



## The Indo-Pacific Maritime Domain Awareness

**For Prelims:** [Indo-Pacific Maritime Domain Awareness \(IPMDA\)](#), [Indian Ocean Region \(IOR\)](#), [Goa Maritime Conclave \(GMC\)](#), [QUAD Grouping](#), [Indian Navy's Information Fusion Centre for Indian Ocean Region \(IFC-IOR\)](#)

**For Mains:** Importance of institutions like QUAD in promoting and strengthening a rule-based world order.

**Source:** TH

### Why in News?

Recently, the Chief of the Naval Staff Admiral addressed the fourth edition of the [Goa Maritime Conclave \(GMC\)](#) where he stressed that building networks and partnerships like [the Indo-Pacific Maritime Domain Awareness \(IPMDA\)](#) would be instrumental in ensuring the security and stability of the [Indian Ocean Region \(IOR\)](#).

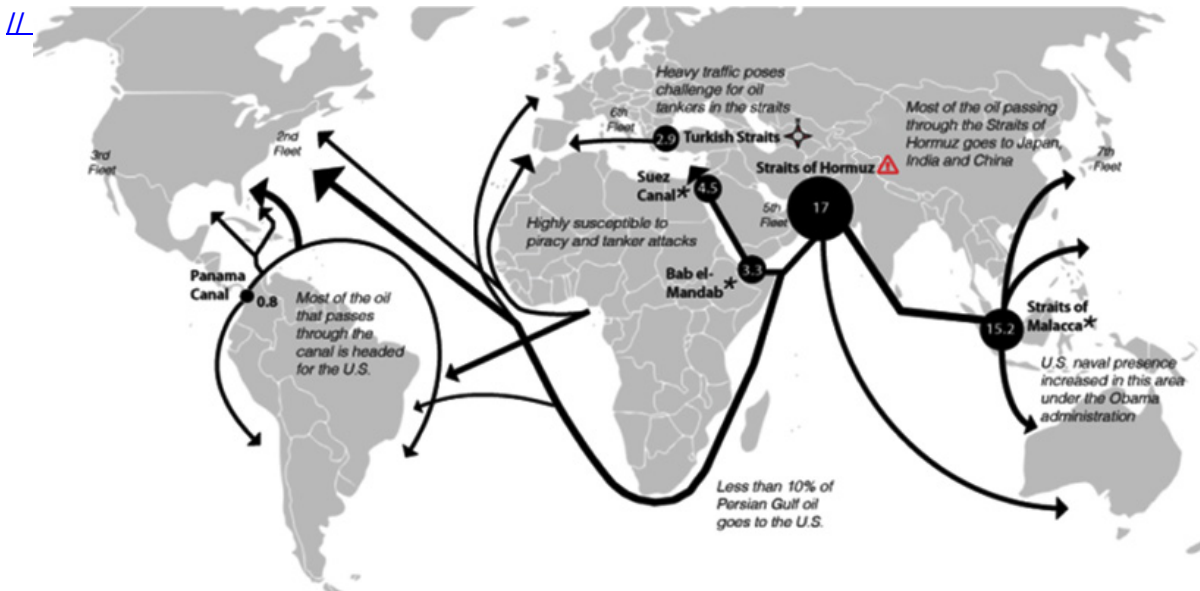
### What is IPMDA?

- **About:**
  - The IPMDA, introduced by the [Quad group](#) (consisting of India, Australia, Japan, and the US) at the Tokyo summit, 2022, aims to monitor "**dark shipping**" and create a **more comprehensive and precise real-time maritime overview** of partner nations' waters.
    - It focuses on **integrating the Pacific Islands, Southeast Asia, and the Indian Ocean region (IOR) in the Indo-Pacific.**

### Dark Shipping

- Dark shipping is a term used to describe a vessel operating with its **Automatic Identification System (AIS)** turned off .
- AIS transponder systems transmit a ship's position at sea, alongside identification data and other useful information that vessels and maritime authorities can reference.
  
