

---

## Security Challenges in Nuclearized IOR: Implications of AUKUS, QUAD and Emerging Alliances

Sh. Imran Nasir<sup>1</sup>

---

### ABSTRACT

---

**Article History:**

**Received:**

September 22, 2025

**Accepted:**

November 15, 2025

**Published:**

December 22, 2025

---

**Fundings:**

This research received no specific grant from any Public, Commercial or not for profit sectors

---

**Conflict of interest:**

The author has declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

The Indian Ocean region (IOR), stretching from north Arabian sea to Australia, is becoming dangerous for its 42 littoral states due to emerging conflict zones viz, global chaos. More nuclear actors, both declared and undeclared such as Iran, Israel and Pakistan are moving in, hence increasing the complexity of the recognized maritime picture. IOR is home to global trade and essential energy supplies around the world; hence, any conflict here, shall impact global trade and energy security in more than one way. More so, nuclear neighbours with pending disputes, simmering flash points and potential hot spots inter alia, murkiness of undersea activities by regional and extra-regional actors, present a clear danger. This needs to be evaluated in the backdrop of obtaining environment and suggest a collaborative mechanism to pool up resources, modulate mutual expertise, synchronise actions, and synergise efforts to minimize threats, especially to non-nuclear states of IOR due to any “intentional incident or unforeseen accident”. This paper argues that the growing nuclearization of the IOR, driven by alliances such as AUKUS and QUAD, increases the risk of escalation and endangers littoral states. A collaborative regional framework is proposed to mitigate the threats.

**Keywords:** Indian Ocean, Sea Lanes, Nuclear Submarine, Autonomous weapons, Global Governance, Economic security

---

### Introduction

In a globalized, interconnected, interdependent yet contested world, oceans remain at the center of economic security. Almost 90% of intercontinental cargo worth USD 4 trillion is transported to more than 4000 ports around the world, forming the backbone of the global economy. This is largely being powered by the Chinese economic rise and its Belt and Road

---

<sup>1</sup> Rear Admiral (Ret.), PhD candidate at the Department of Defence and Strategic Studies, Quaid-i-Azam University (QAU), Islamabad.  
Email:imran\_nasir33@hotmail.com.



This work is licensed under a Creative Commons Attribution-Non Commercial 4.0 International License (CC BY-NC 4.0)

---

Initiative (BRI), aimed at transforming the financial outlook of member states (Min ye, 2020). However, amongst other oceanic regions, the Indian Ocean has emerged as lynchpin for global power contestation in recent times. An estimated 61% of world's total gross national product is generated from areas within 100 Km of Indian Ocean's coastline, commonly known as littorals (Ganeshan, 2019). The littorals are around 42 countries linked to or situated on the Indian oceans coast. The uniqueness of IOR can best be understood from the fact that more than 80% of the products of this region are destined for the extra regional countries while only 20% of the products from countries of Atlantic and Pacific oceans flow out to other nations across the globe. Here, the overall environment is marred with volatility. Transitory nature of political and geo-strategic issues, like multi-tiered great games in Afghanistan, Central Asian Region (CAR's) and Gulf Cooperation Council (GCC), archrivalry between two nuclear neighbours (India and Pakistan), introduction of new disruptive technologies, lethal autonomous weapons (LAWs) in limited conflict scenarios (Om Parkash, 2024), presence of world's biggest oil reserves, rare earth minerals and above all, passing of three most important Sea Lanes of Communication (SLOC's) from its chock points (Renold B, 1997) makes situation in IOR, complex and worrisome for strategic community in the region. Any regional conflict across straight of Hormoz (SoH), Bab el Mandab or Malacca straights, shall interrupt global trade and hence, the global political environment on the strategic landscape. Control of these choke points, by any belligerent shall impact the global trade and dent Chinese more, a valid concern for China and its partners in BRI (Waqas A, 2025). Additionally, due growing instability in world where US is becoming more un-predictable at the fall of unipolar moment (typical of a declining superpower), the progressing Asia and the rising global south are feeling less secure through established means of global governance. Hence, the proposal of new "global governance normal" in SCO summit of May 25. (President Xi, 2025).

This paper contends that the Indian Ocean's increasing nuclearization with more nuclear actors, (India, Pakistan, North Korea alongwith undeclared actors i.e. Iran and Israel) extending their potential at sea, along with emerging alliances and technological proliferation, creates a complex security dilemma for all nations sitting on its littorals. Unlike the Cold War's bipolar stability, the IOR is multipolar, with overlapping nuclear and conventional capabilities, thus increasing the likelihood of miscalculation by one nation or accident by other. In this backdrop, combined and accumulated effect of prevailing environment in IOR is product of convergence and/or divergence of interests between regional and extra regional actors. Most of the innocent states thereof,

---

may be suffering as collaterals without having any knowhow of how to avert consequences of nuclear fallout.

