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## **BLUE ECONOMY: WAYS FORWARD FOR SUSTAINABLE DEVELOPMENT OF IONS MEMBER STATES**

*Focus: Cooperation on Humanitarian Assistance and Disaster Relief (HADR): Providing Assistance, Protection, and Preservation of the Maritime Environment in the Indian Ocean Region (IOR)*

### **INTRODUCTION**

The Indian Ocean Region (IOR) serves as a vital hub within the global maritime supply chain, underpinning the structural stability of international trade and energy networks—fundamental drivers of economic interconnectedness and geopolitical relations. Its geostrategic importance is underscored by the fact that approximately 80% of the world's seaborne oil trade and nearly one-third of all bulk cargo transit through its maritime routes (UNCTAD, 2023; IEA, 2022). This significant maritime traffic via its Sea Lanes of Communication (SLOCs) not only underscores the IOR's central role in global economic stability but also designates it as a strategic location where disruptions—whether induced by natural disasters, geopolitical tensions or maritime insecurity—can produce ripple effects across global markets and geostrategic balances (Kapoor & Ranjan, 2021). Consequently, this strategic importance further amplifies the IOR's relevance to global commerce and enhances its stature as a theater for naval diplomacy, maritime cooperation and regional security initiatives.

This duality of strategic importance and inherent vulnerability makes the IOR a complex maritime domain where economic interests intersect with security governance and strategic rivalry. In this context, the urgency for cooperative, adaptive and forward-looking maritime strategies is clear. It is against this backdrop that the Indian Ocean Naval Symposium (IONS) emerges as a critically relevant platform for regional maritime governance.

Established in 2008 as a voluntary and inclusive forum, IONS is conceived as a platform for naval diplomacy and capacity-building. It serves as a unique multilateral mechanism that complements existing regional architecture by addressing non-traditional security challenges, including Humanitarian Assistance and Disaster Relief (HADR) (IONS,

2024), Maritime Domain Awareness (MDA) and the sustainable management of maritime resources. In an increasingly contested and interdependent maritime environment, IONS provides a credible platform for aligning national interests with collective maritime security and governance objectives. Simultaneously, the frequency and severity of natural disasters and humanitarian crises—particularly in coastal and maritime regions—have necessitated robust HADR frameworks. The intersection of these two domains presents a critical opportunity for policymakers to create integrated strategies that ensure both economic development and disaster preparedness.

In navigating this intricate and contested maritime landscape, the Blue Economy has emerged as a transformative strategic paradigm—reframing the ocean not merely as a conduit for trade or theatre for security competition, but as a vital and renewable source of sustainable development. The Blue Economy—defined by the World Bank (2017) as the sustainable use of ocean resources for economic growth, livelihoods and ecosystem health—is a strategic imperative for the IOR, where maritime vulnerabilities intersect with developmental needs. It advocates for the responsible and equitable utilisation of ocean resources, promoting a holistic balance between economic prosperity, environmental stewardship and social inclusivity (Patil et al., 2016). Its operationalisation requires IONS member states to move beyond fragmented national policies towards a more integrated, coordinated and inclusive regional framework for maritime resource governance. Such an approach is essential not only to enhance economic resilience and ecological security but also to stabilise the broader strategic environment through cooperative maritime stewardship.

## **AIM**

This essay aims to examine the strategic convergence between the Blue Economy and regional maritime cooperation in the IOR, with a particular focus on the role of the IONS as a multilateral maritime platform. It explores how naval-led initiatives—especially in HADR, environmental stewardship and maritime capacity-building—can advance sustainable development, enhance regional resilience and address the growing complexity of maritime security challenges in the IOR.

## **DISCUSSION**

### **THE TRANSFORMATIVE ROLE OF IONS IN THE IOR**

As the IOR gains strategic significance as a key channel for global trade and energy flows, IONS has transitioned from a consultative forum to a strategic facilitator of regional maritime cooperation. It exemplifies functional multilateralism, characterized by a consensus-driven, non-hierarchical structure that fosters equitable participation and shared responsibility. By bringing together navies with diverse capabilities and strategic orientations, IONS fosters trust, enhances interoperability, and enables coordinated responses to common issues, such as sea-lane security, maritime safety, and disaster response (Ho, 2019; Bueger & Edmunds, 2021).

