



# MAKING WAVES

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**Acknowledgement:** 'Making Waves' is a compilation of maritime news and news analyses drawn from national and international online sources. Drawn directly from original sources, minor editorial amendments are made by specialists on maritime affairs. It is intended for academic research, and not for commercial use. NMF expresses its gratitude to all sources of information, which are cited in this publication.



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## MARINE ENVIRONMENT



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## **Improving maritime security in the Asia–Pacific**

- John Coyne and Isaac Kfir

Over recent years, the Asia–Pacific maritime security environment has become increasingly complex. Transnational serious and organised crime in the maritime domain (including illegal, unreported and unregulated fishing; piracy; and trafficking of weapons, drugs and people), terrorism and an increasingly assertive Chinese maritime strategy are generating further complexity.

The evolving strategic challenge hasn't gone unnoticed in Australia, or in its Asia–Pacific neighbours. While countries with the means have invested heavily in their navies, others have focused more on developing their coastguards. More recently, the dynamic operating context has been the catalyst for enhanced bi- and multilateral maritime cooperation.

Unsurprisingly, the region's focus on civil–military maritime security is increasing the demand for more comprehensive and coordinated maritime domain awareness (MDA) (see [here](#), [here](#) and [here](#)) across the Asia–Pacific.

However, while many commentators have highlighted the need for greater regional cooperation on MDA, it has proved difficult to reach agreement on how to turn that idea into a fully-fledged multilateral arrangement. Some of our policy contacts around Canberra have suggested to us that the European Union's Maritime Analysis and Operations Centre – Narcotics (MAOC–N) in Lisbon offers a viable model for improving regional cooperation. The MAOC–N was established in 2006 under the auspices of the EU by seven countries (Portugal, Spain, the United Kingdom, Ireland, France, the Netherlands and Italy) as a multilateral forum for combating and countering drug trafficking from the Cape of Good Hope to the Norwegian Sea. The centre is an important part of EU law enforcement efforts in coordinating maritime and aviation intelligence. The investment has paid dividends in disrupting piracy and illicit drug flows. The MAOC–N's success has been underpinned by the depth and breadth of European cooperation and the EU's well-developed organisational structure. Unfortunately, neither of those conditions exists in the Asia–Pacific in general or in ASEAN more specifically. Because of its complex geopolitical context, ASEAN's framework for inter-

and intraregional and global sharing of law enforcement information and intelligence is convoluted and often difficult to navigate. ASEAN operates a range of formal and informal networks that exchange tactical, operational and strategic information. In most cases, the frameworks that promote this work are supported by long-term interpersonal and interagency relationships of trust. These frameworks collectively form a complex web of arrangements. The characteristics that make relationships of trust and sharing possible in ASEAN have also encouraged the development of multiple channels of communication. Although they don't necessarily generate results efficiently, these multiple channels are effective at providing operational agencies with opportunities to exchange information. The diverse and often compartmentalised system that is law enforcement intelligence-sharing in ASEAN brings with it more than a few risks and challenges. The lack of a central repository imperils distributed access to knowledge, and the lack of a clear information architecture increases the risk of duplicative reporting and feedback loops.

At the 2010 ASEAN Regional Forum Inter-Sessional Meeting on Maritime Security, the US government sought to address these challenges by proposing the establishment of the ASEAN Regional Forum Transnational Threat Information-sharing Centre (ATTIC). Despite the potential benefits presented by ATTIC, a lack of ownership among ASEAN member states has seen the idea languish in a policy limbo. Two existing mechanisms, the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP) and the Information Fusion Centre to the ASEAN regional forum, offer opportunities for increased MDA cooperation. ReCAAP is a regional government-to-government agreement to promote cooperation against piracy and armed robbery. It has 20 members, including North, South and Southeast Asian countries; Australia; the UK; and the United States. ReCAAP's Information Sharing Centre in Singapore facilitates communication between regional authorities and the maritime community and enables timely and accurate classification and analysis of incidents. The centre's reporting and analysis assist coastal states to take law enforcement actions, and shipowners as well as ship masters to adopt risk-mitigation measures.

The Information Fusion Centre is a regional maritime security centre hosted by the Singaporean navy. The centre facilitates information sharing and collaboration between its partners and provides actionable information to regional and international navies, coastguards and other maritime agencies. It covers the full range of maritime security threats and incidents, including piracy, armed robbery at sea, weapons proliferation, maritime terrorism, and contraband and drug smuggling. It also hosts various

multilateral information-sharing portals and platforms in support of regional and international frameworks. Many an Australian official might be tempted to promote the development of a new regional MDA mechanism or support ATTIC. However, the creation of an Asia–Pacific MAOC-type arrangement is a risky proposition. Putting aside the language, technical, trust and geopolitical hurdles, an Asia–Pacific MAOC may simply add further bureaucracy to the region’s already complicated information-sharing arrangements. Australia and its partners may find more utility in making further investments in ReCAAP’s Information Sharing Centre and the Information Fusion Centre given their successes to date.

Source: [www.aspistrategist.org.au](http://www.aspistrategist.org.au), 16 Jan 19

### **NIMASA to address maritime security challenges**

Dr Dakuku Peterside, the Director General (DG) of Nigerian Maritime Administration and Safety Agency (NIMASA), said on Tuesday that the agency was addressing the issue of maritime security to make Nigerian ports more attractive. Peterside, who disclosed this in an interview with newsmen in Abuja, said that maritime security challenge increases the cost of doing business and reduces competitiveness. ‘According to him, for us in NIMASA, we are doing a lot in conjunction with our partners to address the issue of maritime security. “We aware that if we don’t address maritime insecurity the cost of goods coming into Nigeria will not be competitive. ”The freight is usually more expensive, the insurance is more expensive, and almost at world risk level, so the only way to bring down insurance, is to bring down the cost of freight. ”The only way to bring down the cost of goods and services is to address the issue of maritime security,” he said.

He, however, said that the challenge in the port is not the number of agencies in the port but the ways they operate, noting that government was taking proactive steps in harmonising their operations. According to him, the passage of the National Transport Commission bill is also to address the issue of competitiveness in our ports and goods coming in and out of Nigeria. ”The NTC will not solve all the problems but it will address economy regulations issues such as competitive trade, fair trade, consumer protection, those are the things it will address. ”There are other regulatory issues that it won’t address, like the gaps in infrastructure or deficit in infrastructure, that one we need more funding, we need to identify all the issues. ”We need to invest in infrastructure, we need to build partnership to improve our infrastructure but as long as we don’t invest in

infrastructure it won't be competitive," he said. The NIMASA boss expressed dissatisfaction with the security on the waterways, saying that the agency has a two-year agreement with an Israeli company to provide equipment and training.

Source: [www.pmnewsnigeria.com](http://www.pmnewsnigeria.com), 15 Jan 19

## **Underwater Domain Awareness and Acoustic Capacity Building – A Maritime Security Perspective in the Indian Ocean Region**

-Dr (Cdr) Arnab Das (Retd) & Vice Admiral Suresh Bangara (Retd)

Maritime security is burdened by thousands of years of history and tradition. Joseph L. Nimmich and Dana A. Goward US Coast Guard. The statement on top is a highly loaded, one that truly describes the nature and complexities of the maritime domain and any attempt at managing the maritime environment, whether for security or for conservation. The authors of this article work in "Maritime Domain Awareness: The Key to Maritime Security", have brought out the key reasons for the limitations of the global maritime security management scenario. The starting point for any initiative towards effective maritime governance with a coherent and systematic approach would be Maritime Domain Awareness (MDA). MDA is rooted in the ability to effectively monitor what is going on at any moment in the entire maritime space.

