

# Understanding **IUU FISHING** and Its Impacts on **Sustainable Fisheries**



# What is IUU Fishing?

According to the Food and Agriculture Organization (2001), **IUU Fishing** refers to:

“ *Illegal, Unreported and Unregulated Fishing conducted in contravention of applicable fisheries laws and regulations* ”



**Break** fisheries law



**Avoid** proper reporting



**Operate** without effective control or management



These activities **threaten marine ecosystems, reduce fish stocks,** and negatively affect coastal communities and **global food security.**



# What does “I” mean?

I = **Illegal** Fishing



**Definition:** fishing activities conducted in violation of national, regional, or international fisheries laws and regulations.



## Examples of Illegal Fishing Activities



Fishing without a valid license



Fishing in prohibited or protected areas



Using banned or destructive fishing gear



Catching protected or undersized species



Fishing beyond quota limits



Entering another country's waters without permission

# What does “U” mean?

**U = Unreported Fishing**



**Definition:** fishing activities that are not reported or are falsely reported to the relevant fisheries authorities.



## Examples of Unreported Fishing Activities



Failure to report catches to the relevant authorities



Submitting incorrect or incomplete catch data



Misreporting fish species or catch quantities



Concealing or falsifying fishing activities and records



Landing or transshipping catches without proper reporting or documentation





# What does “U” mean?

## U = Unregulated Fishing



**Definition:** activities conducted in areas or for fish stocks where there are no effective conservation or management measures.

### Examples of Unregulated Fishing Activities



Fishing in areas without effective management or conservation measures



Fishing by vessels without nationality (stateless vessels)



Fishing for fish stocks not covered by management measures



Operating outside regional fisheries management frameworks



Fishing in unmanaged or poorly regulated high-seas areas



# Impacts of **IUU** Fishing

**IUU Fishing** has serious impacts on marine resources, economies, coastal communities, and global fisheries sustainability.



# Impacts of IUU Fishing

## 1. Depletion of Marine Resources



Overfishing **reduces fish populations** and threatens marine biodiversity.



Unsustainable fishing practices **damage marine ecosystems** and habitats.



Some fish species may become **endangered** or **collapse** due to excessive exploitation.

## 2. Economic Losses



Governments **lose significant revenue** from illegal fishing activities.



IUU Fishing **weakens national fisheries industries** and seafood markets.



It increases **management and enforcement costs** for authorities.





# Impacts of IUU Fishing

## 3. Impacts on Legal Fishers



Law-abiding fishers face **unfair competition** from illegal operators.



Declining fish stocks **reduce income and fishing opportunities** for coastal communities.



Sustainable fishers may suffer from **lower market competitiveness**.

## 4. Threats to Food Security



Fish is an **important source of protein** for millions of people worldwide.



IUU Fishing threatens the **long-term availability** of seafood resources.



Reduced fish stocks may **affect nutrition and livelihoods**, especially in developing countries.

# // Impacts of IUU Fishing

## 5. Trade Barriers and International Reputation



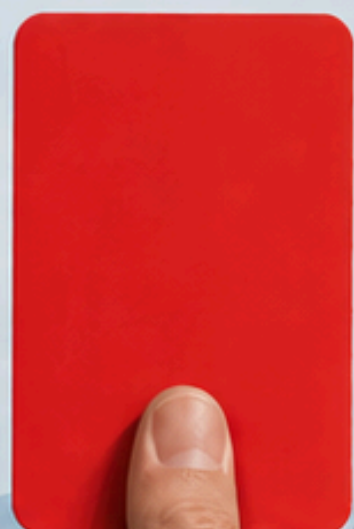
Countries associated with IUU Fishing may face **international trade restrictions**.



Seafood exports can be affected by import regulations from major markets such as the **European Union**.



# EU Yellow Card and Red Card Explained



The EU uses **Yellow** and **Red** Cards to ensure countries take IUU Fishing seriously and protect marine resources.



## Yellow Card

The EU gives a **Yellow Card** to countries that fail to control IUU Fishing properly. It is a warning that the country must improve its laws and actions. If not, it may face a **trade ban**.

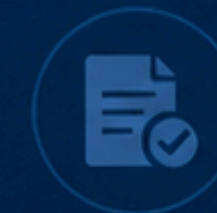


## Red Card

A **Red Card** means serious failure to stop IUU Fishing. The country is **banned** from exporting seafood to the EU. It causes **big problems** for the economy and seafood workers.



# How to Combat **IUU** Fishing



# Why do Legal and Institutional Frameworks Matter?

Because IUU Fishing often involves multiple countries and the international seafood trade, effective responses require **the following**



**International** legal frameworks



**Regional** cooperation



**National** laws and policies



**Coordinated** fisheries governance





THE LAW  
OF THE SEA

# UNCLOS 1982: The Legal Foundation for Fisheries



## What is UNCLOS?



The United Nations Convention on the Law of the Sea (UNCLOS), adopted in 1982, establishes the legal framework for the use and management of the world's oceans.