It is feared that future wars in IOR may be fought in uncharted mediums of new warfare like, Artificial Intelligence, autonomous systems and cyber domains ascending into nuclear dual. Importantly, maritime arena is vast and complex; no single nation, even the US alone, can secure its interests, therefore most actors are resorting to collective and collaborative security initiatives with near-permanent military presence (Javaid, 2025). More so; alliance formation based upon security architecture, religious construct and operational needs further compounds the situation. Formulation of AUKUS and QUAD and now strategic defense agreement between KSA and Pakistan are case in Point. Multi Polar blocks may also emerge at sea, in future, due to limited capabilities of any single nation and costs involve acquire defensive construct. This changing character of IOR has also brought eight of the world's nuclear submarine operators or powers to this region. The same has been pointed out by *Thomas P.M. Barnett in his article titled "India's 12 Steps to a world class Navy (2001):*

*"No ocean is in need of strategic stability more than the Indian Ocean, which is arguably the most nuclearized of the seven seas."*

This has also brought a change in the operational character of the obtaining environment in IOR. All the stakeholders have pitched state-of-the-art ships, submarines, weaponry, sensors, and trained men under the garb of Global War on Terror (GWOT), anti-piracy operations against unknown enemies, and to counter threats of proliferation of weapons of Mass Destruction (WMD). This exponential change in security architecture, though seems benign superficially, however in the event of a power entanglement between big players or interstate actions between regional battlers, shall have far reaching consequences, beyond the geographic boundaries of individual contenders. Four days conflict between India and Pakistan, in May 2025, reflects clearly on dwindling nuclear thresholds and battle spiraling out of control, quickly. More so, introduction of new imaginative war concepts, such as Artificial Intelligence, Cybernetics, micro drones, greater situational awareness through satellites, exploitation of electromagnetic and fiberoptics spectrum, and employment of directed energy weapons (DEWs) shall take the conflict to a higher level (Pravin, 2024, p. 77). Chinese ambition of BRI and Digital Silk Road (DSR), coupled with its "growing ability" of waging a decisive war in the region, may act as a trigger for the US and other bigger actors' "irrationally". India, in this calculus, is at odds with China. Doklam and Ladakh incidents, with special focus on Indian inclusion in the US Indo-Pacific Command (INDOPACOM), are the underlying concerns. Although,

---

developments in President Trump's Indo-Pacific strategic thought are paradoxical for India viz Chinese emboldening postures yet, this entails rethinking the security dynamics by the regional powers and littoral states alike. It is to safeguard their interests by evaluating QUAD, AUKUS, and any other alliance, in particular Global Governance Initiative (GGI) announced by President Xi during the SCO summit 2025.

The interests of major actors in IOR are:

**USA:** The United States' interests in IOR are beyond economics, as it is following Mahan's concept of sea power to rule the world thus, established many strategically located bases in various regional countries since WW-II. These bases in Diego Garcia, Qatar, Guam, Bahrain, Japan, and numerous other locations house US strategic assets with independent command structures in addition to deployed carrier battle fleets to ensure quick repositioning to cater any emerging situation against US interests. These interests while suites US in maintaining its hegemonic status, pose security challenges, retrospectively, for other powers and littoral states alike. US physical presence at multiple locations in IOR is further strengthened by alliance formation. For example, in countering global war on terror and to combat piracy along horn of Africa, US resorted to form combined tasks forces, (CTF 151 and 152) with support of its European partners and regional allies since 2003. In current times US is more interested in containing China's rise as a global power, so declared in the US National Defence Strategy as, "Strategic Competitor" in 2018 (US NDSP, 2018, p 01). Therefore, to legitimize its permanent presence in the Arabian Gulf, US is using the recent dual between Iran and Israel as "casus belli". It has convinced its Arab allies of the potential threat posed by Iranian Missiles and terror attacks from Yemen. Despite claims of neutralizing Iranian Nuclear capability, the seeds of suspicion have been laid for any future Iranian venture against Arabs. US Cooperative Strategy for 21<sup>st</sup> Century Sea Power also indicates a fundamental shift from Atlantic to Indian Ocean (Charles C, 2011). According to this document, "USA is investing in a long-term strategic partnership with India to support its ability to serve as a regional economic anchor and provider of net security in broader IOR". This was further emphasized at the Shangri-La dialogue by US Secretary of State Pete Hegseth on June 25. Signing of four strategic agreements, i.e., Logistic Exchange Memorandum of Agreement (LEMOA), Communication Compatibility and Security Agreement (COMCASA), General Security of Military Information Agreement (GSMOIA), and India-US Defence Accelerator (INDUS-X), has shaped the framework of cooperative thinking as to how the US will seek India's role in

support of its own cause. This poses a double paradox for India, viz, China. The US is also ready to go beyond the extent of NPT, in forming such alliances (like QUAD and AUKUS) to use it as a fulcrum to counter the PLA's force structure, posture, and command, both in peace and war, in all theatres of confrontation, especially the South China Sea (SCS). Important to note is that at any given point in time, at least two US carrier battle groups are operating in Indo-Pacific, including multiple nuclear assets both in terms of propulsion and onboard weapons. Nuclear nations track record of nuclear safety at sea is not very good. At least nine nuclear submarines of Russia and US, with operational reactors are laying on seabed, with unknown numbers of nuclear weapons on board. Likewise, at least four US live nuclear warheads have been dropped in seas due to airborne emergencies. India as a new entrant of Ballistic Missile Submarine (SSBN) club is also striving hard to pitch maximum submarines at sea to complete its TRIAD. In this quest, it is being supported by USA technologically to improve her safety standards. INS Arihant had many failures in its operationalization, attributable to both human errors, and technical snags. Indians, otherwise, enjoy a poor nuclear safety and proliferation record and need technological support from west. Former US Secretary of State Hillary Clinton once mentioned, "The United States is making a strategic bet on India's future". US is not only providing nuclear fuel to India while bypassing Nuclear Suppliers Group (NSG) protocols but is also providing knowhow, to overcome technical issues in operationalization of Indian force structure (Upendra Choudary, 2008). How far, this preferential treatment, will become operative against China and Pakistan's multi-domain capabilities? Only time may be a measure. Although, Pakistan's demonstrated capability in May 2025 conflict and held capacities to shape any future battle outcome, has forced US to re-evaluate and rethink its "Strategic Bet" (Moed, 2025) but it has limited options to challenge China's strategic rise. With Trump's uncertainty in balancing out the global balance of power, Israel has yet been able to push this region further, "into prostrate security" (Nava Freiberg, 2025). Hence, Pakistan's role as a net security provider to the GCC shall put both the US and India in a strategic dilemma, unabated.