The MDA as defined by the International Maritime Organization (IMO), is the effective understanding of anything associated with the maritime domain that could impact the security, safety, economy or the environment. The maritime domain has been defined as "all areas and things of, on, under, relating to, adjacent to, or bordering on a sea, ocean, or other navigable waterway, including all maritime-related activities, infrastructure, people, cargo and vessels and other conveyances". The global commons are being effectively utilised to export terror and contraband across the globe. The awareness term in MDA is the key and effective MDA will necessitate that we focus and coordinate to achieve that. To be able to see, understand and share have been described as the most critical pillars of MDA at a tactical level. In our conventional understanding of MDA, we ignore the underwater part of it and in doing so, underestimate the threat from the undersea domain. The underwater threat in the maritime domain is increasingly getting real and far more devastating than ever before. The easy access to technology and know

how has made it easy for both nation states and non-state players to deploy sophisticated underwater devices to cause large scale damages and precise attacks on their adversaries.

### *Underwater Domain Awareness*

The concept of Underwater Domain Awareness (UDA) in a more specific sense will translate to our eagerness to know what is happening in the undersea realm of our maritime areas. This keenness for undersea awareness from the security perspective, means defending our Sea Lines of Communication (SLOC), coastal waters and varied maritime assets against the proliferation of submarines and mine capabilities intended to limit the access to the seas and littoral waters. However, just the military requirement may not be the only motivation to generate undersea domain awareness. The earth's undersea geophysical activities have a lot of relevance to the well being of the human kind and monitoring of such activities could provide vital clues to minimize the impact of devastating natural calamities.

The commercial activities in the undersea realm need precise inputs on the availability of resources to be able to effectively and efficiently explore and exploit them for economic gains. The regulators on the other hand need to know the pattern of exploitation to manage a sustainable plan. With so much of activities, commercial and military, there is significant impact on the environment. Any conservation initiative needs to precisely estimate the habitat degradation and species vulnerability caused by these activities and assess the ecosystem status. The scientific and the research community need to engage and continuously update our knowledge and access of the multiple aspects of the undersea domain.

### *Comprehensive Perspective of Undersea Domain Awareness*

The UDA on a comprehensive scale needs to be understood in its horizontal and vertical construct. The horizontal part would be the resource availability in terms of technology, infrastructure, capability and capacity specific to the stakeholders or otherwise. The vertical part is the hierarchy of establishing a comprehensive UDA. The first level or the ground level would be the sensing of the undersea domain for threats, resources and activities. The second level would be making sense of the data generated to plan security strategies, conservation plans and resource utilization plans. The next level would be to formulate and monitor regulatory framework at the local, national and global level.

## *Indian Ocean Region*

The Indian Ocean Region (IOR) is emerging as the strategic and economic centre of gravity in the 21st century. The region on one hand is driving an economic boom, however, on another account it's also being seen as the hotbed of piracy, maritime trafficking and maritime terrorism, posing serious danger to international peace and security. The special status of the region and political instability is not just of concern to littorals in the region, but also extra regional powers. The entire post Cold War dynamics is unfolding and the flexing of muscles by global entities is being witnessed in the IOR.

The relative immaturity of the powers in the region and the involvement of multiple extra regional powers for significant vested interests is resulting in prolonging the conflicts and uncertainties rather than solving them. The lack of regulations is allowing powers with resources to access and exploit, depriving the legitimate owners of the region, causing unholy alliances and unrest. The regional navies and the regulatory bodies have very inadequate resources and capabilities to intervene above the tactical level and are limited to being mere book-keepers events as they unfold.

The IOR is also marked by tropical waters and the UDA formulation suffers substantially due to sub-optimal performance of the sonar systems. The random fluctuations of the medium and the unique site specific behaviour ensure significant (upwards of 50 %) deterioration in the effectiveness of the underwater systems. The Cold War era, that was instrumental in the rapid progress of underwater technology was largely restricted to the temperate regions in the vicinity of North-West Europe. In the absence of indigenous efforts, the IOR will continue to throw challenges to the UDA initiative, both at the tactical and strategic levels.

## *Acoustic Capacity Building*

The UDA at its heart involves the core competence of acoustic sensing, supported by non-acoustic means to disseminate the information to multiple stakeholders. The immediate physical layer is to see, where we need sensors and the associated hardware required to deploy the sensors to map the entire region and high performance computing processors.

The second aspect is to understand, or the analysis capability, where we make sense of the raw data that has been corrupted by noise and medium distortions. There are two aspects here – the first is the data integrity that minimizes errors due to data corruption and the second is the analysis capability to make meaningful interpretations from the

data. The error mitigation requires significant understanding of the local conditions related to noise and the medium fluctuations. The analysis capability apart from the data processing and analytic techniques, also requires long term information on the local conditions to differentiate the routine from the evolution of an event.

Both the aspects involve large scale oceanographic studies and acoustic surveys. The third is the share category, where we are able to make the information available to multiple stakeholders and activate response in real time

Acoustic capacity building refers to generating significant information on the local conditions, both to mitigate the errors and also enhance the data analytic capabilities. These sensor networks will mean fixed and mobile network nodes comprising of observatories, underwater gliders, autonomous underwater vehicles, remotely operated vehicles, etc. Development of algorithms for data processing across stakeholders, indigenously will be a critical capability. This will translate to enhanced performance of the underwater systems in terms of range, robustness to medium fluctuations, data integrity, etc., and also enhanced understanding of the local underwater domain to quickly recognize any change in the status quo.

The interesting fact is that noise is highly contextual and the desired signal and noise varies based on the stakeholder. For a military sonar, the signal from an adversary is the desired signal and any other signal in the environment is noise like a biological signal or reflection from undersea minerals. Similarly for a marine biologist the biological signal is of interest and everything else is noise.

The see and the share infrastructure could be imported (possibly at a high cost due to its strategic value) to start with, , however the understand mechanism, is where the indigenous efforts specific to the stakeholders will be critical. On multiple fronts, pooling of expertise could be possible, however, the starting point is the infrastructure for generating the data over long time frames. The prohibitive cost of such an infrastructure discourages the stakeholders to go ahead and invest. The classified nature of the data, whether for security concerns or commercial reasons have eluded any collaborative initiative. Probably government involvement is inescapable to build the basic infrastructure and the acoustic capabilities.

### *The Story So Far in India*

Since early 1960s the Indian navy duly assisted by NPOL, NHO, NIO and NIOT has been in the forefront of activities linked with UDA. Ever since INS Khukri was sunk in 1971 off Diu, numerous measures were initiated as, ironically, Kuhkri was operating with an indigenous update to its directional sonar 170. Clearly there was an urgent need to upgrade the detection sonar as also the knowledge-base of under water acoustic propagation conditions. In pursuit of ASW related solutions, Sonars 184 from UK and its Soviet version of panoramic sonar MG 312 entered service.

The first indigenously designed and manufactured Sonar APSOH was fitted on board INS Himgiri in 1980 and was subjected to stringent sea trials. The need for scientific data and range prediction tables became an inextricable part of ASW. Security needs of a navy often became the harbinger of UDA as a whole.

Both NIO and NHO had made significant contribution to sound propagation studies in areas of interest to the Indian Navy in particular. Although range prediction methodologies were refined over decades of data collection, it remained woefully inadequate in terms of very limited availability of ships for scientific studies which also had the potential to assist fishery and environment related studies.