IONS is redefining maritime security cooperation in the IOR by bridging strategic divides through a collaborative framework based on dialogue and practical cooperation. Its inclusive approach enables navies with different capacities to enhance interoperability and engage in collective actions outside formal alliances. Beyond just a diplomatic platform, IONS has emerged as an operational entity, harmonising regional naval perspectives on maritime security, ecological stewardship, and sustainable development. Through capacity-building initiatives, IONS is embedding sustainability into its strategic discussions, reflecting the interdependence between maritime security and Blue Economy priorities (Brewster, 2020).

However, IONS faces structural limitations that constrain its strategic effectiveness. Its non-binding, consensus-based model—while fostering inclusivity—can dilute commitment and slow implementation of key initiatives. Additionally, joint protocols on HADR or coordinated environmental measures have seen uneven uptake and geopolitical frictions among some member states have occasionally hindered unified decision-making (Bueger & Edmunds, 2021). Moreover, IONS' navy-centric orientation, while instrumental in addressing traditional security challenges, limits its ability to engage in the regulatory, developmental and economic aspects of ocean governance. Without stronger institutional linkages or enhanced mandates, IONS risks remaining aspirational rather than actionable in catalysing sustainable maritime development (Brewster, 2020; Kraska, 2011).

To realise its full potential, IONS must evolve into a more structured and sustained mechanism of maritime engagement. This may include formalising coordination cells, standardising procedures and integrating more closely with complementary regional bodies such as the Indian Ocean Rim Association (IORA). Such synergy could enhance policy alignment, operational readiness and cross-sector cooperation—enabling IONS to support not only regional stability but also long-term economic and ecological resilience.

While IONS has made significant progress in fostering regional naval cooperation and trust, its enduring impact will hinge on its capacity to institutionalise efforts, adapt to multidimensional maritime challenges and serve as a decisive instrument for cooperative maritime governance in the IOR.

## **DEFINING THE BLUE ECONOMY: CONTESTED CONCEPTS AND STRATEGIC IMPLICATIONS FOR IONS MEMBER STATES**

The concept of the Blue Economy, which emphasises the sustainable use of ocean resources for economic growth and ecosystem health, has gained significant traction—emerging as the most widely adopted term among a range of new maritime sustainability frameworks. While definitions vary, shaped by national interests, developmental priorities and strategic maritime concerns, the Blue Economy broadly refers to a sustainable ocean-based economic model that balances economic development with the preservation of marine ecosystem health, particularly in coastal and ocean-linked sectors. For member states of the IONS, these divergent understandings carry significant implications. It promotes the responsible utilisation of ocean resources to drive economic growth, enhance livelihoods and create jobs, all within the bounds of long-term environmental integrity (LSE, 2024; World Bank, 2017).

Broader interpretations of the Blue Economy extend beyond economic metrics to encompass ocean stewardship, poverty alleviation, marine scientific research, education and capacity-building. However, its conceptualisation remains fluid—shaped by differing national priorities, institutional capacities and policy frameworks across the IOR (Silver et al., 2015). This definitional ambiguity presents both a challenge and an opportunity: while the absence of a universally accepted framework can complicate policy harmonisation, it also offers regional

platforms such as the IONS, a strategic opening to shape a shared understanding rooted in collective maritime interests to harness maritime resources for economic growth, address pressing challenges such as climate change, resource security and geopolitical competition.

For IONS, which operates at the intersection of security cooperation and maritime governance, the Blue Economy provides a compelling normative anchor. It enables member navies to support not only maritime safety and HADR, but also sustainable development objectives—advancing a vision of security that is integrative, preventive and capacity-oriented. In doing so, IONS can help institutionalise regional approaches that reconcile national economic aspirations with the imperative of safeguarding the IOR's marine ecosystems for future generations to navigate the complex intersection of economic development, maritime governance and regional security.

