaluation (communication with CCAMLR Secretariat)
	Transshipment monitoring programme	1	CM 10-09 Notification system for transshipments within the Convention Area
	Inspections in port	1	CM 10-03 Port inspections of fishing vessels carrying Antarctic marine living resources
	Designation of landing ports	0	(1) "Contracting Parties <u>may designate ports</u> to which fishing vessels may seek entry." (CM 10-03) (2) No list available
IUU vessel listing	Document	1	Conservation Measure 10-06 (2016) Scheme to promote compliance by Contracting Party vessels with CCAMLR conservation measures Conservation Measure 10-07 (2016) Scheme to promote compliance by non-Contracting Party vessels with CCAMLR conservation measures
	Link	-	https://www.ccamlr.org/en/compliance/contracting-party-iuu-vessel-list https://www.ccamlr.org/en/compliance/non-contracting-party-iuu-vessel-list
	Coverage	1	Provisions for two separate lists
	Evidence	2	(1) Paragraph 3: "Where a Contracting Party obtains information that vessels flying the flag of another Contracting Party have engaged in activities set out in paragraph 5, it shall submit a report containing this information to the Executive Secretary and the Contracting Party concerned in a timely manner."

			(2) Paragraph 6: “[...] on the basis of the information gathered in accordance with paragraphs 2 and 3, and <u>any other information that the Executive Secretary might have obtained</u> [...]”
	BO	1	Paragraph 16(iii): “owner of vessel and previous owners, including beneficial owners, if any”
	Listing justification	2	(1) Paragraph 16(x): “date and location of subsequent sightings of the vessel in the Convention Area, if any, and of any other related activities performed by the vessel contrary to CCAMLR conservation measures.” (2) Description of IUU activity available in the IUU vessel list
	Follow-up	3	(1) Paragraph 18: “Contracting Parties shall take all necessary measures, subject to and in accordance with their applicable laws and regulations and international law [...]” Paragraph 20: “The Executive Secretary shall circulate to non-Contracting Parties cooperating with the Commission by participating in the CDS the CP-IUU Vessel List, together with the request that, to the extent possible in accordance with their applicable laws and regulations, they do not register vessels that have been placed on the List unless they are removed from the List by the Commission.” [1] (2) Paragraph 18(viii): “imports, exports and re-exports of <i>Dissostichus</i> spp. from vessels on the CP-IUU Vessel List are prohibited;” [1] (3) Actions take in relation to vessels suspected of IUU fishing noted in the Compliance report (vessels not included on the IUU vessel list) [1] (4) Not available, however there are provisions available in paragraph 25: “The Commission shall review, at subsequent CCAMLR annual meetings, as appropriate, action taken by those Contracting Parties to which requests have been made pursuant to paragraph 24, and identify those which have not rectified their activities.” [0]
Decision-making	Document	1	Convention on the Conservation of Antarctic Marine Living Resources (1980)
	Voting	0	Article XII(1): “Decisions of the Commission on matters of substance shall be taken by consensus. The question of whether a matter is one of substance shall be treated as a matter of substance.” (Article XII suggests that on important matters, the decision-making process would default to consensus)
	Objection	0	NA
	Justification of the objection	0	NA
	Framework of the objection	0	NA
	Review panel	0	NA
Co-operation	Co-operation	1	Paragraph 19: “[...] the Executive Secretary shall communicate the CP-IUU Vessel List to the FAO and appropriate regional fisheries organisations to enhance cooperation between CCAMLR and these organisations for the purposes of preventing, deterring and eliminating IUU fishing.”
	Cross-listing	0	(1) No provisions for cross-listing with other RFMOs established in the relevant resolution (2) No mention of IUU vessel list from other RFMOs

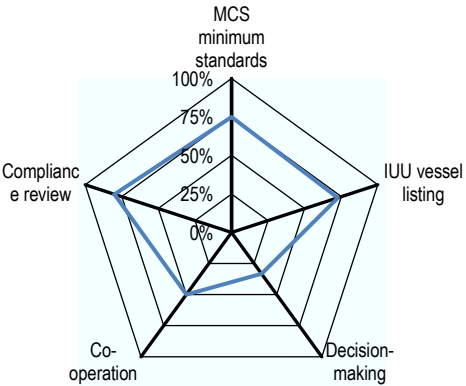
Compliance review	Compliance review body and related documents	1	CCAMLR Compliance Evaluation Procedure (CCEP) evaluates CPs' compliance with CMMs; responsible body is Standing Committee on Implementation and Compliance (SCIC), gathering annually since 2003; SCIC has replaced Standing Committee on Observation and Inspection (SCOI) established in 1988
	Summary (implementation of CMMs)	1	CCAMLR Compliance Report (latest - Annex 8 of the Commission meeting CCAMLR XXXVI) identifies non-compliance with CMMs by CP/CNCP
	Summary (data collection)	1	Compliance with CMMs on data reporting (CMMs marked 23-0X, where X ranges from 1 to 7) available by CP/CNCP
	Sanctions	0	(1) Not available (2) Not available