## UNCLOS defines:



Maritime rights and  
jurisdiction of States



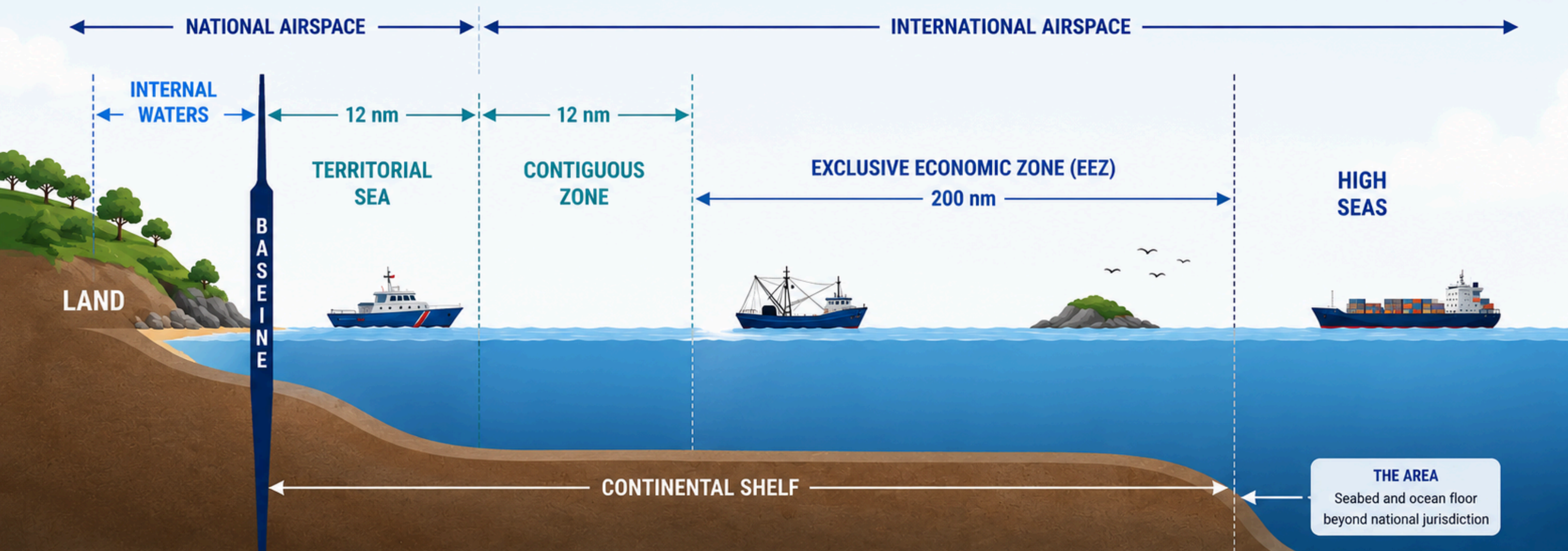
Responsibilities for  
marine resource  
conservation



International cooperation  
in ocean governance

# MARITIME ZONES AND AIRSPACE

Overview of maritime boundaries under UNCLOS



## INTERNAL WATERS

Waters on the landward side of the baseline.



## TERRITORIAL SEA

Up to 12 nautical miles (nm) from the baseline.



## CONTIGUOUS ZONE

From 12 to 24 nm from the baseline.



## EXCLUSIVE ECONOMIC ZONE (EEZ)

Up to 200 nm from the baseline. Coastal State has rights for the purpose of exploring, exploiting, conserving and managing natural resources.



## HIGH SEAS

Beyond the EEZ. Open to all States under international law.



## THE AREA

Seabed and ocean floor beyond national jurisdiction.



1 nm (nautical mile) = 1,852 meters



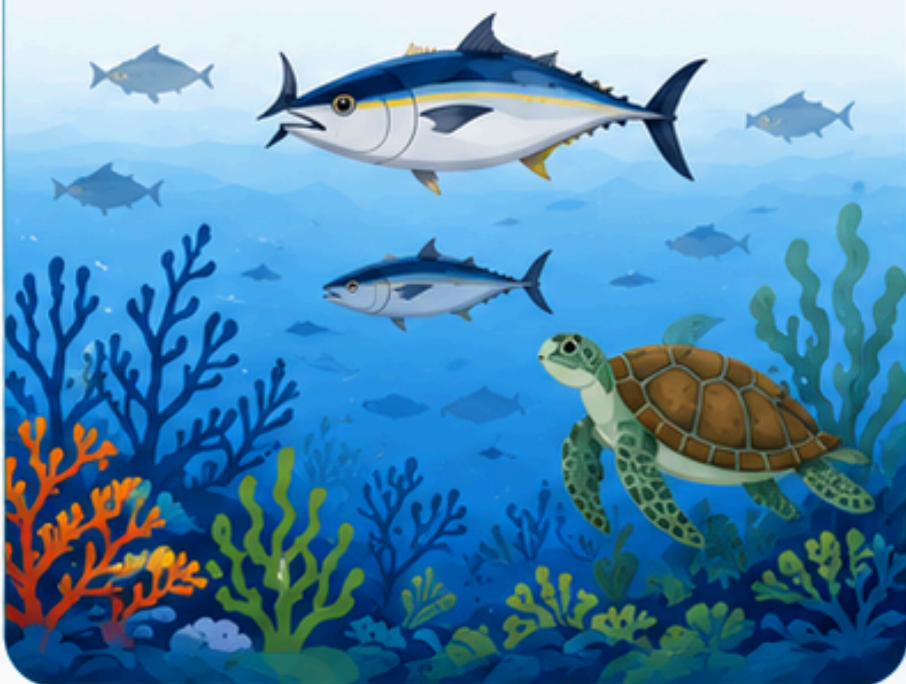
# Key UNCLOS Provisions Related to IUU Fishing

UNCLOS supports the prevention of IUU Fishing through four key principles:



## Conservation of Marine Living Resources

Coastal States are responsible for conserving and sustainably managing marine living resources.



## Coastal State Jurisdiction and Enforcement

Coastal States have the authority to regulate and enforce fisheries laws within their EEZ.



## Flag State Responsibility

States must ensure that vessels flying their flag comply with applicable fisheries laws and regulations.



Authorize vessels



Monitor activities



Ensure compliance



## International Cooperation

States are encouraged to cooperate in conserving and managing shared and high seas fishery resources.



Together, these UNCLOS principles form the legal foundation for States to **prevent, deter and eliminate IUU fishing** worldwide.