The successful indigenous design and manufacture of Sonar APSOH and its derivatives spurred the scientists to demand more and more UDA linked solutions. This had to be generated within the resources of our country owing to security considerations. Dedicated assets for determining parameters both for environmental and operational needs were targetted by US and French naval ships in our strategic backyard of IOR primarily to counter Soviet Submarines during the cold war.

It was at this stage of our history that increasing use of helo borne dunking sonars and air launched sono buoys entered service. This was soon to be followed by passive towed array and sophisticated low frequency detection system. The demand for UDA related studies increased by leaps and bounds. India had entered the big league but with a lag of credible scientific and verifiable data on UDA. Bharat Shakti

### *Way Ahea*

In the developed world during the Cold War era, massive acoustic infrastructures were built to generate UDA, like the Sound Surveillance System (SOSUS) and Pt. Sur

lightstation, for military purposes. The Cold War period, facilitated unrestricted investments in military infrastructures, so such huge grants were supported. However, post the Cold War, massive military spending was politically unviable and to sustain operational cost of these facilities, they had to be opened for civilian applications. This gave a boost to open research by scientists for multiple applications in the underwater domain. Underwater research is a highly resource intensive activity and only pooling of resources is the answer in today's geopolitical framework. In India, we have a similar facility at Goa, exclusively for the Navy being utilized for a limited application of acoustic assessment of warships. This facility has significant potential to build the much desired acoustic capability for India in the IOR

In the IOR, the maritime forces are frequently being called upon to perform multiple roles, other than their mandated roles. Their assets and platforms meant for full blown conflicts, get deployed for non-traditional threats like piracy, maritime terrorism, etc and even humanitarian relief and constabulary role of maintaining good order at sea. Effective UDA, if realized across all the hierarchy (vertical construct) can rationalize the deployment of maritime forces and ensure efficient utilization of their resources. Events could be prevented and damages post event if any could be minimized.

Effective UDA, requires significant resources and infrastructure for acoustic capacity building to significantly enhance the performance of sonars when deployed in the region. Such capabilities will be highly relevant to all the nations in the region, so opens the possibility of economic and political viability for India to play a leadership role in the region. Once the networks are in place, the second stage of generating resources and threat maps of the region can facilitate planning and monitoring resource utilization and security strategies. Information sharing with nations in the region could give diplomatic and political leverage on multiple aspects.

The good order at sea and land is governed by regulations. With effective UDA infrastructure and understanding, we can pitch for comprehensive regulatory framework at the local, national, regional and global level on multiple fronts, specific to the stakeholders. The underwater domain is known to be poorly regulated due to lack of transparency and awareness. IOR with its emerging strategic and economic status, requires urgent measures to regulate from the security, equitable sharing of resources and conservation perspective. Effective UDA has the potential to provide soft power for maritime security paradigm for the emerging Blue economic thrust in the IOR.

The first step is probably the recognition that MDA is grossly incomplete without UDA. Only a military approach (the military maritime strategy being released in the absence of maritime strategy) to maritime security may be limited in the absence of a comprehensive maritime strategy. Acoustic capability building for UDA needs far more emphasis in our discourse on maritime security initiatives. The UDA in IOR needs to be understood in its entirety, that may require extensive deliberations and research. A detailed report on “Underwater Domain Awareness and Acoustic Capacity Building – A Maritime Security Perspective in the Indian Ocean Region” could be a good beginning. In brief, there is a need for identifying, collating and integrating acoustic under water data in a time bound manner by creating an over arching empowered organisation akin to the now talked about Maritime Domain Authority of India.

A project may be assigned towards generating a detailed report to put all the pertinent aspects in perspective. The report will aid the relevant authorities and agencies in the Government to derive actionable inputs. The proposed work may contribute substantially to the larger Maritime Domain Authority (MDA) framework being formulated. The UDA could be the backbone for such an initiative that will be able to address the dynamics and challenges in the IOR. The primary objectives of the project would be:

- Draw out the detailed UDA framework and its relevance to the MDA formulation.
- Put in perspective the requirements of the four stakeholders and the dynamics of their interaction with each other and the MDA.
- Bring out the way ahead for the regulatory formulation, specific to the stakeholders and the maritime strategy aspects involved.
- Elaborate on the resource requirements of UDA and how the stakeholders could pool resources and also how the national security concerns are addressed.
- Present the science and technology aspects of UDA with the gap analysis.
- Propose the organizational structure to realize effective UDA and its interaction with the MDA.

Source: [bharatshakti.in](http://bharatshakti.in), 16 Jan 19

## **Navy Begins 'Sea Vigil' To Monitor 7,516 km Indian Coastline to Prevent 26/11 Type Attacks**

- Kriti Gupta

26/11 Mumbai terror attacks had the country virtually under siege for almost 72 hours. Backpackers with assault rifles opened fire at people at Chhatrapati Shivaji Terminus, blew up a gas station near Nariman House, attacked posh Leopold Cafe and carried out a mass shooting at Taj Palace and neighbouring Oberoi-Trident hotel.

The terrorists had entered India via the western coast, which raised serious questions regarding India's security. The country realised that it was just not prepared to deal with a magnitude of attack like the one they experienced that killed 166 people. MARCOS personnel had to be summoned to rescue people stuck in Taj hotel. Indian Navy, coastline, maritime security, Mumbai Terror attacks, Sea Vigil, D K Sharma, drill, stak. A decade has gone by since the Mumbai terror attacks took place and Indian Navy launched first of its kind multi-drill agency or 'sea vigil' on Tuesday, PTI reported.

The drill will man the country's entire 7,516 km long coastline, 13 coastal states and Union Territories as well as exclusive economic zone. The unparalleled drill deployed 150 ships, 40 aircraft and strategic assets of the Navy and Coast Guard. Navy Spokesperson Capt. D K Sharma told PTI, "The exercise aims to comprehensively and holistically validate the efficacy of the measures taken since the Mumbai terror attack." Indian Navy, coastline, maritime security, Mumbai Terror attacks, Sea Vigil, D K Sharma, drill, stak

The two day exercise is being described "unprecedented" because of its scale, the stakeholders involved, the number of units that are participating and objectives that need to be met. During Mumbai terror attacks, the terrorists snoopied into India from Karachi by boat. Since then, Indian Navy was given the charge of full time maritime security, including offshore and coastal security. D K Sharma further added that this is the first time the exercise will do wide frontage coverage of the entire coast of India. Fishermen too were made a part of this exercise. The objective of 'sea vigil' is to perform a realistic assessment of strengths and weaknesses, which will help to strengthen the maritime security. Reportedly, the exercise is a build up towards the major theatre level tri-service exercise TROPEX [Theatre-level Readiness Operational Exercise] which Indian Navy conducts every two years. The coastal infrastructure has been strengthened since the 26/11 attacks and all the bottlenecks have been addressed. Also, a robust

surveillance network comprising 42 radar stations linked to a control centre headquartered Gurgaon has been put in place.

Source: [www.indiatimes.com](http://www.indiatimes.com), 23 Jan 19

### **10 years after 26/11 attack: Is India's maritime, coastal security any better?**

- Anil Bhat

The heinous 26 November 2008 attack on Mumbai ten years ago by a group of terrorists of Pakistan's Lashkar-e-Tayyaba, who came by the sea route without being detected, exposed many weaknesses and lacunae in India's coastal security. The attack shook the government into realising the urgent need to greatly tighten the security of India's long coastline of 7,600 km, including its island territories and 2,000,000 square km of Exclusive Economic Zone (EEZ).