Figure D.1. Evaluation of RFMOs – summary plots

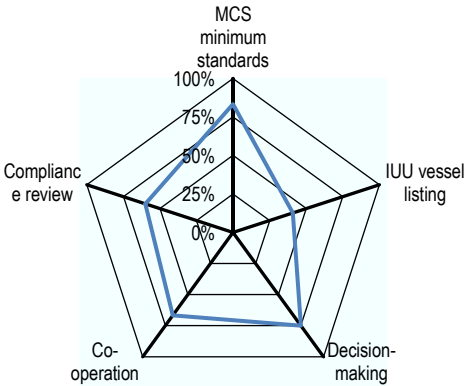




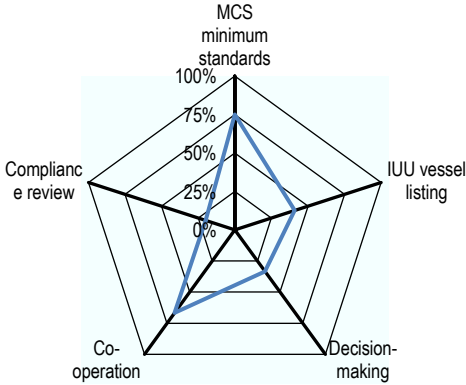
ICCAT



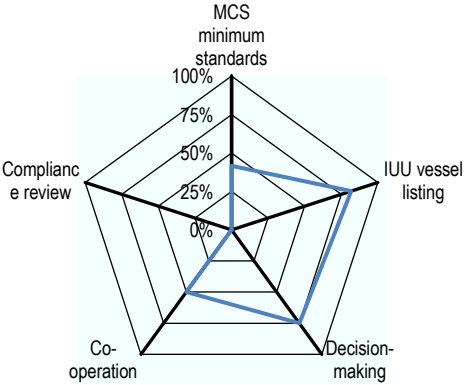
IOTC



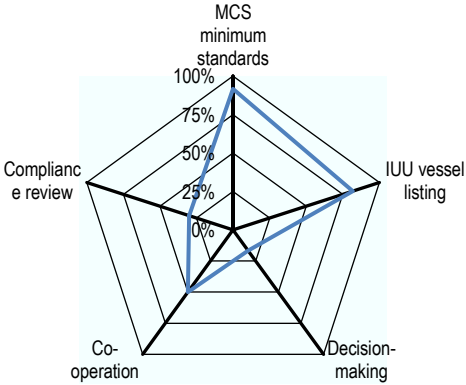
NAFO



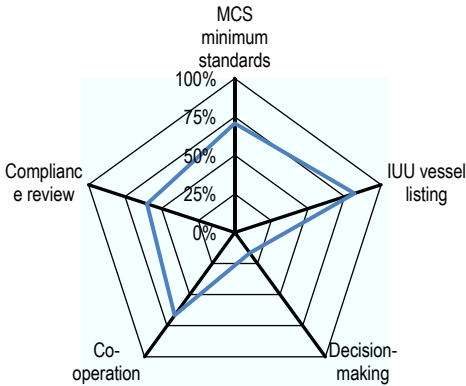
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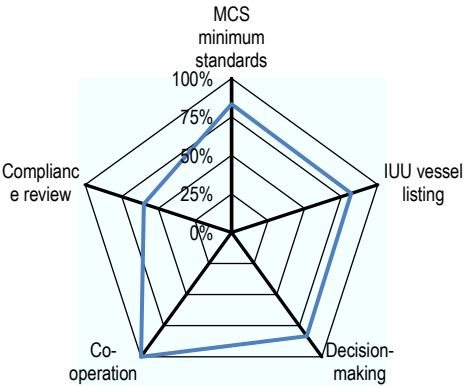
NPFC



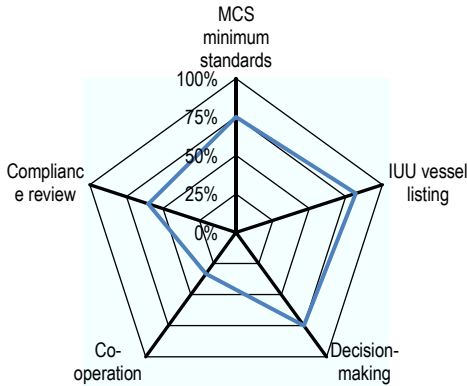
SEAFO



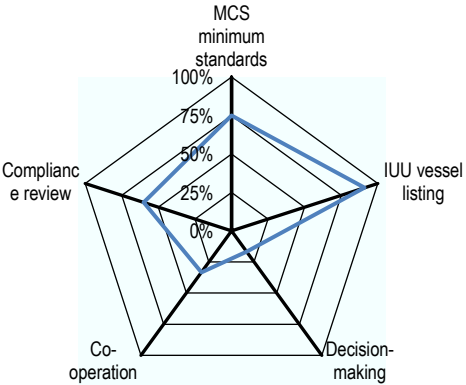
SIOFA



SPRFMO



WCPFC



CCAMLR

Note: Percentage represent the share of implemented best practices identified in the sections 7.2.1-7.2.5.