## **THE STRATEGIC SIGNIFICANCE OF THE BLUE ECONOMY FOR IONS MEMBER STATES**

Situated along some of the world's most critical maritime trade routes, IONS member states collectively command vast EEZs which are endowed with significant rich in both living and non-living resources. While these marine endowments present significant economic opportunities, their sustainable and secure exploitation requires coordinated maritime governance and stability across the IOR. For many IOR countries, the Blue Economy offers a structural approach to addressing developmental inequalities, supporting economic diversification, enhancing food and energy security, and boosting adaptive capacities to climate-related disruptions (Patil et al., 2016; Virdin et al., 2021). In this context, IONS, as a voluntary maritime cooperation mechanism, plays a pivotal role by fostering operational interoperability, strategic dialogue and trust among regional naval forces. Beyond its traditional security remit, IONS holds untapped potential as a platform for advancing broader regional priorities—particularly in integrating Blue Economy principles and promoting sustainable ocean governance. Leveraging its existing structure and convening power, IONS can help harmonize national maritime strategies, enhance collective MDA and support the development of a rules-based maritime order across the IOR.

Given the IOR's status as a strategic maritime corridor—facilitating a significant proportion of global trade and energy flows—its long-term stability is intrinsically tied to the sustainable management of ocean resources and the resilience of its coastal economies (Wright, Rochette, & Druel, 2020). Ocean sectors are no longer peripheral; they are increasingly central to national economic strategies. However, unlocking their full potential requires more than domestic policy innovation. It depends on strengthened regional governance, institutional coordination and the ability to mitigate shared externalities such as illegal exploitation, resource depletion and environmental degradation (World Bank, 2017).

In this changing landscape, the Blue Economy has shifted from a developmental ideal to a strategic necessity for IONS member states. Strategically, the Blue Economy compels IONS member states to rethink maritime security through a broader, non-traditional lens. Issues such as illegal, unreported and unregulated (IUU) fishing, marine pollution and climate change-induced coastal vulnerabilities now demand as much attention as conventional threats like piracy or maritime terrorism. This shift reinforces the need for integrated maritime domain awareness, shared surveillance infrastructure and cooperative naval operations—areas where IONS plays a catalytic role. Instead of merely promoting marine resource extraction, IONS has to combine ecological sustainability with economic strategies—positioning ocean-based sectors as tools for long-term resilience and geo-economic competitiveness.

Furthermore, the Blue Economy provides a normative framework through which IONS member states can align their national maritime strategies with international legal instruments, particularly the United Nations Convention on the Law of the Sea (UNCLOS). This alignment is critical in a region witnessing intensified great power rivalry, contested maritime claims and increasing militarization. By advancing a rules-based approach to maritime governance underpinned by Blue Economy principles, IONS member states can collectively push back against coercive maritime behaviours and assert their agency over regional maritime norms.

Then again, the IOR's prominence also renders it increasingly vulnerable to geopolitical competition, ecological degradation and uneven development capacities among its members. These vulnerabilities underscore the need to reconceptualise maritime security in broader, more integrative terms. The Blue Economy, therefore, has to be understood not just as a model for

growth, but as a framework for strategic autonomy, ecological stewardship and regional resilience in a highly interdependent maritime space.

IONS, with its multilateral structure and operational reach, is uniquely positioned to catalyse this shift. By bridging the gap between traditional naval security and sustainable ocean governance, it can align maritime cooperation with long-term development goals. To do so, IONS must recalibrate its agenda—embedding ocean stewardship, climate resilience and resource governance into its operational ethos. In doing so, it can foster meaningful synergy between maritime capability and regional sustainability, reinforcing its role as a strategic enabler in the IOR’s evolving security and development landscape.

The strategic significance of the Blue Economy for IONS states is twofold: it serves as a driver for sustainable economic growth and as a platform for strategic collaboration in a complex and contested maritime theatre. Realising its full potential, however, requires coherent national policies, inter-agency coordination and above all, a shared regional vision—one that IONS is uniquely positioned to cultivate through dialogue, trust-building and operational cooperation.