The then home minister was changed and a beginning was made by the ministries of defence and home affairs having meetings to discuss and decide on long overdue raising/enhancing coastal police, providing them equipment, stepping up coastal patrolling, joint tactical exercises and multi-dimensional expeditions to explore and familiarise the armed forces personnel with stretches of India's vast seaboard.

In February 2009, the government designated the Indian Navy as the authority responsible for overall maritime security, which includes coastal and offshore security, assisted by the Indian Coast Guard (ICG), state marine police forces and other central and state agencies. The ICG was additionally designated as the authority responsible for coastal security in territorial waters including areas to be patrolled by the coastal police. Further, to ensure that assets are optimally deployed and there is synergy between the two organisations, the Navy was assigned to control all Navy and Coast Guard joint operations.

Coastal security is complex construct since it involves activities both at sea and at land. The targets of the terrorists could be well inland. In the aftermath of 26/11, a holistic government approach to maritime security was adopted and a large number of measures were taken by a host of stakeholders. The National Committee on Strengthening Maritime and Coastal Security (NCSMCS) with cabinet secretary at the helm was established to review important matters pertaining to coastal security and for effective

centre-state coordination. The same committees were established at state and district level. Also, joint operations centres (JOCs) of the Navy and coastal security operations centres of the Indian Coast Guard were set up.

A multi-tier patrol and surveillance mechanism with focus on technical surveillance and augmenting maritime domain awareness (MDA) through the coastal radar chain and other systems was adopted. Real-time information sharing through the national command, control, communication and intelligence (NC3I) network; greater intelligence and operational coordination were made the focus areas. Security initiatives were initiated in fisheries, offshore, ports and shipping sectors. However, apart from the Navy and the Coast Guard, implementation of the multifarious actions involved by other ministries/departments was slow or incomplete. Ten years after 26/11, the Indian Navy coordinated the largest-ever coastal defence exercise off the Indian coast on 22-23 January 2019, codenamed Sea Vigil. The first ever of its kind, this exercise was undertaken along the entire 7,516.6 km coastline and India's EEZ involving all nine coastal states and four union territories along with all maritime stakeholders and facilitated by the ministries of defence, home affairs, shipping, petroleum and natural gas, fisheries, customs, state governments and other agencies of the Centre/state as well as the fishing and coastal communities. The scale of the exercise was unprecedented in terms of the geographical extent, the number of stakeholders involved, the number of units deployed, and in terms of the objectives to be met. Planned in two phases, Phase I commenced with the deployment of personnel and seagoing units of all stakeholders. 150 ships and 35 aircraft of the Navy and Coast Guard were deployed for the exercise. This when added to sea-going assets of other stakeholders like the state police, CISF, Customs, etc, reached an astonishing 500-600 craft at sea. This layered defence provided almost unbroken surveillance along the entire coast of India and outlying islands. This was further enhanced by the chain of radar stations set up along the coast as part of the coastal surveillance network (post 26/11, all 46 lighthouses along India's coastline are radar stations). All this was fed back to the JOCS set up by the Navy at Mumbai, Kochi, Visakhapatnam and Port Blair for monitoring, analysis and response. The uniform and technical surveillance network was further augmented by the fishing communities along the coast as the "eyes and ears" of the nation's coastal security construct. Phase I also saw an intensive audit of all measures put in place since 26/11 to improve the measures of efficiency and effectiveness of coastal security. This was undertaken by multi-agency teams deployed to check and audit important landing points including fish landing centres, vulnerable areas and important installations along the coast as well as in the hinterland. The entire coastal security apparatus was thereafter shifted to Phase II commencing at 8 p.m. on 22 January. This phase saw attempts to penetrate and land

dummy explosives by designated “RED” forces comprising teams drawn from the Navy, Coast Guard, police and Central Industrial Security Force. These teams were given a free hand to commandeer fishing vessels, merchantmen etc and attempt to reach the coast. Around 8-10 teams were deployed in each state and it is to the credit of all participating agencies that only a few “attacks” were successful. Many attacks were allowed to “go-through” to test the robustness of police check-points which were found to be very effective throughout the exercise. The customs department also undertook rummaging of visiting ships at anchorage and in harbours. Phase II involved the exercising of various contingencies on land after an “assumed landing.” The National Security Guard was also called in to tackle hostage situations in two-three vital installations. Contingencies including hijacking of ships, bomb disposal in malls, attacks and responses on places of worship etc were also exercised and tested for effectiveness. Crisis management groups of states were also activated to deal with such situations.

This first and largest ever in scale and extent coastal defence exercise is to be institutionalised and conducted every alternate year in addition to the states-focussed Sagar Kavach series of exercises. Also Ex Sea Vigil is a build-up towards the major theatre level tri-service exercise TROPEX (Theatre-level Readiness Operational Exercise) which the Indian Navy conducts every alternate year. While this exercise is a long overdue and necessary measure, the whole gamut of India’s coastal security in view of terrorist threats and other crimes/problems/liabilities, this whole apparatus put together must function effectively and consistently, as there have been instances of breaches in coastal security after 26/11. According to GKToday, in 2011, two years after 26/11, three massive vessels entered Mumbai which included a container ship named MV Wisdom, loaded with 7025 tonnes of deadweight, and MV Pravit containing 1000 tonnes of materials, which escaped the huge set-up of surveillance. In the latter case, the information of the drifting was given by fishermen, but the response was received only after 14 hours. These are merely some examples. Although so many items of security infrastructure are in place there is a discrepancy in their use. Patrol boats are under-utilised, there is a shortage of manpower and huge amount of funds remain unspent. The lack of integration of the marine police in the system is also a root cause of the problem. The NCSMCS, which coordinates the coastal security activities of the maritime agencies, is reportedly merely an ad-hoc arrangement, which has not been backed by the enactment of the Coastal Security Bill. There have been some disagreements in the functioning of the surveillance systems. While the security agencies have preferred active tracking of individual fishing boats through onboard transponders for e-surveillance, the state maritime board officials seek a satellite tracking system. When a Coast Guard team during a security exercise some years ago enacted the entry of the 26/11 Pakistani terrorists from the sea

opposite Badhwar Park, it succeeded – that is, they entered and proceeded ahead undetected/unchallenged. Any lacunae or drawbacks still persisting in the coastal security system must urgently be made good in order to avoid a repeat the 26/11 in any part of India. And that possibility cannot and must not be ruled out, all the more so because of the frustration and desperation of Pakistan’s anti-Indian agencies which have faced great reverses in Jammu & Kashmir in 2018.

Source: [www.asianage.com](http://www.asianage.com), 30 Jan 19



## **With an eye on China, Indian Navy commissions new airbase INS Kohassa in Andaman and Nicobar islands**

With an eye on China, the Indian Navy, on Thursday, commissioned a new airbase in the Andaman and Nicobar islands. Aimed at expanding its footprint in the Indian Ocean Region (IOR), the base - INS Kohassa, was inaugurated by Navy Chief Admiral Sunil Lanba in presence of top Navy commanders. "The close proximity of Coco Islands (Myanmar) and wide expanse of Indian Exclusive Economic Zone (EEZ) makes the base a very vital asset," Navy spokesperson Captain DK Sharma was quoted as saying by news agency PTI.