# /// IPOA-IUU (2001):

## A Global Policy Framework Against IUU Fishing



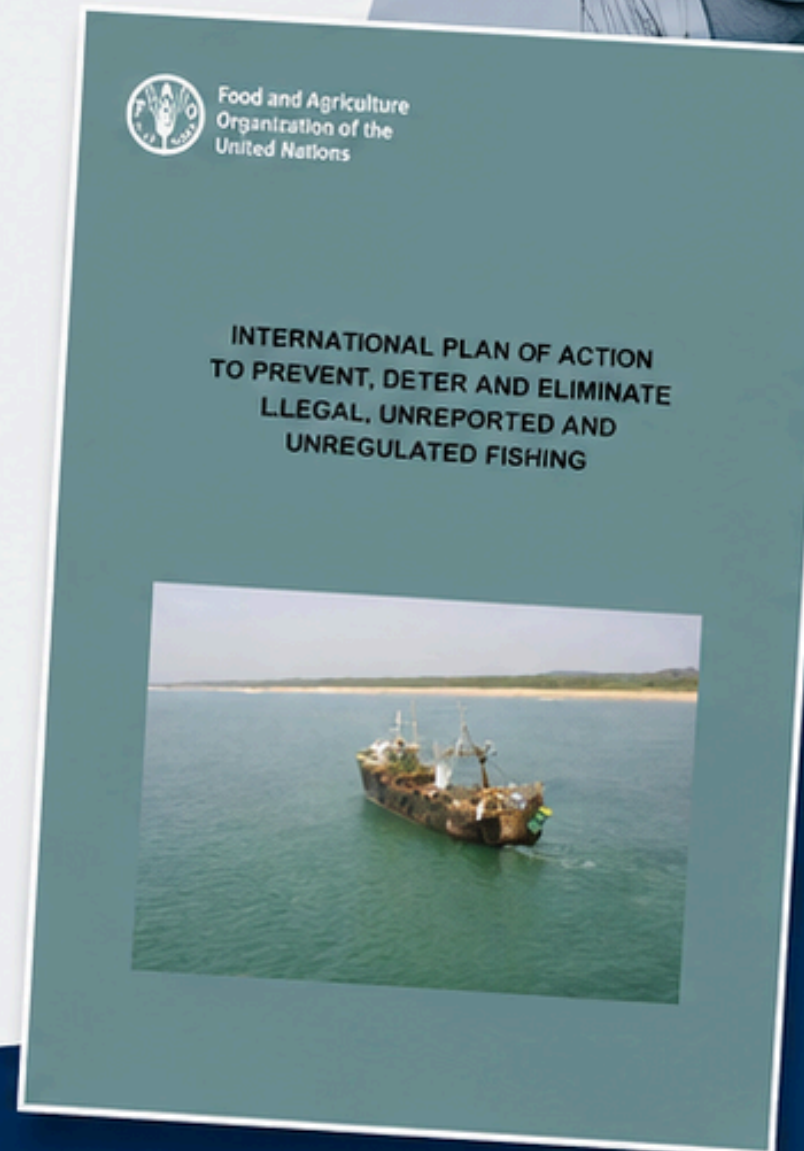
### What is IPOA-IUU?



The International Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported, and Unregulated Fishing (**IPOA-IUU**) was developed by the Food and Agriculture Organization and adopted in 2001.



The IPOA-IUU is a voluntary international instrument developed under the **Code of Conduct for Responsible Fisheries** to support global action against IUU Fishing.



# Key Principles and Measures of IPOA-IUU

The **IPOA-IUU** promotes a comprehensive and cooperative approach to combat IUU Fishing through:

## Key Principles



### International cooperation

Strengthening global partnerships and collaboration to prevent and eliminate IUU Fishing.



### Transparency

Promoting access to information and ensuring transparency in fisheries activities and governance.



### Conservation and sustainable use of fisheries resources

Ensuring the long-term conservation and sustainable use of marine living resources.