## **UNDERSTANDING HADR IN STRATEGIC MARITIME CONTEXTS**

In the evolving maritime security architecture of the IOR, HADR has transitioned from a secondary, reactive function to a strategically embedded capability with profound geopolitical and operational implications, a critical dimension of maritime strategy, particularly for the IONS member states. Its significance lies not only in alleviating human suffering but in reinforcing state legitimacy, maritime stability and regional cohesion. HADR operations now serve as instruments of soft power projection, multilateral engagement and trust-building—particularly among navies and maritime agencies operating in contested or disaster-prone waters. Given the region’s vulnerability to natural disasters, HADR operations are no longer peripheral tasks but central to naval readiness, regional cooperation and maritime diplomacy. Strategically, HADR is instrumental in maintaining the continuity of SLOCs, safeguarding critical coastal infrastructure and ensuring economic resilience in the face of environmental and man-made disruptions.

HADR intersects with broader maritime governance objectives, acting as a bridge between security and development paradigms. Its execution often involves multi-domain coordination—combining logistics, intelligence, medical aid, engineering assets and interoperable command structures—underscoring the necessity of pre-established frameworks and regional cooperation. As highlighted by Bateman and Bergin (2011), HADR in the maritime context must be understood not simply as a humanitarian tool but as a strategic function that enhances national influence, institutional trust and collective maritime preparedness. For regional forums such as the IONS, HADR provides a tangible pathway to operationalise security cooperation, integrate naval capacities and institutionalise non-traditional security roles in pursuit of long-term maritime resilience.

HADR has since evolved from local disaster relief to a complex, multidimensional effort shaped by climate change, coastal growth and maritime activity. The confluence of transboundary threats now demands a shift from reactive responses to proactive, doctrine-based frameworks built on interoperability, early warning and joint preparedness. This evolution reflects the urgent need for integrated, anticipatory approaches to safeguard vulnerable coastal zones in an era of escalating environmental volatility.

This shift has significantly deepened reliance on naval forces, inter-agency coordination and multinational mechanisms. It enables states with varying capacities to coordinate logistics, share best practices and conduct joint responses to crises in a manner that is politically neutral and diplomatically constructive. Importantly, HADR missions often serve as the most visible and immediate demonstration of naval utility to civilian populations, thereby reinforcing the role of maritime forces in human security.

Strategically, HADR also provides a low-friction entry point for fostering multilateralism in a geopolitically sensitive region. Navies, due to their inherent mobility, robust command-and-control structures and logistical reach, are uniquely positioned to lead and support complex HADR operations across maritime jurisdictions (Till, 2018). More than mere responders, they function as force multipliers—delivering immediate relief, restoring critical infrastructure and fostering post-disaster stability in affected regions.

Crucially, this operational complexity underscores that HADR is no longer a sporadic or episodic engagement, but a strategic continuum that demands long-term investment,

integrated planning, and sustained regional collaboration. Its centrality in maritime security now reflects a deeper recognition that the viability of the Blue Economy—and by extension, the stability of coastal societies—is inextricably linked to effective disaster preparedness and response. In this regard, HADR transcends its humanitarian origins, emerging as a core component of strategic maritime governance where security, sustainability and naval diplomacy converge.

## **HADR AS A PILLAR OF BLUE ECONOMY COOPERATION**

In the evolving maritime discourse, HADR is not only a strategic security function but increasingly a cornerstone of Blue Economy cooperation among IONS member states. The Blue Economy—premised on sustainable, inclusive ocean-based growth—relies heavily on the uninterrupted functioning of critical maritime sectors. As climate-related events and maritime disruptions grow in frequency and intensity, the interrelationship between HADR and the Blue Economy has become increasingly evident within the IONS framework, underscoring the need for rapid, coordinated and resilient response mechanisms. The ability of IONS member states to thrive within the Blue Economy is, therefore, intrinsically tied to their collective capacity for disaster preparedness, response and recovery. This alignment is not only strategic but also essential for sustaining regional maritime resilience and long-term economic viability.