Shortly after it completed the largest maritime exercise covering all the coastal state of the country, the Navy's commissioning of a new airbase in the strategically important Andaman and Nicobar island can be viewed on the backdrop of an increasing Chinese footprint in the IOR. Besides, the Navy's "new mission-based deployment" plan involves the deployment of mission-ready platforms along the Sea Lines of Communication (SLOC). Speaking on the occasion, Lanba said that the airbase will enhance the operational preparedness of the Navy and compliment the Navy's role as a net security provider in the IOR.

Named after a white-bellied sea eagle, a large bird of prey, endemic to Andaman and Nicobar islands, the station currently operates short-range maritime reconnaissance (SRMR) aircraft and helicopters, which undertake the surveillance of India's Exclusive Economic Zone (EEZ), Search and Rescue operations (SAR) and Humanitarian Assistance and Disaster Relief (HADR) operations. In fact, the search operations for Malaysian flight MH-370 was conducted from the same base.

Source: [www.timesnownews.com](http://www.timesnownews.com), 25 Jan 19

## **India Navy set to open Third Base in Strategic Islands to counter China**

- Sanjeev Miglani

NEW DELHI (Reuters) - India's navy will open a third air base in the far-off Andaman and Nicobar islands on Thursday to beef up surveillance of Chinese ships and

submarines entering the Indian Ocean through the nearby Malacca Straits, military officials and experts said.

New Delhi has grown concerned over the presence of China's bigger navy in its neighbourhood and the network of commercial ports it is building in an arc stretching from Sri Lanka to Pakistan that India fears could become naval outposts. The Indian military has seized upon the Andamans that lie near the entrance to the Malacca Straits to counter the Chinese challenge, deploying ships and aircraft since Prime Minister Narendra Modi took office in 2014 promising a more muscular policy. Indian navy chief admiral Sunil Lanba will commission the new base, called INS Kohassa, about 300 km (180 miles) north of the archipelago's capital, Port Blair, the navy said in a statement. The facility, the third in the islands, will have a 1,000-metre runway for helicopters and Dornier surveillance aircraft. But eventually the plan is for the runway to be extended to 3,000 metres to support fighter aircraft and longer-range reconnaissance aircraft, navy spokesman Captain D.K. Sharma said.

About 1,20,000 ships pass through the Indian Ocean each year and nearly 70,000 of them pass through the Malacca Strait. "The underlying thing is the expanding Chinese presence. If we have to really monitor Chinese presence, we need to be adequately equipped in the Andaman islands," said former navy commodore Anil Jai Singh. "If you have air bases you can cover a larger area," he said, adding he expected the navy to permanently deploy more ships to the islands in the next phase of the buildup. A Chinese submarine docked in Sri Lanka's Colombo port in 2014 that drew such alarm in New Delhi that Modi's government raised the issue with the Sri Lankan authorities. Both India and China have been locked in a contest for influence, with New Delhi trying to push back against Beijing's expansive diplomacy in the region. This week, Indian defence officials are due to hold talks with the defence minister of the Maldives, Mariya Ahmed Didi, where New Delhi is seeking to repair ties after the ouster of its pro-China leader in a presidential election last year.

Source: [in.reuters.com](https://in.reuters.com), 23 Jan 19

### **Andaman and Nicobar: India's 'Strategic Anchor' holds ground**

- Abhijit Singh

New Delhi is on the cusp of clearing a proposal for defence infrastructure building on the Andaman & Nicobar Islands (ANI). According to the media reports, the Modi

government is ready with a 10-year-long “roll on” plan to create facilities for additional troops, warships, aircraft and drones on the islands, strengthening the existing military facilities. This comes on the back of the news of the commissioning of INS Kohassa, an Indian naval base, at Shibpur in the Northern Andaman. Kohassa is the Navy’s third aviation centre at the ANI. It is, like INS Baaz at Campbell Bay in the Greater Nicobar, a naval air station that has been upgraded into an aviation base.

The main driver for these developments is undoubtedly the Chinese naval presence in the Indian Ocean. There has been a surge of anxiety in New Delhi over the recent deployment of PLAN submarines in the IOR. Indian observers suspect that in the guise of anti-piracy mission, Chinese subs have been collecting vital information about the underwater operating environment in the sub-continental littorals. At the Raisina Dialogue in early January this year, at a panel discussion between five service chiefs from ‘Quad’ countries plus France, Admiral Lanba, the Indian Naval chief, was candid in stating Indian concerns vis-à-vis China. The PLAN, the Admiral averred, is making its presence felt in the Indian Ocean (even if the Indian Navy is still the dominant force in the region). More importantly, China’s ongoing naval modernisation — with over 80 ships commissioned in the last five years — has ensured a constant high-quality Chinese naval presence in the Northern Indian Ocean.

There has been a surge of anxiety in New Delhi over the recent deployment of PLAN submarines in the IOR. Indian observers suspect that in the guise of anti-piracy mission, Chinese subs have been collecting vital information about the underwater operating environment in the sub-continental littorals. The expansion of the existing naval air stations at the Andaman and Nicobar Islands into full fledged aviation bases then seems motivated by the need to enable an effective surveillance of Chinese ships and submarines in the South Asian seas, presumably through a more expansive deployment of assets such as the P-8I aircraft. For the Navy, there is no more onerous task than protecting the busy trade routes that the islands straddle.

Even from a domain awareness perspective, the facilities at the ANI are significant. The Indian Navy recently inaugurated an information fusion centre in Gurugram which is likely to be joined by many regional navies. India is at the forefront of information collection and sharing endeavor and would like to play a lead role in improving domain awareness in the IOR. Better surveillance facilities, and naval assets like the Khukri-class warships positioned on strategic nodes at the ANI, will raise the effectiveness of security endeavours.

Beyond active surveillance and submarine hunting, however, the Andaman and Nicobar Command (ANC) is an important marker of India's strategic presence in the Eastern Indian Ocean. In recent years, the Bay of Bengal has emerged as a critical area of interest for China and Chinese companies have been setting up critical shipping and energy infrastructure in Bay states. In a bid to emphasise its regional preeminence, the Indian Navy has raised the tempo of naval operations in the Bay of Bengal. Reinforcing strategic infrastructure on the islands is a way of highlighting India's combat prowess.

Beyond active surveillance and submarine hunting, the Andaman and Nicobar Command (ANC) is an important marker of India's strategic presence in the Eastern Indian Ocean. Over the years, Indian commentators have often expressed frustration with the long delay in building strategic capability at the ANC. However, what outwardly appears to be a straightforward choice hasn't always been an easy decision for New Delhi to make. Truth is that on the matter of the strategic development of the ANC, India's defence and foreign policy establishments haven't always been on the same page. A section of India's foreign policy community has argued against turning the islands into a strategic-military hub, on the grounds that it wouldn't sit well with Southeast Asian countries, who perceive India to be benevolent and benign power. Indeed, when India first began developing a military presence in the Andaman and Nicobar Islands in the mid-1990s, Malaysia and Indonesia didn't quite view it as a positive development. But the logic of 'minimalist security presence' was seemingly discarded when China's growing presence in South Asia began pushing India on the defensive in its own backyard.

As regional maritime forces have expanded their cooperation with the Indian Navy in recent years, there is a new appreciation in Southeast Asia of India's potential in offsetting China's dominance of littoral-Asia. As a consequence, the consensus in New Delhi over the ANI has also shifted. Secure in the knowledge that a strategically proactive posture wouldn't make India's regional credentials any less estimable, Delhi today is keener than ever to develop the islands militarily. The appointment of Admiral D.K. Joshi, a former Indian Navy chief, as the Lt. Governor at the ANI in October 2017 was a sign that a plan for a strategic build-up at the ANC was in the works.