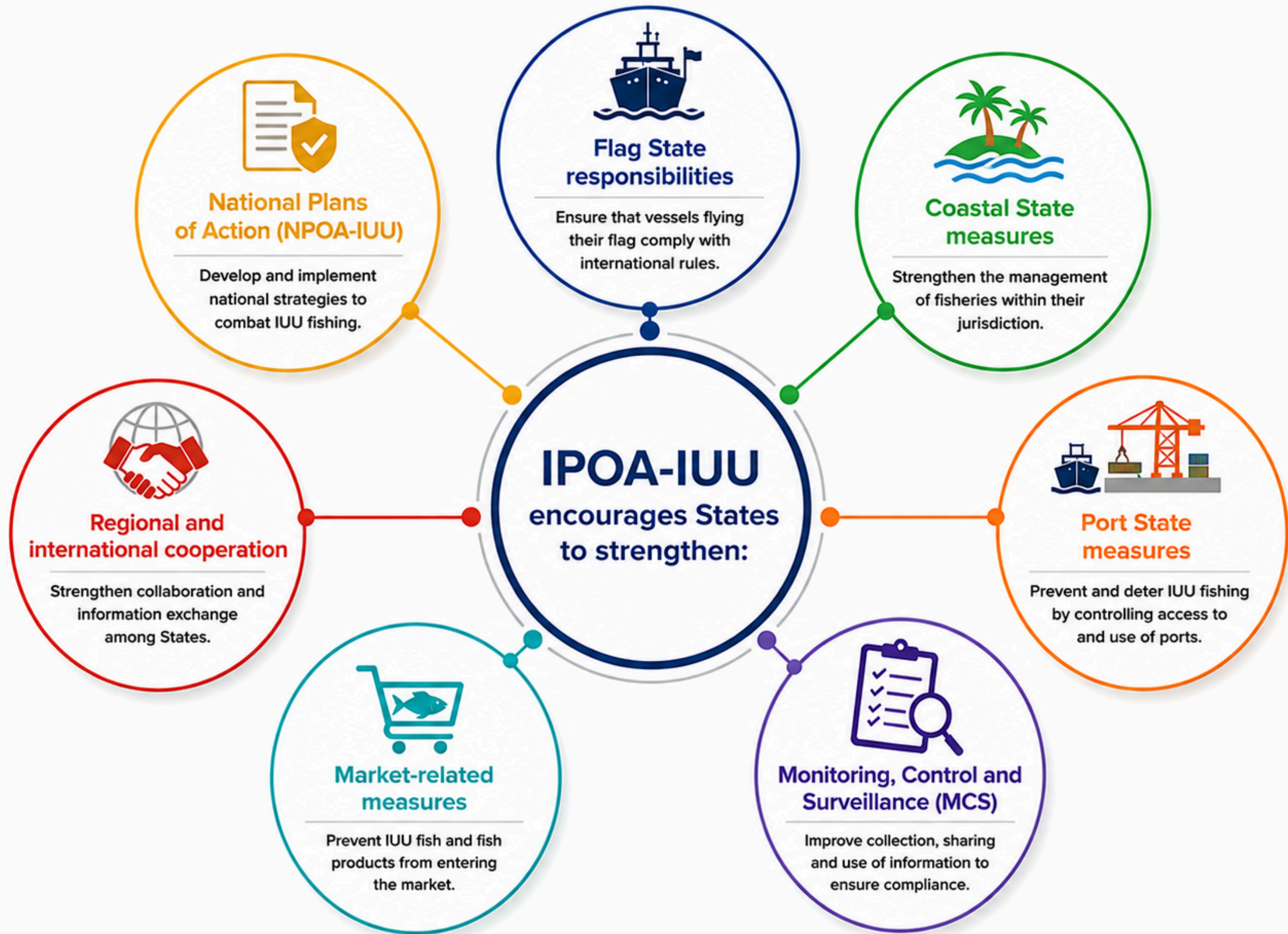


### Participation and coordination among States and stakeholders

Engaging all relevant stakeholders and promoting coordinated action at all levels.



SUSTAINABLE FISHERIES  
FOR A BETTER FUTURE





# RPOA-IUU

Regional Plan of Action to Promote Responsible Fishing Practices including Combating IUU Fishing



## RPOA-IUU: Regional Cooperation Against IUU Fishing



### What is RPOA-IUU?

The Regional Plan of Action to Promote Responsible Fishing Practices including Combating IUU Fishing (RPOA-IUU) is a voluntary regional initiative endorsed in Bali, Indonesia, in 2007 to strengthen regional cooperation against IUU Fishing.



### Participating Countries

11 participating countries



Australia



Brunei Darussalam



Cambodia



Indonesia



Malaysia



Papua New Guinea



Philippines



Singapore



Thailand



Timor-Leste



Viet Nam



### Key Areas of Cooperation



Information Sharing and Coordination



MCS Cooperation (Monitoring, Control and Surveillance)



Fisheries Enforcement and Compliance



Capacity Building and Technical Assistance



Port State Measures (PSM) and Regional Coordination



Sustainable Fisheries Management and Responsible Fishing Practices



### RPOA-IUU Aims To



Strengthen fisheries governance



Combat IUU Fishing through regional cooperation



Promote responsible fishing practices



Support sustainable fisheries and marine ecosystems



# NPOA-IUU: NATIONAL ACTION AGAINST IUU FISHING



## WHAT IS NPOA-IUU?

A National Plan of Action to Prevent, Deter and Eliminate IUU Fishing (NPOA-IUU) is a national strategy developed by individual countries to implement measures against IUU Fishing in accordance with international and regional commitments.



NPOA-IUU is encouraged under the IPOA-IUU framework and reflects country-specific fisheries contexts and priorities.



COMPLY WITH  
INTERNATIONAL  
OBLIGATIONS



STRENGTHEN  
NATIONAL  
GOVERNANCE



PROTECT MARINE  
RESOURCES



PROMOTE  
RESPONSIBLE  
FISHING

## COMMON AREAS COVERED IN NPOA-IUU



### 1. FISHERIES LAWS AND REGULATIONS

Establish and strengthen a comprehensive legal framework to prevent, deter and eliminate IUU fishing.



### 2. LICENSING AND VESSEL REGISTRATION

Ensure that fishing vessels are properly licensed and registered, and that information is accurate, up-to-date and verifiable.



### 3. MONITORING, CONTROL AND SURVEILLANCE (MCS)

Implement effective MCS systems to monitor fishing activities and detect IUU fishing.



### 4. PORT AND INSPECTION MEASURES

Strengthen port controls and inspection procedures to prevent IUU-caught fish from entering the supply chain and markets.



### 5. ENFORCEMENT AND COMPLIANCE

Ensure effective enforcement, sanctions and compliance mechanisms to deter violations and promote accountability.



### 6. INTER-AGENCY COORDINATION

Enhance collaboration and coordination among relevant government agencies.



### 7. STAKEHOLDER PARTICIPATION

Engage fishers, industry, civil society and other stakeholders in the development and implementation of NPOA-IUU.



# Thailand's **NPOA-IUU**

## National Plan of Action Against **IUU** Fishing

Thailand developed the National Plan of Action to Prevent, Deter and Eliminate IUU Fishing (NPOA-IUU) to implement international commitments and strengthen fisheries governance at the national level.

**NPOA-IUU No.2** was issued in 2021 to continue and strengthen actions against IUU Fishing.



### Five Major Implementation Areas

- 1 All State Responsibilities
- 2 Flag State Responsibilities
- 3 Coastal State Measures
- 4 Port State Measures
- 5 Market-related Measures



### Key Objectives

-  Comply with international commitments
-  Strengthen fisheries governance
-  Collaborate across sectors
-  Sustain marine resources for the future





# MCS

(Monitoring, Control, and Surveillance)

*“MCS is the implementation of a plan or strategy to combat IUU Fishing”*



# What is MCS?



**“Monitoring, Control, and Surveillance (MCS)”** is an approach used to support fisheries management and prevent **IUU Fishing**.