Having evolved significantly from their traditional role as reactive, short-term humanitarian interventions, HADR capabilities have become a strategic enabler of Blue Economy resilience. In the IOR, where economic dependence on maritime industries is high and vulnerability to natural disasters is acute, HADR now forms a core component of regional maritime strategy. No longer peripheral, it is now a core operational capability crucial for protecting maritime trade routes (SLOCs), ocean-based industries and coastal infrastructure (Patil et al., 2020; Singh, 2019). For IONS member states, effective HADR responses are key to minimising disruptions that could otherwise cascade across national economies and undermine regional stability. The capacity to deliver timely and coordinated disaster response is essential not only for humanitarian reasons but also to prevent cascading disruptions across national economies—disruptions that can severely undermine trade, food security and regional stability (Rahman, 2021). For IONS member states, embedding HADR within national and

regional maritime strategies enhances both resilience and cooperative security, aligning with broader Blue Economy objectives aimed at sustainable and inclusive growth (UNCTAD, 2022).

Positioning HADR as a core pillar of the Blue Economy is increasingly critical amid escalating climate-induced disasters. Strategically integrating HADR into Blue Economy frameworks allows IONS member states to enhance maritime governance that supports both economic continuity and ocean health. Embedding disaster preparedness into development planning builds resilience to environmental shocks and reinforces regional stability. For IONS member states, strengthening cooperative HADR mechanisms is not merely a humanitarian obligation but a strategic investment in maritime security, economic interdependence and shared regional prosperity.

### **GAPS IN HADR IN THE IOR**

Despite the growing strategic importance of HADR as a strategic priority in the IOR, the current architecture for coordination and response among IONS member states remains fragmented and underdeveloped, undermining the effectiveness of regional disaster response and Blue Economy resilience. These gaps are institutional, operational and technological, reflecting uneven capacities, fragmented coordination and limited standardisation across member states. While IONS offers a valuable platform for dialogue and confidence-building, its HADR engagements are primarily limited to goodwill exercises and conceptual exchanges, lacking the institutional depth, operational continuity, and real-time interoperability necessary for effective regional disaster response.

One of the primary challenges in integrating Blue Economy objectives with HADR operations is the fragmented governance architecture that separates these domains. While Blue Economy initiatives are typically overseen by ministries of environment, fisheries or industry, HADR responsibilities are often managed by defence or national disaster management authorities. This institutional siloing creates significant barriers to cross-sectoral coordination, joint planning and integrated budgeting, ultimately undermining the efficiency and strategic coherence of maritime resilience efforts. The absence of a unifying national framework further exacerbates the challenge, as policy disjunctions delay crisis response and dilute the impact of

disaster preparedness measures (UNESCAP, 2022). These challenges are especially acute in the context of the IOR's heightened vulnerability to climate-induced and anthropogenic maritime disasters, which disproportionately affect developing and low-income littoral states that rely heavily on ocean-based sectors for economic sustainability (Patil et al., 2016).

As a voluntary maritime cooperation platform, several structural and systemic limitations undermine the effectiveness of HADR coordination within IONS. Chief among these are the absence of a permanent coordination mechanism, non-standardised operating procedures and significant asymmetries in naval capability, logistical readiness and institutional capacity across member states. Disparities in communication infrastructure, legal frameworks and maritime domain awareness further complicate joint responses, resulting in slow mobilisation and operational incoherence during disaster events (Mohan, 2021).

The lack of an institutionalised HADR doctrine under IONS, combined with irregular joint training and limited trust in information sharing, exposes the region to cascading strategic risks. These include prolonged economic recovery, ecological degradation and weakened public confidence in regional crisis response mechanisms. Without targeted reforms, IONS member states will remain ill-prepared to respond effectively to the increasing scale, frequency and complexity of maritime disasters.