Yet, the development plan also has an equally significant economic component. In 2015, when the government had first announced its intention to transform the Andaman and Nicobar into a maritime hub — allocating 10,000 crores for the endeavour — the emphasis was on tourism and port development. In recognition of the islands' potential for trade enhancement, there is a plan to build a transshipment terminal at Campbell

Bay, the largest of the Nicobar Islands, located just 90 km away from the Malacca Strait. Efforts are on to boost air connectivity and helicopter tourism, with INS Kohassa being developed for both military and civil use. This is likely to provide an impetus to the Centre's UDAN scheme to boost regional connectivity.

As regional maritime forces have expanded their cooperation with the Indian Navy in recent years, there is a new appreciation in Southeast Asia of India's potential in offsetting China's dominance of littoral-Asia. As a consequence, the consensus in New Delhi over the Andaman and Nicobar Islands has also shifted.

On the recommendation of the NITI Aayog — mandated by the Island Development Agency to head a 'Holistic Development Program' — the government recently invited global players to invest in a wide-ranging social and infrastructure development programme, including investments in resorts and other tourist infrastructure at the Andaman. Authorities, of course, are being careful; they know their plans need to take into account the fragile ecology of the islands, which conservationists say is bound to be threatened by massive infrastructure creation.

For the Indian Navy, the ANI's core utility remains its potential for nontraditional security cooperation. Over the years, the ANC has been a 'staging post' for India's humanitarian efforts in the Bay of Bengal. Building on its 2004 tsunami relief experience, the Navy has undertaken a wide range of HADR operations in the regional seas, ranging from major evacuation efforts in Yemen, to alleviating a drinking water crisis in the Maldives and providing relief supplies to Sri Lanka, Bangladesh and Indonesia during natural disasters. The Navy's biennial MILAN exercises at Port Blair are the largest gathering of navies in the region (including from Southeast Asia) and gives special attention to humanitarian relief and non-combatant evacuation drills. To justify its 'security provider' status, the Indian Navy realises the need to maintain necessary force levels on the islands.

Lastly, developing the Andaman and Nicobar has the potential to boost jointness at the ANC — India's only operational tri-services command. In a series of moves since August last year, the government has shown it is keen for a more genuine integration of the military. In July last year, in the first restructuring of top defence management, the Navy has (apparently) been given permanent charge of the strategic Andaman Nicobar Command, a post that it earlier shared in rotation with the Air Force and the Army. Now, the commander-in-chief of the ANC has also been empowered to requisition military

assets from the three services, handle land acquisition cases, and been granted additional financial powers.

Source: [www.orfonline.org](http://www.orfonline.org), 02 Feb 2019

### **Exercise Cutlass Express 2019 begins**

Cutlass Express 2019, sponsored by U.S. Africa Command (AFRICOM) and conducted by U.S. Naval Forces Africa, is an exercise designed to assess and improve combined maritime law enforcement capacity, promote national and regional security in East Africa as well as information sharing, planning and operating.

“Today, we face serious challenges at sea such as illegal fishing, trafficking of weapons, narcotics and people and the ongoing threat of piracy,” said Rear Adm. Heidi Berg, director, intelligence and knowledge development directorate, AFRICOM. “Our efforts here will help make the region a safer place for maritime commerce and help increase prosperity throughout the region.” The participating nations will be testing their ability to combat illicit trafficking, piracy, illegal fishing, as well as conduct search and rescue operations. “U.S. Africa Command sponsored exercises like Cutlass Express are part of a wider effort the United States undertakes with African partners to deter and defeat transnational threats and provide a security environment conducive to good governance and development,” said Berg. Participating nations in Cutlass Express include Canada, Comoros, Djibouti, France, India, Kenya, Madagascar, Mauritius, Mozambique, Portugal, Seychelles, Somalia, Tanzania, The Netherlands and the United States. “The United States of America recognizes the importance of a stable and secure East Africa,” said J. Alexander Hamilton, Deputy Chief of Mission of the U.S. Embassy in Djibouti. “The success of these countries is largely dependent on a secure environment along the coast and the surrounding seas.” Cutlass Express is one of three Africa-focused regional, “Express” series exercises sponsored by AFRICOM and facilitated by U.S. Naval Forces Europe-Africa/U.S. 6th Fleet. The exercise falls under Africa Partnership Station, the umbrella program for the Express series of exercises and other capacity-building initiatives throughout Africa.

Source: [www.c6f.navy.mil](http://www.c6f.navy.mil), 28 Jan 19

## **Russian Navy procures New Electronic Warfare Capabilities**

-Roger McDermott

Russia's Armed Forces are continuing to develop and strengthen their Electronic Warfare (Radioelektronnaya Borba—REB/EW) capabilities. The General Staff sees this as an essential element in its efforts to adopt Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) competencies, as well as a force enabler and force multiplier. In turn, the political-military leadership and defense industry value EW as a tool primarily fashioned for use against a near-peer adversary. As these advances proceed, with special emphasis placed upon the development of EW systems to target C4ISR assets of the United States and the North Atlantic Treaty Organization (NATO), all Russian service arms and branches are benefiting from the constant drive to boost this vital area of the country's warfighting capability. In recent months, new systems have been moved into Kaliningrad, such as a coastal variant of the Samarkand EW complex (see EDM, December 11, 2018). And the latest reportedly cutting-edge technology will allegedly provide added EW capability for the Russian navy with the introduction of 5P-42 Filin ("Eagle Owl") stations (Izvestia, February 2).

In early February, the press service of the holding company Roselektronika, part of Rostec, reported on the new 5P-42 Filin and the defense ministry's plans to equip Russian naval surface vessels with this latest EW system. The Filin is described as a visual-optical interference system, designed to "blind" enemy systems and disorientate adversary forces. The new EW systems have already been placed onboard the Admiral Gorshkov and Admiral Kasatonov Project 22350 frigates. In the near future, two additional ships of this class, currently under construction at the Severnaya Verf plant, will be fitted with the system (Izvestia, February 2). Russia's Armed Forces have highly trained EW specialists present throughout the arms and branches of service; the naval EW centers will most likely provide EW personnel for service onboard the surface ships carrying the Filin system as well as oversee its introduction.

According to Roselektronika, the Filin uses low-frequency fluctuations in the brightness of light radiation to attack the optic nerves of enemy personnel causing "temporary reversible disorders" of vision. It has a variety of potential uses against enemy surface ships and can also confuse and incapacitate forces operating in coastal areas using small arms and sniper weapons (Lenta.ru, February 2).

In terms of its practical application as an EW support system, the stations deployed onboard naval platforms can reportedly cause temporary blindness and even hallucinations among enemy personnel. Furthermore, the Filin functions as a jamming station, and is designed to also operate at night, suppressing both visual-optical and optical-electronic observation channels. It is specifically aimed at targeting enemy night-vision devices, laser range finders, and the targeting systems of anti-tank guided missiles at distances of up to 5,000 meters (2.69 nautical miles). The Filin, as noted, also has an application against forces using small arms, including sniper weapons, since it causes such levels of disorientation. The manufacturers stress that it is a non-lethal system, and they have plans to produce a miniaturized variant for non-military security forces (Topwar.ru, February 3).