## MCS helps authorities



Monitor fishing activities,



Ensure compliance with fisheries laws, and



Detect and prevent illegal fishing operations.

## Components of MCS



### Monitoring

Collecting information and data



### Control

Establishing laws and regulations




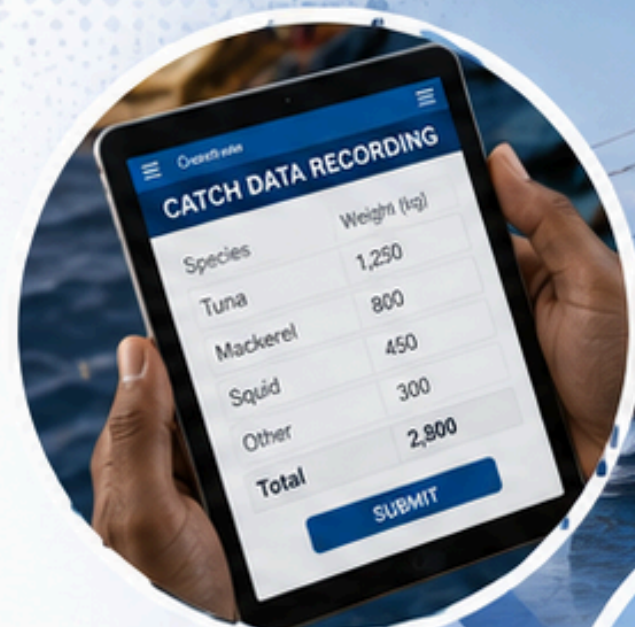
### Surveillance

Inspecting and enforcing compliance



# Monitoring (M)

 **Monitoring** refers to the collection of data and information related to fishing activities.



## Examples of Monitoring Activities

-  Recording catch data
-  Monitoring fishing vessels
-  Tracking fishing locations
-  Collecting fisheries statistics
-  Using Vessel Monitoring Systems (VMS)
-  Electronic reporting systems

## Monitoring helps authorities understand

- 1** How much fish is caught?
- 2** Where fishing occurs?
- 3** Whether fishing activities comply with regulations?











# Control (C)

Control refers to the establishment of laws, regulations, and management measures to govern fisheries activities.

## Examples of Control Measures

-  Fishing licenses
-  Catch quotas
-  Fishing seasons
-  Closed areas
-  Gear restrictions
-  Port regulations



Control measures help ensure sustainable fisheries management and reduce illegal fishing activities.

# Surveillance (S)

Surveillance refers to inspection, observation, and enforcement activities used to detect violations and ensure compliance with fisheries laws.

## Examples of Surveillance Activities



Patrol vessels



Aircraft surveillance



Port inspections



Observer programmes



Boarding and inspection at sea



Satellite monitoring



Surveillance helps authorities **identify and stop illegal fishing operations.**





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# PORT STATE MEASURES (PSM)

Even if illegal fishing takes place at sea, fish often need to be landed at ports before entering markets.

Therefore, **ports play a critical role** in combating **IUU Fishing**.





# What is PSM?



**Port State Measures (PSM)** are actions taken by port States to prevent vessels involved in Illegal, Unreported and Unregulated (IUU) Fishing from using ports and entering seafood markets.



PSM mainly focuses on **foreign fishing vessels** and **fishing-related vessels** (carrier, transshipment, and support vessels are relevant to fishing operations) entering ports.

## PSM aims to:



**Prevent** illegal catches from being landed



**Improve** fisheries monitoring and inspection



**Strengthen** international cooperation against IUU Fishing.





# Why is PSM Important?



Ports are **key checkpoints** in the seafood supply chain.

## Without effective port controls:



Illegally caught fish  
may enter markets



Seafood traceability  
becomes difficult



IUU operators may profit  
from illegal activities



# Agreement on Port State Measures (PSMA)



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The Agreement on Port State Measures (PSMA) is the first **legally binding international agreement** specifically designed to combat **IUU Fishing** through effective port State measures.



Adopted by FAO in 2009, PSMA aims to prevent vessels involved in IUU Fishing from entering ports, landing catch, and accessing markets.



# Types of State Responsibilities in Fisheries Management



## Flag State



The State whose flag a vessel is entitled to fly and which is responsible for regulating and controlling its vessels.



## Port State



The State that exercises authority over foreign vessels entering or using its ports through inspection and enforcement measures.



## Coastal State



The State that has sovereign rights and jurisdiction to manage and conserve marine resources within its maritime zones.



These complementary responsibilities strengthen global fisheries governance and help promote the sustainable use of the world's oceans.





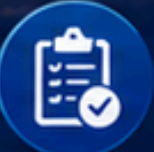



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United Nations

# Global Information Exchange System (GIES)

The Global Information Exchange System (GIES) is an online platform developed by FAO to support the implementation of the Port State Measures Agreement (PSMA).

## GIES facilitates:

-  **Information sharing** among States
-  **Communication** between port, flag, and coastal States
-  **Reporting** of port inspections and decisions, and
-  **Cooperation** to combat IUU Fishing.



# TRACEABILITY SYSTEM



Traceability allows us to know **where** seafood comes from and whether it was harvested **legally and responsibly.**



# WHAT IS TRACEABILITY?

Traceability refers to the ability to track fish and fishery products throughout the supply chain, from harvesting to final consumption.



## THE SEAFOOD SUPPLY CHAIN

### A TRACEABILITY SYSTEM HELPS ENSURE THAT SEAFOOD PRODUCTS ARE:



#### LEGALLY CAUGHT

Complies with fisheries laws and regulations



#### PROPERLY DOCUMENTED

Accurate records at every step.