Addressing these gaps requires a fundamental transformation in how HADR is conceptualised and operationalised within IONS. First, IONS must transition from a consultative forum into a functional enabler of multilateral HADR readiness. This could be achieved through the establishment of a Regional Maritime HADR Coordination Centre (RMHCC)—tasked with maintaining an inventory of deployable assets, harmonising SOPs, facilitating real-time information exchange and coordinating multinational response operations.

Second, the development of a jointly endorsed Integrated HADR Doctrine is essential. This doctrine should standardise deployment protocols, legal frameworks, civil-military coordination and environmental safeguards. Regular, institutionalised multinational HADR exercises must also be conducted to foster interoperability, build trust and strengthen regional response capabilities.

Finally, IONS could deepen partnerships with organisations such as the IORA and the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) to enhance legitimacy, align with global best practices and expand the scope of humanitarian logistics and planning.

Ultimately, addressing these gaps requires a shift from ad hoc cooperation to structured, rules-based engagement. Embedding HADR as a foundational component of maritime governance within IONS is not just a humanitarian imperative—it is a strategic necessity. By institutionalising HADR cooperation, IONS can help secure the region's Blue Economy, safeguard coastal populations and reinforce the credibility of multilateral maritime security in the IOR. For IONS to remain relevant, it must evolve beyond symbolic exercises into a mechanism that delivers tangible regional outcomes.

## **NAVIES AS STRATEGIC ENABLERS IN HADR: BEYOND CONVENTIONAL RESPONSE**

In the evolving security landscape of the IOR, the navies of IONS member states are increasingly viewed not only as traditional warfighting institutions but as strategic enablers in HADR. This transformation reflects a broader shift in maritime doctrine, where the role of naval forces extends beyond conventional deterrence and power projection to include non-traditional security functions aligned with the principles of human security and Blue Economy resilience (Rahman, 2021). Navies are no longer merely first responders in HADR operations—they are evolving as strategic enablers and architects of resilience within the maritime disaster response ecosystem. Their unique positioning is not solely derived from their inherent mobility and logistical reach, enabling them to respond effectively to diverse disruptions, but also from their ability to project stability, orchestrate multi-domain coordination and serve as the backbone of regional disaster governance in the maritime commons.

Unlike other security actors, navies possess command-and-control flexibility, scalable force packages and embedded medical and engineering capabilities that can be rapidly tailored to the specific demands of any disaster scenario. More importantly, naval forces routinely

operate in contested, degraded and complex environments, offering a natural advantage in navigating the chaos and uncertainty that characterise large-scale humanitarian crises.

In the IOR, IONS navies have consistently proven their operational value in HADR—from the rapid multinational response to the 2004 tsunami to more recent coordinated actions during cyclones, maritime accidents and pandemic-related logistical operations. However, these successes, while commendable, reflect an underutilised strategic potential. Navies remain trapped within a reactionary paradigm, constrained by fragmented interoperability, siloed communication frameworks and the absence of pre-emptive operational architectures that could enable anticipatory response and resilience-building before disasters strike.

To fully realise their potential, IONS navies must now transcend the role of episodic responders and assume leadership in shaping a proactive, network-centric HADR construct—integrating naval diplomacy, real-time data sharing, pre-positioned assets and harmonised standard operating procedures. This demands not just joint exercises but the institutionalisation of naval-led disaster governance frameworks that can outpace the speed of disruption in the IOR. In this emerging model, the navy is not just a responder—it is a strategic convenor, an enabler of cross-sectoral synergies and a critical node in advancing regional stability, development and maritime governance.

## **RECOMMENDATIONS**

### **STRATEGIC ROADMAP FOR A NAVAL-LED HADR ARCHITECTURE IN THE IOR**

The intensifying frequency, complexity, and cross-border nature of disasters in the IOR—exacerbated by climate change, dense maritime traffic, and fragile coastal infrastructure—have outpaced traditional, reactive disaster response models. The IONS is uniquely positioned to lead a transition toward a proactive, institutionalised and naval-led HADR framework. This approach redefines HADR as a forward-deployed, multidimensional capability embedded in the region's maritime security architecture. To build such a system, IONS must initiate a series of mutually reinforcing policy, operational, and institutional actions:

- **Establish a Permanent Naval HADR Task Force (HADR-PAC)**. IONS should create a rotational, pre-designated task force comprising amphibious vessels, hospital ships and logistics support platforms contributed by member states. Configured with modular humanitarian payloads and autonomous systems, this standing force will enable immediate activation without the need for ad hoc political clearance, ensuring rapid, rules-based response during emergencies (Prabhakar, 2016; Djalal, 2020).
- **Operationalise a Regional HADR Coordination Cell (RHCC)**. A permanently staffed RHCC under IONS should serve as the command-and-control hub for disaster planning, asset tracking and joint interoperability. Staffed by naval liaison officers from each member country, the RHCC would facilitate:
  - Pre-authorized mobilisation protocols to enable rapid deployment of naval assets during emergencies.
  - Integrated logistics and task allocation planning to improve operational efficiency.
  - Real-time communication and situational awareness across forces to enhance multi-navy cohesion during disaster response.

This institutional anchor transforms HADR from sporadic deployments to a sustained, regionally embedded capacity allowing for pre-disaster resilience and swift, coordinated multinational responses (Bateman, 2021).

- **Develop and Ratify a Multilateral Agreement on Naval Disaster Response (MANDR)**. IONS should lead negotiations to establish a legally binding framework codifying:
  - Cross-border HADR permissions (e.g., port access, overflight rights and SOFA protocols).
  - Legal norms for coordination with civilian authorities.
  - Common operating procedures aligned with UN Oslo Guidelines and ASEAN's AHA Centre.

This agreement will remove political and legal frictions during crisis response, enabling swift and structured naval deployment (Lele & Prabhakar, 2012).

- **Create Distributed Maritime Logistics Nodes and Pre-Positioned Stockpiles.**

Regional supply depots should be established at key chokepoints (e.g., Port Blair, Colombo, Mombasa and the Seychelles) to store relief materials, engineering kits, and fuel stocks. Modular floating platforms and civil-military access agreements will increase logistics agility and reduce time-to-response (Ray & Nair, 2023).

- **Build a Multi-Tiered HADR Financing Model.** IONS should launch a regional HADR Trust Fund supported by:

- GDP-scaled member contributions.
- External donor support (UNDP, IFRC, development banks).
- Potential maritime industry levies (e.g., disaster resilience surcharges on shipping).

This model ensures predictable, sustainable financing for both operations and capacity-building (Kraska, 2011).

- **Institutionalise Joint Preparedness Mechanisms and Exercises.** IONS should mandate annual multinational HADR exercises that involve naval and civilian actors.

These should include:

- Scenario-based crisis simulations.
- Early warning and risk assessment systems.
- Contingency planning and procedural drills.

Such initiatives foster interoperability, trust and alignment across participating states (Ho, 2022).

- **Standardise Multilateral Protocols and Interoperable Communication Frameworks.** Developing common operating doctrines and a shared HADR "playbook" is critical. Priority actions include:

- A regional Common Operating Picture (COP) platform.
- Harmonised SOPs for logistics, mission handovers, and communications.
- Standard frequency channels and encrypted data-sharing systems

These efforts reduce duplication and latency while enhancing response quality and cohesion. Such frameworks are essential for transforming multinational HADR missions into cohesive, high-performing operations, especially under time-sensitive and resource-constrained conditions (Rahman, 2009).

- **Integrate HADR into Blue Economy Governance Ecosystems.** To protect maritime economic resilience, HADR must be embedded in national and regional Blue Economy policies. This strategic alignment will:

- Safeguard key economic sectors (fisheries, energy, shipping).
- Enable faster recovery and continuity of maritime trade.
- Elevate HADR within broader developmental planning and resource allocation.

These Blue Economy strategies ensure that disaster resilience is directly aligned with the protection of marine economic assets and sustainable development objectives. Framing HADR as an essential component of Blue Economy resilience will also reinforce its legitimacy within civilian policy domains (Samaranayake, 2021).