**China:** Rise of China in the geo-political landscape is transforming the character of the international order. Being an economic powerhouse, its energy needs are fast becoming a major factor in its threat calculus since 2010, as endorsed by the Wall Street Journal. More than 80% of its oil imports are from the Middle East and Africa. This oil transits through SLOCs of the Indian Ocean, i.e. Strait of Malacca, often termed as "Malacca Dilemma", posed by some of ASEAN members (Pawel, 2021). This was first identified as a strategic weakness of China by Ex President Hu Jintao. With growing economic and Military power, China has gained the strength to equate itself

---

with the US. Hence, in the first meeting between the US and China at the diplomatic level, in Alaska (March 2021), it was declared by Mr. Yang Jie Chi, a senior Chinese diplomat, that “US did not have the capacity to speak to China from a position of strength. The message was clear that China was no longer a rising power, but a power already at the top. More recently, in his inaugural speech at the SCO summit 2025 held in Tianjin, China, President Xi laid down the contours of a new world order. He said that global governance has reached a new crossroads to uphold Justice and equality and move away from Cold War mentality, to stop confrontations and bullying practices. He, while holding hands with President Putin of Russia and PM Modi, showcased the support for this new global thinking and eased the “double paradoxical situation” for India to some extent. For President Xi, the optics were ideal as he asserted himself as a new global leader, capable of shaping a new environment. US, eyes these developments with suspicion and threat to its status as global leader. Therefore, despite Indian opposition to CPEC, a flagship component of BRI, and their “love hate” relations with US, the focus of Chinese military developmental strategy is to build maritime infrastructure and capacities in IOR. These are supporting operations of PLA(N) far from home to safeguard their SLOC’s and Maritime Silk Road (MSR) through fourth Industrial revolution (Pravin, 2024 pp.34). PLA’s protection to BRI is Asymmetrical in line with China’s strategic approach. According to China’s 2019 white paper on defence, it would be building a new model security partnership featuring equality, mutual trust, and win-win cooperation. China does not believe in the militarisation of SLOCs as it is the biggest stakeholder in this gambit and would play a larger role in framing new rules of maritime security and to combat any challenge, as highlighted in the SCO summit, 2025. Thus, new alliance formation amongst China, Pakistan, Bangladesh, Sri Lanka, and Myanmar for providing sea basing, logistic support, along with non-kinetic means to the Chinese operators in the IOR. This is also to counter the Indo-US nexus in play since 2022, under the ambit of Malabar exercises. Presently, the PLA Navy has embarked on a journey to establish a more permanent blue water presence well beyond the Pacific Rim and connect with all nations of the BRI. Deployment of PLA(N) units, including nuclear assets in IOR, is key to its sustainability and posturing (Sushil, 2024). Logistic base at Djibouti and deep-water port at Gwadar are just the springboards. It may be noted that China does not want to project power as claimed by Kaplan in his work “Monsoon”; rather, it wants to project influence through Geo-economics as part of its dream. Nonetheless, US in its quest to remain the biggest hegemon, may push the region in to nuclear conflagration, risking entire IOR. China may have to respond according to its nuclear strategy of massive retaliation. China is also viewing the Strategic Mutual Defence Agreement

---

between Pakistan and the Kingdom of Saudi Arabia, in the backdrop of China's role in acting as a bridge between Iran and the KSA.

**EU & UK:** Prominent EU countries are also maintaining strongholds in IOR to secure their economic and geopolitical interests. France has its overseas territories of La Reunion and Mayotte off Madagascar. France is not only maintaining a base in Djibouti but also, in 2010, has shifted its sea-based 'Alindien' command to Abu Dhabi to guard French interests along the entire IOR (Caroline, 2009). Also, the UK purchases 60% of its liquid natural gas from Qatar, as indicated by statistical data of past decades (Joey, 2003). UK's Maritime Component Commander is stationed in Bahrain, and the continuous naval presence of other EU navies in the Arabian Gulf and the Gulf of Aden are true manifestations of the EU's interest in the region. In any future conflict, their alignment with the US is beyond doubt, despite recent disappointments in the European arena by Trump's administration. Both the UK and France possess deployed nukes, and their presence in IOR compounds the security calculus. However, its extent will be defined by Geo-economics and Chinese intrusion in their financial loop.

**Japan:** Japan, being an Island nation, is highly dependent on the maintainability of sea routes to and from Japan for all its trade. Japan, in collaboration with India, is also contemplating a strong mutual security cooperation framework involving the safety of its SLOCs, conduct of combined naval exercises, and counter-piracy cooperation. Japan is maintaining a logistic base in Djibouti, which extends support to Japanese counter piracy efforts off, Horn of Africa. Japanese animosity with China in the backdrop of atrocities committed during WW-1 & 2 makes it a natural ally of the US; hence, joining QUAD and keeping JSDF ready for deployment (P.C. Katoch, 2024). Nonetheless, President Xi's assertion on China's Victory Day commemorations in Beijing (80<sup>th</sup> anniversary of the end of WW-2) is a clear manifestation of Chinese resolve, that history of subjugation shall not be repeated. Expansion of SCO's mandate in the 2025 summit to counter security threats and challenges is an indicator of an emerging order to shape the global governance and security architecture. However, Japan's capacity to pitch a sizeable force in Indo-Pacific and greater IOR shall be detrimental to the outcome of any future conflict in the region. Its capacity in nuclear domain can be useful in shaping any future alliance to help suffering of littoral states, should a nuclear accident happen.