#### TRANSPARENTLY TRADED

Clear and verifiable information shared across the supply chain

### FROM OCEAN TO PLATE, EVERY STEP CAN BE TRACED.



#### SEAFOOD TRACEABILITY

Scan the QR code to view the product journey



- Species: Skipjack Tuna
- Caught: 12 May 2024
- Vessel: TL1234A
- Area: FAO 71
- Landing Port: Port X
- Processor: Seafoods Ltd.
- Shipped to: Importer Co.
- Retailer: Ocean Market

VERIFIED



#### 1. HARVESTING

Fish are caught in accordance with the law and recorded



#### 2. LANDING

Catch is landed and documented at the port



#### 3. PROCESSING

Products are processed with batch and facility information recorded



#### 4. PACKAGING

Products are labeled with traceability information



#### 5. TRANSPORTATION

Shipments are tracked during transit to ensure integrity



#### 6. DISTRIBUTION

Products are delivered to buyers and retailers



#### 7. CONSUMPTION

Consumers can access information and trust what they buy

## TRACEABILITY SYSTEMS HELP TO:



#### PREVENT ILLEGALLY CAUGHT FISH FROM ENTERING MARKETS

Protects marine resources and honest fishers



#### IMPROVE SEAFOOD TRANSPARENCY

Provides clear, verifiable information at every step



#### SUPPORT FISHERIES LAW ENFORCEMENT

Helps authorities detect and deter illegal activities



#### STRENGTHEN CONSUMER CONFIDENCE

Builds trust through accountability and reliability



#### FACILITATE INTERNATIONAL SEAFOOD TRADE

Meets global requirements and opens market access



# The Role of SEAFDEC in Combating IUU Fishing



**Southeast Asian Fisheries Development Center (SEAFDEC)** is a regional or intergovernmental organization established to promote sustainable fisheries development and strengthen regional cooperation in Southeast Asia.

## SEAFDEC Supports IUU Countermeasures Through:



**Training and  
Capacity Building**



**Technical  
Assistance**



**Fisheries Policy  
and Legal Support**



**Regional Dialogue  
and Cooperation**



**Information Sharing  
and Knowledge  
Exchange**



**Support for MCS,  
Traceability, and  
Fisheries Governance**

# Project Implementation Relevant to Combat IUU Fishing in Southeast Asia by SEAFDEC



2024 - 2027

ASEAN-JICA Capacity Building Project on IUU Fishing Countermeasures in Southeast Asia



2024 - 2028

Sustainable Management of Fisheries, Marine Living Resources and their Habitats in the Bay of Bengal Region for the Benefit of Coastal States and Communities



2025 - 2029

Enhancement of Regional Cooperation and Human Resource Development to eliminate IUU Fishing

**giz**

2025 - 2027

Strengthening Regional Capacity to Combat IUU Fishing and Promote Safe, Fair and Sustainable Fisheries in Southeast Asia

**Canada**

2025 - 2026

Strengthening Regional Fisheries Governance and Technology Integration to Combat IUU Fishing in the Indo-Pacific

# SEAFDEC's Role in Supporting ASEAN Member States in Combating IUU Fishing



Developing the Regional Fishing Vessels Record (RFVR) to enhance transparency and monitoring of fishing fleets



Promoting the use of the Electronic ASEAN Catch Documentation Scheme (eACDS) for traceability of fishery products



Electronic ASEAN Catch Documentation Scheme (eACDS)



Electronic ASEAN Catch Documentation Scheme (eACDS)



Regional Fishing Vessels Record (RFVR)



# Regional Fishing Vessels Record (RFVR)

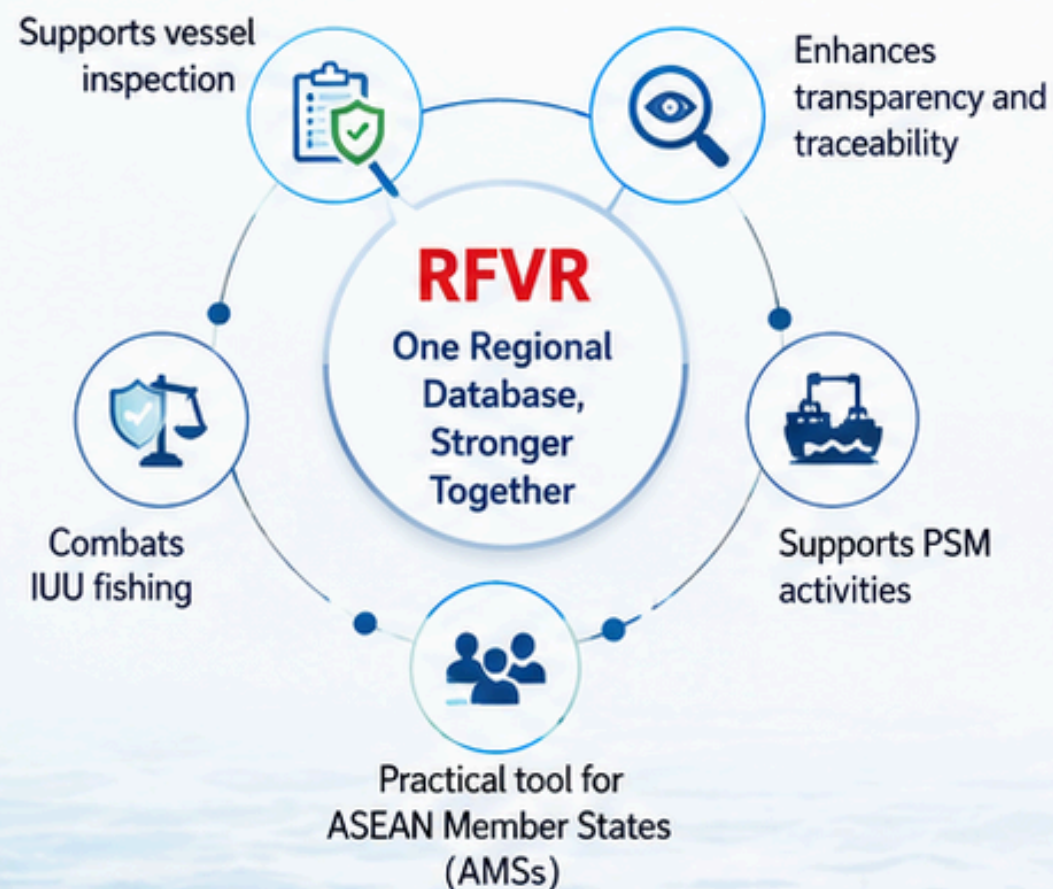
RFVR is a regional fishing vessel database designed to support vessel inspection and combat **IUU fishing** in Southeast Asia.