- **Strengthen Inclusive Capacity-Building and Technology Transfer.** IONS must ensure no state is left behind. Capacity-building efforts should include:

- Joint naval HADR training pipelines.
- Technology-sharing agreements.
- Regional innovation hubs and pre-deployment platforms in high-risk zones.

This approach promotes inclusive regionalism, boosts participation by smaller navies and reduces dependency on extra-regional actors (UNCTAD, 2021).

- **Forge Public–Private Partnerships in Humanitarian Logistics.** A Maritime Humanitarian Logistics Consortium should be formed, bringing together:

- Port authorities, shipping lines, and offshore energy firms.
- Maritime insurers and supply chain providers.

These partnerships will enhance surge capacity, provide last-mile delivery mechanisms, and embed private sector assets into regional contingency planning (Bueger & Edmunds, 2020).

## **STRATEGIC OUTLOOK: ELEVATING IONS AS A HUMANITARIAN GOVERNANCE ACTOR**

The successful implementation of this naval-led HADR framework will transform IONS from a consultative platform into a central node of disaster governance in the IOR. By promoting this model in multilateral platforms such as IORA, ADMM-Plus, and the UN Global Platform for Disaster Risk Reduction, IONS can:

- Institutionalise its leadership in maritime human security.
- Attract technical and financial partnerships.
- Advance maritime humanitarian diplomacy in the Indo-Pacific.

This strategic shift will not only bolster disaster preparedness but also embed IONS as a credible guardian of the maritime commons and a normative actor in the region's security architecture (Cordner, 2018).

## **CONCLUSION**

This essay has underscored the strategic interdependence between the Blue Economy and regional naval cooperation in the IOR, positioning HADR not merely as a reactive support mechanism but as a core enabler of maritime resilience, economic continuity and Blue

Economy sustainable development. The IOR, as a critical conduit for global trade and energy flows, faces mounting risks that could destabilise both national economies and shared marine ecosystems. Within this high-stakes environment, the IONS stands uniquely positioned to shape a regional security architecture grounded in cooperation, operational preparedness and collective action. By transitioning from a dialogue-centric platform to an operationally relevant maritime coalition, IONS can catalyse trust-building, capacity enhancement and standardisation of multilateral disaster response mechanisms.

As climate-induced disasters, industrial hazards and environmental disruptions intensify across the IOR, the strategic imperative for a robust, institutionalised HADR framework has never been clearer. Instead, anticipatory, interoperable, and institutionalised frameworks must form the backbone of regional maritime governance. For IONS, positioning navies as strategic enablers in this domain—beyond their conventional kinetic roles—offers a transformative opportunity to lead regional disaster governance through capability, trust, and coordination.

However, significant gaps remain. Fragmented inter-agency governance, legal and procedural disparities, capacity asymmetries among navies, insufficient real-time information-sharing mechanisms and the absence of a pre-disaster planning architecture continue to impede efficient, equitable and collective action. These limitations are not merely operational shortcomings—they are strategic vulnerabilities that risk undermining the region's economic stability and maritime security architecture.

To address these, this paper presents a set of integrated recommendations grounded in institutional permanence, legal codification, operational standardisation and inclusive capacity building. Central to this vision is the recognition that HADR must be embedded not only within naval doctrine but also across the broader maritime policy ecosystem—including Blue Economy planning, public-private partnerships and civilian resilience strategies. These initiatives, when integrated within a multilateral maritime framework supported by partnerships with entities such as IORA and relevant UN agencies, can build a resilient, forward-looking disaster governance architecture.

Ultimately, HADR must be understood not only as a humanitarian obligation but as a strategic instrument for preserving maritime security, economic interdependence, and environmental integrity. IONS has both the convening authority and operational potential to

shape a future-ready regional HADR architecture. By moving decisively towards an anticipatory, networked and rules-based framework, IONS can redefine its strategic relevance—not only as a naval dialogue platform, but as a cornerstone of collective maritime human security in the IOR. Through coordinated innovation and sustained political will, IONS can transform the IOR into a domain of opportunity, stability, and shared stewardship for future generations. The time to institutionalise this vision is now.

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