**Russia:** Russia, after the breakup of the former USSR, is now rising again on the global chessboard. Though its naval presence in IOR has been limited but it possesses the necessary wherewithal to deploy its naval assets anywhere at any time. However, safety record of its nuclear fleet of ships and

---

submarines in very devious. Despite that it has leased one nuclear submarine to India since 1994 is still the biggest arms exporter to India, totaling to 1.5 billion US dollars annually (The Moscow Times, 2025). Russia, although not a member of the anti-piracy task force, is committed to deploying its warships for counter-piracy operations in the Gulf of Aden to safeguard its SLOCs. In the aftermath of the Ukrainian war, Russia aspires to seek Chinese support to counter NATO's expansion. In return, Russia is willing to support the GGI, wholeheartedly under China's supremacy. It may, therefore, deploy its SSBNs to influence events ashore anywhere, including IOR. Putin's special guest status in China's "V Day Commemoration" on 3 Sep 25 tells it all. India's westward leaning is paradoxical in more than one way, and the US tariff war is further strengthening this notion. The duplex nature of Indian strategic thinking compels it to accrue benefits from all, in their interests; thus, their role in any developing situation is unpredictable.

After dwelling upon the interests of international players, the concerns of regional countries are determined in the backdrop of the prevailing international order, war in Gaza and Ukraine, and President Xi's Global Governance Initiative:

**Iran:** With the third largest world oil reserves and 9<sup>th</sup> on crude oil production on global footprint, despite sanctions (Melissa, 2024), Iran is one of the most important countries at the mouth of the straits of Hormuz (SoH). Its inherent animosity with GCC countries, Israel, and the US is threat to global power stability. During the recent duel with Israel, Iran has reassured to world of its resolve to safeguard its legitimate rights of preserving sovereignty against all odds, to include acquiring nuclear capability. Iranian progress in emerging technologies and its practical manifestation in the shape of Swarming techniques, adopted in SoH and against Israel is daunting, despite unfair sanctions (Antony J, 2024). While the Chinese role in bridging gap between GCC and Iran is viewed positively by the world, both US and Israel consider it detrimental to their designs and regional aspirations. Iran's capabilities and its extended role in Yemen, Syria, and Iraq are twisted to suit the US narrative for the GCC. However, Iran exhibited strategic maturity and patience with continued commitment to peace with dignity in recent times. Iran considers the Arabian Gulf retrospectively, as the Persian Gulf, and claims its rights from a historical perspective. Iran's dependence on Chinese support and equipment, coupled with an aspiring populace, shall be great support to President Xi's Global Governance Initiative. Iranian position in SCO, and their President's tall stature on the Chinese victory day parade are testimonial. In any future conflict in Arabian Gulf, Iranian nuclear capacity may be tested and risks the region for radiation pollution in many ways.

---

**India:** India, with a population close to one and a half billion, an average economic growth rate of near 7% over the last decade (World Bank, 2024), and an ambitious military expansion program, is aspiring to become a global power. According to the Indian Maritime Doctrine, the Indian Navy is endeavoring to project power through "reach, multiplied by sustainability" across its "areas of interest" stretching from the Arabian Gulf to the Straits of Malacca (P. C. Katoch, 2023). Accordingly, India has undertaken a wide range of maritime initiatives to enhance its influence among IOR littorals. Most significant of these are the strategic agreements signed with the US to become a lynchpin at the heart of the US's Asia pivot strategy. India now sees at "Oceans" as main mainstay of its foreign policy operations instead of the Himalayas. While this provides a lead role to the Indian Navy in checkmating Chinese BRI engagements in IOR, it also puts India as a nation in a paradoxical situation due to land disputes with China and Pakistan (Pravin, 2024 pp.217). It is a double bind, which forces India to make a conscious approach notwithstanding irrationality embedded in its strategic thought p. The sixteen-hour conflict in May 2025 with Pakistan made the picture clearer to Indian leadership that they just cannot follow US wishes, in toto, while facing combined China and Pakistan in Multidomain operations (Parvin, 2024, pp. 77). In this backdrop, India has resorted to a pessimistic approach through regular conduct of naval exercises with regional and extra-regional countries. It has signed various agreements to foster its reach in IOR, which include, but are not limited to a Defense pact with Oman, security pacts with Maldives and Seychelles, establishment of communication and electronic intelligence posts in Madagascar, a Defense Co-operation pact with Mozambique for joint patrolling of its coast, and naval collaboration with Mauritius for surveillance of its EEZ. These developments may be termed the Indian strategy to encircle the Indian Ocean at specific points. Furthermore, the Indian Navy has launched a consultative group for regional navies in the IOR, namely "Indian Ocean Naval Symposium" commonly known as IONS (Sushil, 2018). The Indian Navy is utilizing the IONS platform for soft power and to address its maritime security concerns. Indian desire for a blue water navy is not novel. Jawahar Lal Nehru, India's first Prime Minister, while aptly realizing the importance of the Navy, said:

"To be secure on land, we must be supreme at sea".