It enhances **transparency** and **traceability**, particularly in supporting inspection related to **Port State Measures (PSM)** activities.

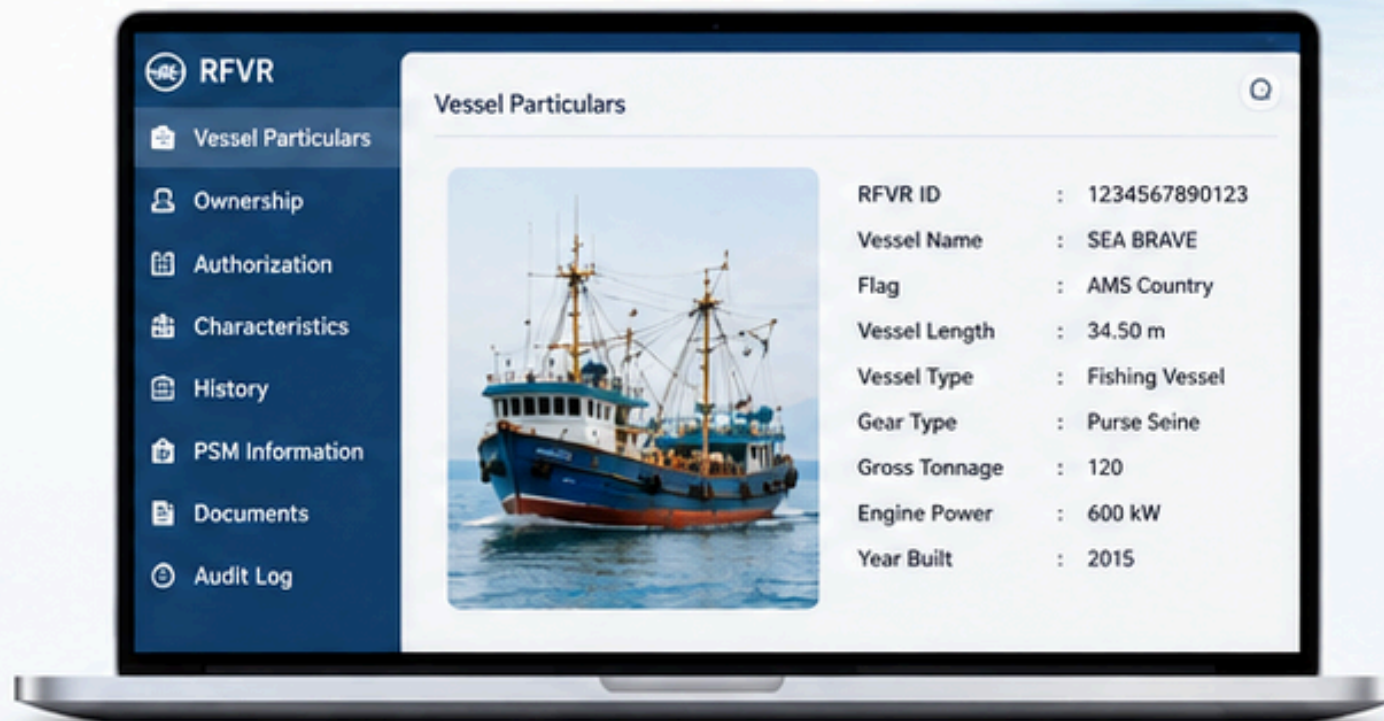
The database serves as a **practical tool** for ASEAN Member States (AMSs) to verify vessel information and take corrective actions when necessary.



## WHAT IS RFVR?



## RFVR DATABASE



### USED BY ASEAN MEMBER STATES (AMSs)



- RFVR originally covered fishing vessels **24 meters in length and over.**
- Includes **28 Key Data Elements (KDEs).**
- Since **1 November 2021**, AMSs have been able to update RFVR information independently.
- The database is currently being expanded to include vessels **less than 24 meters in length.**

**RFVR CONTRIBUTES TO**

- Strengthening regional cooperation
- Improving compliance and governance
- Enhancing inspection efficiency
- Supporting sustainable fisheries in Southeast Asia

# Electronic ASEAN Catch Documentation Scheme (eACDS)



A prototype software for enhancing a **traceability** of fish and fishery products from fishing to plate.



Implementing eACDS required **good governance** in fisheries management: port control, catch reporting, recording movement of fish in the supply chain, export-import, etc.