Table D.3. Membership of RFMOs and other organisations with a mandate to monitor fisheries or other marine resources

	CCAMLR	CCSBT	GFCM	IATTC	ICCAT	IOTC	NAFO	NEAFC	NPFC	SEAFO	SIOFA	SPRFMO	WCPFC
OECD member countries													
Australia	CP	CP				CP					CP	CP	CP
Belgium	CP	CP*	CP*	CP*	CP*	CP*	CP*	CP*		CP*	CP*	CP*	CP*
Canada				CP	CP		CP	CNCP	CP				CP
Chile#	CP			CNCP									CP
Colombia				CP								CNCP	
Denmark	CP*	CP*	CP*	CP*	CP	CP*	CP*/CP ¹	CP ²		CP*	CP*	CP ¹ /CP*	CP*
Estonia	CP*	CP*	CP*	CP*	CP	CP*	CP	CP*		CP*	CP*	CP*	CP*
Finland#	CP*	CP*	CP*	CP*	CP	CP*	CP*	CP*		CP*	CP*	CP*	CP*
France#	CP	CP*	CP	CP	CP ³ /CP*	CP	CP*/CP ³	CP*		CP*	CP	CP*	CP
Germany	CP	CP*	CP*	CP*	CP*	CP*	CP	CP*		CP*	CP*	CP*	CP*
Greece	CP*	CP*	CP	CP*	CP*	CP*	CP*	CP*		CP*	CP*	CP*	CP*
Iceland					CP		CP	CP*					
Ireland	CP*	CP*	CP*	CP*	CP*	CP*	CP*	CP*		CP*	CP*	CP*	CP*
Israel#			CP										
Italy	CP	CP*	CP	CP*	CP*	CP*	CP*	CP*		CP*	CP*	CP*	CP*
Japan	CP	CP	CP	CP	CP	CP	CP		CP	CP	CP		CP
Korea	CP	CP		CP	CP	CP	CP		CP	CP	CP	CP	CP
Latvia	CP*	CP*	CP*	CP*	CP*	CP*	CP	CP*		CP*	CP*	CP*	CP*
Lithuania	CP*	CP*	CP*	CP*	CP*		CP	CP*		CP*			CP*
Mexico#				CP	CP								CNCP
Netherlands	CP*	CP*	CP*	CP*	CP*	CP*	CP*	CP*		CP*	CP*	CP*	CP*
New Zealand	CP	CP						CNCP			CNCP	CP	CP
Norway	CP				CP		CP	CP		CP			
Poland	CP	CP*	CP*	CP*	CP*	CP*	CP	CP*		CP*	CP*	CP*	CP*
Portugal#	CP*	CP*	CP*	CP*	CP*	CP*	CP	CP*		CP*	CP*	CP*	CP*
Slovenia	CP*	CP*	CP	CP*	CP*	CP*	CP*	CP*		CP*	CP*	CP*	CP*
Spain#	CP	CP*	CP	CP*	CP*	CP*	CP	CP*		CP*	CP*	CP*	CP*
Sweden	CP	CP*	CP*	CP*	CP*	CP*	CP*	CP*		CP*	CP*	CP*	CP*
Turkey			CP		CP								
United Kingdom	CP	CP*	CP*	CP*	CP ⁴ /CP*	CP*	CP*	CP*		CP*	CP*	CP*	CP*
United States	CP			CP	CP		CP		CP			CP	CP
OECD accession countries													

	CCAMLR	CCSBT	GFCM	IATTC	ICCAT	IOTC	NAFO	NEAFC	NPFC	SEAFO	SIOFA	SPRFMO	WCPFC
Costa Rica [#]				CP	CNCP								
Non-member countries and economies													
Albania			CP		CP								
Lebanon			CP										
Libya			CP		CP								
Malta		CP*	CP	CP*	CP*	CP*	CP*	CP*		CP*	CP*	CP*	CP*
Thailand						CP					CP		CNCP
Chinese Taipei		CP		CP	CNCP					CP		CP	CP

Note: Includes OECD member countries (excluding land-locked countries with no fishing fleets and EEZs), OECD accession countries, and countries and economies participating in the project. CP indicates contracting parties or members of the agreement or convention; CNCP indicate non-contracting co-operating parties or co-operating non-member of the agreement or convention. * - indicates a status following from European Union membership; # - indicates OECD member and accession countries not participating in the project

Membership in respect to: ¹ Faroe Islands; ² Faroe Islands and Greenland; ³ St. Pierre and Miquelon; ⁴ overseas territories of the United Kingdom.

Source: Membership lists confirmed with relevant secretariats.