With Modi's government's aggressive policies and aspirations to become a global hegemon, India is fast developing its Navy and is expected to be the largest in the region and beyond. It plans to have 150 operational ships, most of which will be indigenously built. With newer agreements with the USA to support its carrier construction and submarine development program, it is expected that, India; may have at least two operational aircraft

---

carriers, always, with one in the refit (Sunil, 2021). Additionally, with the operationalization of two indigenously built SSBN's India has expanded its reach exponentially, let alone the addition of 2<sup>nd</sup> strike capability. An ambitious submarine (SSN) development program is also underway. It has further compounded the security dilemma for BRI's manifestation. Will India be ready to pay the price to act as the United States' proxy against China? Needs threadbare additional research. With China showcasing its "Military Muscle" in the Victory Day parade and the US's orientation to Australia for a Nuclear Patrolling role in the Pacific and beyond, India may be pushed to a "strategic surrender" to stay relevant in global affairs (as highlighted by "The Indian Telegraph" post SCO 2025). With poor track record of safety and operations at sea, Indian capability pitch nuclear assets at sea, is extremely dangerous for the region and littoral states.

**Pakistan:** Pakistan suffers from a continental mindset, and a lack of maritime domain awareness is its true strategic dilemma (Paine, 2025). Pakistan got nuclear due to its strategic compulsions and existential threats to its sovereignty from multiple directions; hence, it has been pushed to compete with India to maintain parity in defence capabilities in sync with the threat perception. More so, dependence on sea trade and maintainability of SLOCs is yet another strategic compulsion requiring continuous preparations (Hali, 2012). The caveat with its nuclear deterrence, being credible and at full spectrum demands extending the same to the vastness of the Arabian Sea and into the Indian Ocean. Likewise, due to alliance compulsions, Pakistan may have to choose carefully its partners with limited choices apart from China. The rapid transformation in the global order and formation of AUKUS and QUAD has forced the strategic community in China and Pakistan to extend their thought to Russia, Turkey, and Iran, along with other littoral states in the far east. Thus, the new "Global Governance Initiative" and its manifestation thereof. Both China and Pakistan may have to seek Russia's leverage to keep India informed of consequential effects of its crossing the "Red Lines" vis CPEC. This evolving character of coalition formation is inviting criticism from US alliances in the region and shall provide appropriate leverage in times of need to the partner nations. Pakistan's capabilities and projected capacities in emerging technologies, experience of combating terrorism both at land and sea, thwarting aggression in multidomain, and above all, "Superior Strategic Orientation" (SSO) at the mouth of the Strait of Hormuz (SoH) give it a unique stature amongst all the operators in IOR, for support in times of need. Extension of deterrence at Sea is the icing on the cake (Syed, 2021). Future conflict between India and Pakistan will have far reaching complexities, nuclear posturing to use of TNW's shall endanger the safety and security of most of the inhabitants of IOR. (Kidwai, 2022). Likewise, in India-China

---

paradigm, India may use its geographical leverage in IOR to offset setbacks in Himalayan planes.

**Australia:** With known and visible threats to its sovereignty, Australia has been maintaining a balanced force structure in its national interest and hence a potent Navy. The strategic culture inherited as a former colony of the UK makes Australia an obvious conduit of regional influence and a reliable partner in times of need. As part of its modernization program, Australia ventured into two contracts. One for the purchase of “shortfin barracuda” submarines from France. This was supposed to be a conventional submarine with the possibility of integrating nuclear propulsion during the implementation stage. However, this contract invited intense criticism from home, as this submarine has still not been inducted into the French Navy and is facing technical snags. The deal was subsequently hijacked by the USA, under the proviso of AUKUS, for the provision of nuclear attack submarines, to be built in Australia, while relaxing the provisions of NPT (ASA, 2025). The second deal is with UK for provision of the state-of-the-art Type 26 Frigates in the ASW role. It's believed by the strategic thinkers across the globe that AUKUS is more beneficial to the US and UK to counter rising China at the cost of funds from Australia. In future power contestation, role of Australian nuclear submarines shall be pivotal in maintaining deterrence; hence, risk of nuclear factor. Facilities are being built, in Australia to station US and UK SSBNs, when needed. Therefore, overall calculus of threat matrix tilts in the favor of US and its allies. China needs to rethink and strategize its ballistic missile disposition.

**AUKUS:** The trilateral security partnership formally known as AUKUS has sent reverbs beyond the bounds of Indo-Pacific and caused a dent in the overall alliance architecture in the region. The agreement announced on 15<sup>th</sup> September 2021, by the UK, USA, and Australia, has added new dynamics to already volatile sentiment amongst the stakeholders. According to sources, the Australian defense establishment will receive support and knowledge in the domains of cyber warfare, advanced AI, Nuclear, and undersea capabilities from the USA and UK (ASA, 2025).

The cornerstone in the arrangement is the provision of highly sensitive advanced nuclear technology and tactical nuclear submarines to Australia by the other two partners. This enables Australia to build and operate nuclear-powered submarines (SSNs) with conventional weapons onboard by 2040. Nonetheless, the arrangements may be made to host and operate partners' nuclear fleet for training and capability build-up to have the crew ready for operationalization of this capability in a short time.

Chinese response to AUKUS has been lowkey; however, it has termed it as “the West’s cold war mentality” (Benjamin, 2024). It has thus come up

---

with a proposal of “new global governance” in SCO summit 2025. To a strategic thinker living in littorals of IOR, this development seems to have intensified the great power competition in the maritime construct of Indo-Pacific with bigger consequences for the region and beyond. It shall hamper the strategic interests of populace of IOR in many ways. In hindsight, AUKUS is also a reflection of the US's lack of confidence in India to offset growing Chinese capacity and capability in the maritime domain. It is in the backdrop of Indian nuclear association with Russia hence, a double paradox. This also indicates a strategic pivot to Canberra in the US policy domain, albeit proviso of QUAD dialogue. It is likely that in due course, AUKUS will overshadow other such collaborative security arrangements. Hence, Indian security analysts are pressurizing their government to speed up the Nuclear Submarine construction program to maintain relevance in the US strategic calculus. This changing character of threat dynamics in IOR entails careful evaluation of every move being made by regional and extra-regional actors. For all thinking minds, our sea shoers may face clouds of impending wars amid this power contestation, having protentional to transcend to the nuclear domain. Sri Lanka took the lead and prompted the UN in 1971 to establish a zone of peace in IOR. The UN resolution 2832 (XXVI), thus adopted and still valid today, may provide desired leverage to lessen such threats.