From Fishing to Plate: Traceable, Transparent, and Trustworthy



## eACDS Applications

### 1. eACDS on Web-based Application



#### 1.1 Vessel Owner/ Fishing Master

- Request Port-out and Port-in



#### 1.2 Processor

- Request Statement of Catch
- Request Catch Certificate Document



#### 1.3 Officer

- Approve Port-out / Port-in and Verify Weight
- Issuance Catch Declaration (CD)
- Issuance Movement Document (MD)
- Issuance Statement of Catch (SC)
- Issuance Catch Certificate Document (CC)
- View Reports and Manage KDEs

### 2. eACDS on Mobile Application



#### 2.1 eACDS-Catch Report App.

- Fishing Master/  
Vessel Owner



#### 2.2 eACDS-Market App.

- Seller and Buyer

# Countries Implementation of eACDS

2017



**Brunei Darussalam**

**1** Fishing Port, **50** vessels

Muara Port

2018



**Yangon, Myanmar**

**3** Fishing Ports, **100** vessels

- Aung Phyo Myat Jetty
- Ei Phyo Yadana Jetty
- Ngwe Pinle Jetty

2018



**Binh Thuan, Viet Nam**

**4** Fishing Ports, **50** vessels

- Phan Thiet Fishing Port
- Lagi Fishing Port
- Phu Hai Fishing Port
- Phan Ri Cua Fishing Port

2019



**Malaysia**

**2** Fishing Ports, **30** vessels

- Kelantan
- Kuantan

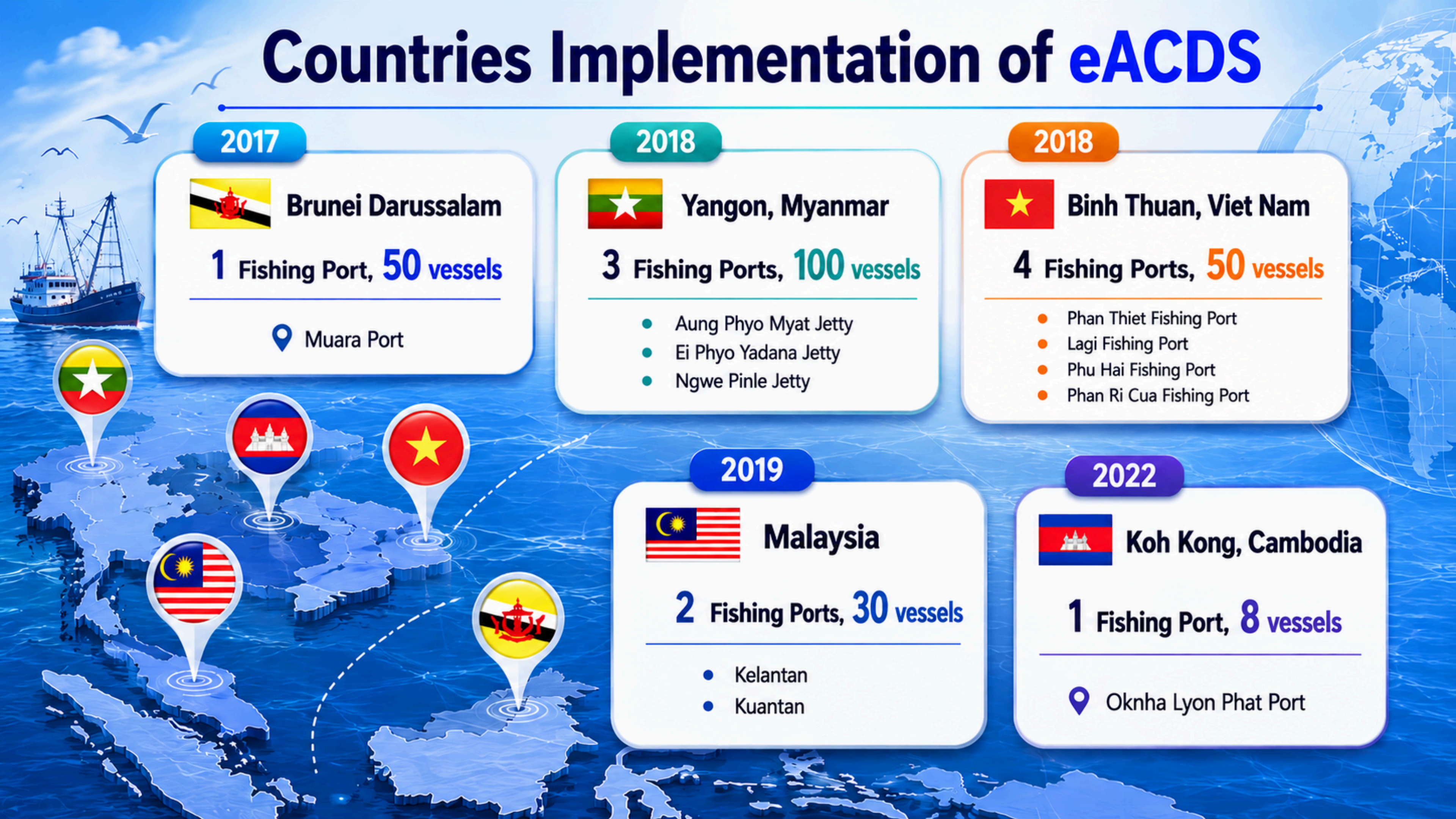
2022



**Koh Kong, Cambodia**

**1** Fishing Port, **8** vessels

Oknha Lyon Phat Port



- **Organizing training programs and capacity-building activities** for personnel involved in IUU Fishing prevention
- **Supporting the implementation of the Port State Measures Agreement (PSMA)** to prevent illegally caught fish from entering ports
- **Assisting in the development of regional guidelines**, such as ASEAN Guidelines for Preventing the Entry of IUU Fish and Fishery Products into the Supply Chain





## Conclusion

**Illegal, Unreported, and Unregulated (IUU) Fishing is not just a violation of fisheries laws, but a major threat to marine resources, ecosystems, the economy, and global food security.**

**Addressing this challenge requires the cooperation of all stakeholders, the implementation of effective measures, and shared awareness to protect our oceans and ensure the long-term sustainability of the fisheries sector.**



**Thank You / Q&A**