- **Objective:**
  - The initiative is a significant endeavour aimed at enhancing the security and stability of the [Indo-Pacific region](#), which holds a central place in global geopolitics.
    - It seeks to establish a comprehensive system for monitoring and securing maritime activities in the Indo-Pacific, ensuring the safety of [critical sea lines of communication](#), and promoting cooperation among like-minded nations in the region.
- **Importance of Navy:**
  - To secure the IOR and Indo Pacific, the importance of the Navy cannot be emphasized enough, where force modernisation is the need of the hour.
    - The Navy currently has over 140 ships and submarines and is targeting a 170 to

180 Navy by 2028, and aim is for the Navy to be fully **AtmaNirbhar** by 2047.



## What Has Been the Progress and Achievements of GMC?

- **Collaboration Among Navies:**
  - The Conclave has successfully **brought together navies from the Indian Ocean region to collaborate on addressing common maritime challenges**. This cooperation has led to coordinated efforts in responding to natural disasters, conducting joint exercises, and sharing critical maritime information.
- **Effective Response to Piracy:**
  - Establishment of robust mechanisms for information sharing, **such as through [Information Fusion Centre for the Indian Ocean Region \(IFC-IOR\)](#) at Gurugram, has greatly improved the situational awareness in the region**. Navies have been able to respond more effectively to maritime threats, piracy, and other security concerns.
- **Improving MDA:**
  - Sharing of intelligence and information has also **contributed to enhanced MDA**. This has not only improved maritime security but also **allowed for better management** of marine resources and environmental protection.
- **Adopting Common Maritime Priorities:**
  - The last edition of GMC saw all Members unanimously adopt the '**Common Maritime Priorities (CMPs)**', which signaled the common approach of all Members to find regional solutions to regional problems.

## What are the Major Challenges Related to the Indian Ocean Region?

- **Geopolitical Competition:** The Indian Ocean region is a hotspot for **geopolitical competition among major powers** and regional actors. Its location allows for power projection and influence over regional affairs.
  - The presence of key choke points such as the **[Strait of Hormuz](#), the [Bab el-Mandeb Strait](#), and the [Malacca Strait](#)** further enhances its strategic significance.
- **China's Militarization Move:** China has been a challenge to India's interests and stability in the Indian Ocean. India's neighbors are receiving military and infrastructural assistance from China, including submarines for Myanmar, and its **overseas military base in [Djibouti \(Horn of Africa\)](#)**.
- **Maritime Security Threats:** The IOR is vulnerable to various maritime security threats, including piracy, smuggling, illegal fishing, and terrorism. Also, the vastness of the Indian Ocean makes it challenging to monitor and secure its maritime domain effectively.
- **Environmental Challenges:** **Climate change, rising sea levels, [coral reef degradation](#), and marine pollution** are significant environmental challenges in the IOR. These issues affect coastal communities, marine ecosystems, and the livelihoods of millions of people.

## Way Forward

- **Driving Blue Economy Initiatives:** The IOR is rich in marine resources, and leveraging the blue economy can drive sustainable economic growth. There is a need to **include promoting renewable energy generation from ocean resources, supporting sustainable fisheries, developing marine biotechnology, and fostering [eco-tourism](#).**
- **Maritime Security Collaboration:** Given the strategic importance of the IOR, enhancing maritime security is crucial.
  - There is a need to involve strengthening **information-sharing mechanisms, leveraging technology for maritime domain awareness**, promoting joint naval exercises and patrols, and fostering cooperation in countering maritime threats such as piracy, illegal fishing, and smuggling.
- **Climate Change Resilience:** The IOR is highly vulnerable to the impacts of climate change, including rising sea levels, extreme weather events, and ocean acidification.
  - Innovative strategies could focus on **implementing climate-resilient infrastructure, developing early warning systems, promoting sustainable coastal management practices**, and facilitating regional cooperation for climate change adaptation and mitigation.

## UPSC Civil Services Examination, Previous Year Questions (PYQs)

### Prelims

**Q1. With reference to 'Indian Ocean Rim Association for Regional Cooperation (IOR-ARC)', consider the following statements: (2015)**

1. It was established very recently in response to incidents of piracy and accidents of oil spills.
2. It is an alliance meant for maritime security only.

**Which of the statements given above is/ are correct?**

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Ans: (d)**

### Mains

**Q.** With respect to the South China sea, maritime territorial disputes and rising tension affirm the need for safeguarding maritime security to ensure freedom of navigation and overflight throughout the region. In this context, discuss the bilateral issues between India and China. **(2014)**