**QUAD:** The US, India, Japan, and Australia are strengthening collaboration amongst themselves to tackle the challenges in the Indo-Pacific region. QUAD therefore, is aimed at enhancing cooperation between the partners (P.C. Kotach, 2024). This is limited to quadrilateral exercises, talks, cooperation in training, and the generation of joint responses on the face of any emerging challenge. This intends to capitalize on the greater animosity between Japan and China vis a vis, atrocities committed during previous world wars and occupations. Therefore, on hindsight, this also primarily aims at countering increasing Chinese influence in this region and crafting responses where possible through mutual interaction and consent.

**Deductions:** In the backdrop of stipulated interests of various stakeholders, it can be said that the overall power struggle in IOR, which involves nuclear actors too, is far more serious and dangerous than any such situations of the past. A major factor now is the number of nuclear submarine operators, their strategic interests and issues therein. Show casing of advanced autonomous torpedo, HSU100, in power show by China during the 80<sup>th</sup> victory day parade at Beijing, due to its inherent ability to carry nuclear weapons and loitering for indefinite period, has put all the seaborne vessels at risk. Sea-based nuclear deterrence capability of two superpowers of Cold War era is of great importance to appreciate dynamics of nuclearized IOR in the backdrop of Second-Strike capabilities of new entrants into this elite club. Study of Cold

---

War model divulges that reduction in first strike and increase in second strike brought strategic stability between the two superpowers of the time (Frank, 2003). This stability, however, has been grossly undermined after launch, successful commissioning, completion of deterrence patrol and launching a trial of K-4 missiles from INS Arihant. India not only has carved a dent in the bilateral strategic equation of two archrivals in the Indian Ocean (Sushil, 2017) but also has sent reverbs across the globe. With a planned fleet of at least four SSBNs, and possibly two SSNs, India has “provided all the ingredients to trigger a nuclear arms race in this region and beyond. Pakistan is left with no option but to pursue its nuclear triad through whatever means on a short-term basis and seek a permanent solution on longer terms; hence, the induction of nuclear-capable Babur-3, the SLCM. Need for this capability is ever-increasing with the rising presence of regional and extra-regional nuclear actors, mostly in action across the swath of Indian Ocean. Recent Israeli strikes in Iran and then at Doha, way beyond its operational reach, are an additional threat to regional stability and nuclearization of the IOR. It makes the parity equation even more complex for regional rivals, where challenges are multifaceted and quadplex. It is believed, at any given point in time, there are more than four nuclear-armed submarines operating in the IOR. The command, control, and communication dilemma in a hostile situation will compound the threat matrix for a commander at sea. It becomes more challenges in an era of deepfake, and AI generated messages. The murkiness of Sub-Sea picture, coupled with the unpredictable intent of any one of the operators, may trigger a series of events spiraling out of control. It is strongly felt that despite the advent of VLF/ SLF and Laser technologies, communication with submerged submarines will remain a challenge for all, in exceedingly fuddled waters of the IOR. More so in the Indian, Pakistani context, robust civil-military control over the nuclear arsenal will be questioned in case of a submarine carrying mated nuclear missiles. Pre-delegation of launch authority of nuclear-tipped missiles onboard these submarines would add yet another dimension to the doctrinal concepts of both states. The perceptive nature of bilateral relations further increases risk of miscalculation and inadvertent launch. The fragility of Nuclear CBMs in May 2025 encounter renders important lessons for both India and Pakistan.

India, Pakistan, and China are looking forward to deploying sea-based nuclear weapons in the Indian Ocean Region (IOR) to achieve assured second-strike capability and protect their strategic interests in the region and beyond. India-Pakistan’s long nuclear rivalry to achieve strategic balance in South Asia is the foremost driving factor behind such developments. But India-China's ambitious intent (backed by the US in case of India) to gain the strategic control of the Indian Ocean and associated SLOCs is also an important factor

---

for nuclearization of IOR. Power show at Beijing in May 2025, is a case in point. To cater this imbalance, Pakistan may be left with no option except to create its own sea-based nuclear potential to exercise second-strike options, if the situation so dictates. More so, the ever-increasing presence of ERFs with dubious intent and likely connivance with India compounds Recognized Maritime Picture (RMP) problems, entailing a knee-jerk reaction in a multi-threat environment (Parvin, 2024, pp.127). Erosion of sea-based deterrence stability and maturing of Indian sea-based deterrence impacts Pakistan and the Indian Ocean, and needs to be examined focusing on policy options for Pakistan and the region.

Iskandar Rahman, in his seminal work, has also alluded to India-Pakistan motivation behind sea-based nuclear deterrence and argued how this pursuit has created ambiguity, brinkmanship, while contributing towards inadvertent escalation between nuclear-armed neighbors. In the book “Strategy in the Second Nuclear Age: Power, ambition and ultimate weapons,” it has been concluded that India’s SSBN has impacted the deterrence equation with China and Pakistan.