Reportedly, the testing of the new EW system appears to confirm these stated capabilities, and its potential naval application. These tests also serve to indicate the type of ranges involved in its use during maritime operations. Assessments and efforts to confirm the reliability and safety of the system were carried out, inter alia, at the Natalia Bekhtereva Institute of the Human Brain in Moscow. Volunteers were tested in their ability to maintain accuracy in firing small arms and sniper weapons, in response to the use of the Filin EW system. Up to 20 percent of the individuals reported experiencing hallucinogenic effects, describing a spot or spots floating in front of their eyes, while 45 percent complained of a variety of exposure symptoms including dizziness, nausea and disorientation. It was unclear, however, as to how long these symptoms persisted during these tests. According to Roselektronika, the range of the Filin is up to 5,000 meters. But the effects of its use against small arms and sniper usage seems more restricted, at around 2,000 meters. Given its testing against such targets, it is probable that it is viewed partly as an EW system for support during naval infantry coastal operations and to counter enemy coastal defense. Based on these trials, the Filin appears to be an effective EW suppression and jamming system that provides for non-lethal ways to reduce the accuracy of enemy firepower locally, as well as to interfere with the movements of enemy forces (Argumenty i Fakty, February 2).

Roselektronika will also develop a miniature version of the 5P-42 Filin for use by counter-terrorist forces in the National Guard (Rosgvardia) and other law enforcement agencies. The company claims its prototype will be ready in 2019 and is said to have an effective range of up to 700 meters, with an impact sector of 10–15 degrees. Roselektronika has been keen to promote both the naval and security forces' versions of the Filin systems but offers no information on the precise size and specifications of these stations. While stating that the naval variant functions at ranges of up to 2.69 nautical

miles, it is unknown whether this is a fixed or mounted system, or if it can also be made mobile for more flexible use by naval infantry. (Topwar.ru, December 20, 2018).

Some Russian media reports speculate that the technology used in the Filin EW stations draws upon experimental prototype technology that may have been used in attacks against US diplomatic personnel in Cuba. It may also be part of an attempt to catch up with similar developments in China's EW capabilities. Whether there is any factual basis to this remains unclear. Yet the aims of the technology appear similar—to attack enemy optical nerves, among other additional targets in the electromagnetic spectrum (Gazeta.ru, February 2, 2019).

While the 5P-42-Filin is certainly a new EW system, the naval variety, as opposed to the smaller security forces system currently in development, targets maritime forces at the high-technology end of modern conflict. So far, the new system has only been introduced to a limited number of surface vessels; nonetheless, this seems consistent with further trialing and experimentation, prior to future wider procurement. The introduction of such EW systems, coupled with Russian use of EW in support of its operations in Syria, certainly suggests that any future conflict with NATO, however limited in scope, will be marked by a heavily contested electromagnetic spectrum operational environment.

Source: [jamestown.org](http://jamestown.org), 04 Feb 19

## **The Inland Waterways Project won't Choke Rivers**

- Pravir Pandey

Manoj Misra, in 'The Inland Waterways Project Will Destroy India's Rivers' (Comment, January 4), has claimed that the project (IWT) is neither economically viable nor environmentally friendly. Both these claims are untrue. The Jal Marg Vikas Project (JMVP) – Varanasi to Haldia on National Waterway 1 – has an economic internal rate of return of 21.40%, according to analyses by consultants engaged through global bidding for Detailed Feasibility and Engineering Studies.

The Inland Waterways Authority of India (IWAI) is developing standardised vessels for the National Waterway 1 that have a shallow draft and high carrying capacity of (up to 2000 tonnes). These vessels will need a depth of 2.2 to 3 metres and a channel width of 45 metres only even though the Ganga is almost 2.5 kilometres wide at some stretches.

The physical interventions have been kept to a minimum and construction of barrages, diversion structures and groins have been avoided. According to the dredging (desilting) management plan for JMVP, dredged material will not be deposited outside the river. The bed of the river is not being disturbed. Only maintenance dredging will be done to desilt 20 % bed load silt even as 80% of silt is in suspension.

In December 2017, the Union ministry of environment, forest and climate change (MoEF&CC), has confirmed that under JMVP, prior Environmental Clearance for Maintenance Dredging, construction of terminals, jetties etc are not required. However, a detailed green assessment has still been undertaken by IWAI for each and every proposed component in JMVP, as per the Environmental and Social safeguards Policy of the World Bank which is providing financial and technical assistance to the project.

The draft Environment Impact Assessment (EIA) reports were made available on the IWAI website since 2016. Based on the comments from stakeholders, the EIA reports were revised in September 2016. These revised versions of the EIA reports are available on the IWAI website since December 2016 itself. Thanks to a thoroughly scrutinised

Environment Management Plan, IWAI has got wildlife clearance for navigation through the Kashi Turtle Sanctuary, Varanasi, from the National Board for Wildlife (NBWL) and the Coastal Regulation Zone clearance for Multi-Modal Terminal at Haldia from the MoEF&CC on November 6, 2017.

The results of a study, 'Impact assessment of coal transportation through barges along the National Waterway No.1 (Sagar to Farakka) along river Ganga', by ICAR-Central Inland Fisheries Research Institute (ICAR-CIFRI), Barrackpore has revealed no significant changes in water quality parameters.

Dredging is not being carried out in the entire stretch of Vikramshila Gangetic Dolphin Sanctuary. The Inland Water Transport (IWT) mode is cheaper than other modes even if the cargo is transported one way only. After the implementation of JMVP, when the entire infrastructure is ready, two way movement will further reduce the cost of transportation. Has anyone ever wondered why the waterways of the USA, Canada, the European Union, China, Vietnam, Thailand, Brazil, Argentina, Russia, Bangladesh etc are so alive with millions of tonnes of cargo transported on them, and why Indian waterways are dying without any cargo transportation as yet?

JMVP will help rejuvenate the river Ganga by creating a Room for River, a model that has proved to be an effective flood mitigating and river conservancy measure internationally, especially in low lying Netherlands. It is empirically impossible not to be convinced that Inland Water Transport (IWT) is the most environment friendly, cost effective and sustainable mode of transport. It is upon those who don't agree with this fact, to enlighten us how any other mode is better.

Source: [www.hindustantimes.com](http://www.hindustantimes.com), 23 Jan 19

### **India-Bangladesh to finalise new Waterway: Tripura CM**

Tripura Chief Minister Biplab Kumar Deb said on Thursday that Indian and Bangladesh officials will finalise various aspects of a proposed waterway between the two countries. "Union Shipping Ministry officials have informed that senior authorities from both the countries, including from the Inland Waterways Authority of India (IWAI), will visit Tripura on January 28-29. The officials would finalise different issues of the proposed waterway between the two countries involving Tripura," Deb told IANS.

He said that construction works to develop the 35 km waterway between Tripura's Gomati river and Meghna river in Bangladesh is slated to begin next month. "The project works were delayed due to the parliamentary elections in Bangladesh," said Deb. "After the development of the new waterway, movement of vessels and cruises would be possible to ferry people and goods. It would promote trade, tourism and people to people contact." A four-member IWAI team visited Tripura's Sonamura last month to select the site for a terminal building (jetty).

The famous Akhaura canal, built by the erstwhile kings of the princely Tripura, was earlier used to ferry goods to-and-from Bangladesh by boats and small vessels. "After the partition of India, the transportation through the Akhaura canal was stopped," Salil Debbarma, a veteran writer, told IANS. The Indian Oil Corporation in 2016 had ferried diesel and cooking gas to Tripura from Assam via Bangladesh. The Food Corporation of India (FCI) had transported 23,000 tonnes of rice in three phases since 2014 from Kolkata to Tripura via Bangladesh using Dhaka's Ashuganj River Port, which is about 50 km from Tripura.