Practically induction of SSBNs into IN, the launch of SLCM Babur-3 by PN, and the showcasing of autonomous lethal weapons by China have opened a new chapter of strategic instability in South Asia. In a predictable model of the Cold War era, both US and former USSR introduced fast attack nuclear-powered (SSNs) and a fleet of SSBNs. SSNs, apart from their usual Naval roles, provided much-needed secure areas for SSBNs to operate and enable assured second-strike capability. Secured and guaranteed response offered mutual assured destruction, thus stabilizing the US-Soviet deterrent equation. Hence, keeping in view the proven concept of Cold War-era deterrence theory, an endeavor should be made to draw relevance from same in Pakistan-India context and China-India perspective. In same paradigm, studying the impact of alliance formation to share nuclear platforms and associated knowledge is also significant. It is expected that more and more Nuclear submarines shall be inducted into the IOR.

To balance the equation, Pakistan has already set up its Naval Strategic Force Command (NSFC) in 2012 and declared its intent to develop its own sea-based deterrent. The official statement passed during the inauguration of NSFC states: “NSFC is the custodian of nation’s second-strike capability, will strengthen Pakistan’s policy of Credible Minimum Deterrence and will ensure regional stability” (ISPR, 2012). New regional developments, multilateralism, BRI threat matrix, Chinese resolve for “New Global Governance Initiative”, and simmering currents in GCC, warrant continuous appraisal for realignment and re-orientation by all stakeholders. The hairline difference between

---

Incident and accident shall remain a “Challenge”. The consequence of any miscalculated move will result in devastation across the swath of the Indian Ocean. Innocent littoral states with no nuclear capability and wherewithal may be subjected to nuclear fallout. Many of these littoral states, especially along the African coast, lack basic healthcare facilities, let alone, capacity to tackle nuclear fallout or dangerous material drifting ashore. The need is to establish a regional mechanism comprising collaborative arrangements to prepare and implement guidelines, alert systems, and support facilities to help unintended victims of such an eventuality. The clear and present danger must be stipulated, risks identified, and remedial measures thought through. Friends or foes are all treated under the principle of equality. Sri Lanka’s move in the UN and the corresponding resolution No. 2832 may serve as an administrative authority framework.

A new entrant in the overall security calculus is Israel, with an attack on Doha and a resultant security dilemma in the GCC. With known nuclear capabilities of Israel, the situation is fast changing, and the US has lost its credibility as a “Prepaid security Provider” of the Royals in GCC. Thus, the Strategic Mutual Defense Agreement (SMDA) was signed between Pakistan and the KSA. It seems that soon, more countries in the region will join this arrangement. In case of any confrontation on this front, two nuclear-armed states will again be face to face, “Pakistan and Israel”. Here, the rationale of irrationality may not work. It may be the beginning of the end of time. As George Friedman wrote many years back in his magnum opus, “The Next 100 Years,” the US does not need to win wars; all it needs is to create enough chaos so that the other side cannot rise; it seems Israel is acting exactly according to the wishes of the US.

To conclude, it can be inferred that Nuclearization of IOR poses an undeniable threat to the littoral states. India’s growing relations with the US have acted as a catalyst for India’s growing sea-based nuclear ambitions. Emerging alliances like AUKUS and QUAD have further compounded the equation, and likewise, the Pak-KSA, SMDA in response to Israeli attack on Iran and Qatar. Now is the time, Pakistan should establish a framework with China, Russia, Turkey, Iran, KSA and other like-minded friends in pursuit of balancing this equation. All possible efforts must be made to achieve balance, as soon as possible, to draw strategic stability in the region. Cost-benefit analysis of a sea-based nuclear deterrent is relatively high in relation to land-based assets. However, there is a value associated with it, i.e., assured second strike capability when having nuclear armed opponents. Pakistan is confronted with the security dilemma for which there are no quick-fix solutions. It requires strategic patience and persistent efforts by all relevant quarters to strategize on the given prevailing and obtaining environment. The importance

---

of SSN/ SSBN cannot be ruled out to achieve assured second-strike capability. In this regard, Pakistan must not rule out the option of having SSN/ SSBN. Dedicated efforts to evaluate the aforesaid requirement or otherwise are recommended. Pakistan must pursue credible minimum deterrence without getting involved in an arms race. Ambiguous nuclear posture suits Pakistan against our adversary. To save the littoral states from the catastrophic consequences of nuclear hazards, accidental or incidental, preventive measures need to be formulated and implemented.

Formation of working groups at regional level, to study the impact of nuclear fallout, by an “incident or an accident” is the need of hour. Pakistan can take lead in this regard. Cold war studies about impact of NBC weapons can be acquired from both US and Russia for formulating SOPs to counter any such threat in the littoral states of IOR. The capability gap needs to be identified to avert, contain, control and countering the effects of nuclear activities at sea. Coordinated and collaborative efforts may save the humanity living in global south.

**Participant Consent:** The author confirms that no participants were involved in this study.

**Data Fabrication/Falsification Statement:** The author (s) declare that no data have been fabricated, falsified, or manipulated in this study.

**Copyright:** Copyright (c) 2025 Sh. Imran Nasir

### References

- Antony J Blinken, (2024, December 19). Statement on Sanctioning Iran’s Oil Trade. [Press Statement]. US Department of State. <https://2021-2025.state.gov/sanctioning-irans-oil-trade-support-for-proxies-and-partners-and-violations-of-human-rights>.
- Australian Submarine Agency, 2025. AUKUS Agreement for Cooperation on Nuclear Propulsion. *Australian Submarine Agency, [Report] (2025, August 7)*
- Benjamin Herscovitch, (2024). China says AUKUS is Driven by Cold War Thinking. *The Conversation, (September 17, 2024)*.

- 
- Charles C Moore II, (2011). Revitalizing the Cooperative Strategy for 21<sup>st</sup> Century Sea Power. *US Army War College Quarterly: Parameters*. (Vol 41 No.2 Summer 2011)
- Caroline, (2009). “France Opens Gulf Military Base”, reported as special report on CNN, <https://edition.cnn.com/2009/WORLD/meast/05/27/france.uae/index.html?iref=nextin>
- Frank P. Harvey (2003). The Future of Strategic Stability and Nuclear Deterrence. *Canada’s Journal of Global Policy Analysis*, (Spring 2003, Vol 58, Issue 2)
- Ganeshan W, (2019). Opportunities and Challenges for Regional Economic Integration in the Indian Ocean. *Journal of Asian Economic Integration*, (April 2019 Vol 1, p129-155).
- Hali. S. M, (2012). Pakistan’s Maritime Compulsions. *The Nation*, Islamabad (21 November 2012).
- ISPR (2012). ISPR Press Release No PR-122/2012-ISPR (May 19, 2012).
- Javaid Iqbal, (2025, March 24). “The Indian Ocean’s Maritime Security Dilemma”. (Presentation at Conference). Pakistan Navy’s Aman Dialogue 2025, Karachi, Pakistan.
- Joey Grostern, (2023). £19.3bn of fossil fuels imported by UK from authoritarian states in year since Ukraine war. *The Guardian*, (09 June 2023).
- Kidwai, Lt Gen (R), (2025, May 27). “Emerging global realities: Challenges and Response”. (Presentatoin at confrence. Islamabad policy research institute, Islamabad, Pakistan.
- Min ye, (2020). *The Belt Road and Beyond: State Mobilized Globalization in China*. Cambridge University Press.
- Moeed Yusuf, (2025). Why America should Bet on Pakistan: A Better South Asia Policy Runs Through Islamabad. *Foreign Affairs*. (Sept 11, 2025)
- Nava FreiBerg, (2025, October 15), From Airstrikes to Hugs, Israel still wont decide whether Qatar is Partner or Foe?, *The Times of Israel*. <https://www.timesofisrael.com/from-airstrike-to-hugs-israel-still-wont-decide-whether-qatar-is-partner-or-foe/>
- Om Parkash, (2024). The Global Impact of AI Driven Lethal Autonomous Weapons: Strategic Dynamics and Policy Challenges. *Strategic Studies*, (Summer 2024, Vol 44).

- 
- President Xi, (2025, September 01). “Need for new Global Governance Initiative”. (Sumit Presentation, live broadcast). 25<sup>th</sup> SCO Summit, Tian Jin, China.
- Parvin Sawhney, (2024). *The Last war: How AI will shape India’s showdown with China*. ALEPH Book Company, New Delhi, India.
- Pawel Paszek, (2021). China and “The Malacca Dilemma”. *The Warsaw Institute Review, China Monitor*, (28 February 2021).
- P.C.Katoch, (2024) (Lt Gen Rtd, Indian Army). Sixth QUAD Leaders’ Summit, *SP’s Naval Forces, Experts Speak*. (28 Sept 2024).
- P.C.Katoch, (2023) (Lt Gen Rtd, Indian Army). Sea Power and Exercise MILAN 2024, *SP’s Naval Forces, Experts Speak*. (23 Dec 2023).
- Paine, S.C.M (2025). By land or By Sea: Continental Power, Maritime Power, Fight for a New World Order. *Foreign Affairs* (August 19, 2025)
- Renold B, Peele (Lt Col, US) (1997). *Maritime Chock Points: Key Sea Lines of Communication (SLOCs) and Strategy*. Strategy Research Project.
- Sunil Lanba, (Admiral Retd IN), (2021). Indian Navy Aircraft Carriers Goal and Program. *SP’s Naval Forces, Lead Story*. (July 2021, Issue 4).
- Sushil Ramsay (Rear Adm Retd IN), (2024). Chinese Naval Presence: A Threat to Indian Ocean Region. *SP’s Naval Forces, Experts Speak*. (July 2024).
- Sushil Ramsay (Rear Adm Retd IN), (2018). Indian Navy, the Primary Instrument of India’s Sea Power. *SP’s Naval Forces, Maritime Security*. (July 2018).
- Sushil Ramsay (Rear Adm Retd IN), (2017). INS Arihant- Strategic Arm of Nuclear Triade. *SP’s Naval Forces, Submarines*. (Issue 4, 2017).
- Syed Ali Abbas, (2021). Pakistan’s Strategic Force Command Structure and Responsibilities. *Global Defense Insight*, (November 30, 2021).
- The Moscow Times*, (2025, February 11). Russia Struggles to keep India Dependent on its Arms Supplies. <https://www.themoscowtimes.com/2025/02/11/russia-struggles-to-keep-india-dependent-on-its-arms-supplies-a87940>.
- Upendra Choudhary (2008), India-USA Nuclear Deal and Its Impact on India’s Ballistic Missile Program. Research report, *SASSI* (17 June, 2008)
- Waqas Abdullah, (2025). From Bab el-Mandab to Gwadar: Pakistan’s Maritime Stakes in the Middle East Security Matrix. *Center for*

---

*Strategic and Contemporary Research, Islamabad.*  
<https://cscr.pk/explore/themes/defensesecurity>.

World Bank, Data (2024). *GDP Annual Growth Rate (%)*, for India 1961-2024 Mapping.

<https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=IN>.