In 2012, Bangladesh had allowed state-owned Oil and Natural Gas Corporation to ferry heavy machinery, turbines and over-dimensional cargoes through Ashuganj port for the 726 MW Palatana Mega Power Project in southern Tripura. According to the Union Shipping Ministry, out of the 111 National Waterways, 20 are in land-locked northeastern region, mostly in Assam. There are 54 rivers flowing between India and Bangladesh.

Source: [www.business-standard.com](http://www.business-standard.com), 24 Jan 19

### **Iran to build Gas Pipeline, Rail Link to boost Chabahar Port Infrastructure: Officials**

- Rezaul H Laskar

Close on the heels of the launch of a new shipping route connecting three Indian ports with Chabahar, Iran is eyeing the construction of a gas pipeline and a railway link to Zahedan to boost activities at the strategic port, Iranian officials said on Monday.

The first Indian container vessel operating on the new route set sail from Mumbai and called at Mundra and Kandla ports in Gujarat before berthing on Sunday at Shahid Beheshti terminal of Iran's Chabahar port, whose operations are controlled by state-owned India Ports Global Limited. The vessel will continue to Bandar Abbas, the final

port of call on the route. “With the arrival of the first 3,700 TEU (20-foot equivalent unit) container ship at Shahid Beheshti (in) Chabahar port, for the first time, the shipping line between the ports of Mumbai, Mundra and Kandla has opened,” said Behrouz Aghai, managing director of Iran’s Ports and Maritime Organization in Sistan and Baluchistan province. Iranian officials in New Delhi said more cargo vessels will sail from Mumbai to Chabahar and Bandar Abbas every fortnight.

Coupled with the United States sanctions waiver for Chabahar granted last November, the officials said they expect the new shipping route to ramp up activities at the port. Commodore (retired) C Uday Bhaskar, director of the Society for Policy Studies, described the new shipping route as a “symbolically significant development at a time when Afghanistan is in a state of flux”. He said: “It is one of various options that could be viewed by India and like-minded nations such as Japan at a time when Afghanistan is both a complex strategic challenge and an opportunity.” As part of measures to boost infrastructure at the port and its free trade zone, Iran is looking at the construction of a nearly 200-km gas pipeline from Iranshahr to Chabahar and a railway link of about 500 km from Chabahar to Zahedan, which is close to the Afghan border, the officials added. India has conducted a feasibility study and opened a line of credit for the railway link, about 100km of which will be completed by March. The project is expected to cost \$1.6 billion and Iran has invested \$300 million in it. “The terrain in the area is not difficult and once the railway link is completed, Chabahar will be linked to the extensive rail network in northern Iran, making it easier to ship goods to Afghanistan and Central Asian countries,” said an official. “The new gas pipeline could boost the development of industries such as refineries, CNG plants and units making petro-chemicals,” the official added. As part of joint efforts to promote Chabahar port and attract investments, India and Iran will organise the “Chabahar Day” conference on February 26.

Delegates from central Asian countries, traders and freight companies are expected to attend the event. Iran will cover accommodation and domestic travel expenses, officials said. In a related development, the first cargo shipment from Afghanistan to India via Chabahar is expected to be sent in February. The shipment will comprise five containers of mung beans, with each container weighing 22 tonnes. The delivery will be done under the TIR or International Road Transports convention, which streamlines procedures at borders and reduces the burden for customs authorities. Afghanistan, India and Iran signed an agreement to develop Chabahar in May 2016. India sees Chabahar as key to its plans to gain access to the landlocked Central Asian states and Afghanistan while bypassing Pakistan. Iran is among India’s three largest oil suppliers along with Iraq and Saudi Arabia.

Source: [www.hindustantimes.com](http://www.hindustantimes.com), 29 Jan 19

## **India Begins Trade Through Iran's Chabahar Port, Afghanistan to Soon Follow Suit**

India will send shipments to Iran from ports in Mumbai, Kandla, and Mundra, every two weeks. The first such shipment comprising 3700 twenty-foot equivalent units (TEU) of Indian goods reached Chabahar on Sunday, according to Iran's ports and maritime agency. Afghanistan is also set to send its first shipment to India via Chabahar within a month. A month after formally taking over operations of part of Iran's Shahid Beheshti Port in Chabahar, Indian Ports Global Limited has opened a shipping line between the Iranian port and three ports in Mumbai, Kandla and Mundra.

Behrouz Aghaei, the director general of Sistan and Baluchistan's Ports and Maritime Organisation, announced that the first cargo ship from India, which arrived at the Shahid Beheshti dock of Chabahar Port on January 27 at 10.30 am (Indian Standard Time), was destined for Bandar Abbas. Meanwhile, Afghanistan is expecting to ship its first cargo of five containers to India via Chabahar in a month or less. "Husne Mubarak Azizi, head of foreign affairs and Ministry of Transport of Afghanistan stated that Afghanistan is preparing to ship the first cargo of five containers through Chabahar to India, which will take place within a month or less. The cargo is mung beans and each container will weigh about 22 tons. The delivery of this 5 container cargo will be carried out under the international customs transit system (TIR) system," a release by the Iranian government reads. TIR streamlines procedures at borders, reducing the administrative burden for customs authorities and for transport and logistics companies. It cuts border waiting times significantly, saving time and money. Each TIR transport is entirely monitored online, so goods can be traced and secured while in transit. Indian Ports Global Limited, an Indian state undertaking, took over the operations of parts of Shahid Beheshti Port, Chabahar in Iran during the Chabahar Trilateral Agreement meeting held on the 24 December 2018. The heads of the Indian, Iranian and Afghanistan delegations jointly inaugurated the office of the Indian SPV – India Ports Global Chabahar Free Zone (IPGCFZ), at Chabahar. The physical take-over of the terminal area, cargo handling equipment and office building was completed by 29 December 2018. Chabahar is India's gateway to Eurasia and key to the development of landlocked Afghanistan. While India was amply clear on its intention of using the port as part of its wider Indo-Pacific connectivity project, kick-starting

operations on the face of the threat of US sanctions was a tricky matter. However, India received a waiver from the US after the Narendra Modi government dug its heels and announced it would continue to be active in Chabahar even in the absence of a waiver.

Source: [sputniknews.com](https://sputniknews.com), 28 Jan 19

## **India-South Africa ties: Enhancing Military, Space and Economic Relations to be the Focus**

- Huma Siddiqui

Over 150 Indian companies including Tata, Mahindra, Vedanta and Motherson Sumi have invested in South Africa employing over 20,000 locals. A high level delegation including nine Ministers, senior officials of his government and a 50-member business delegation is accompanying the President of South Africa Cyril Ramaphosa, will arrive on a two day state visit to India from Jan 25-26. Enhanced and greater cooperation in areas including military to military, maritime security, skill development, and agriculture and information technology will be the focus of both bilateral as well as delegation level talks when the visiting leader meets with Prime Minister Narendra Modi on Jan 25.

With the objective to grow business ties between the two countries and hoping to achieve a trade target of \$ 20 bn by 2021, the two leaders will address the India-South Africa Business Forum on Friday. He will also deliver the Gandhi-Mandela Freedom Lecture organized by Indian Council of World Affairs under IBSA framework as a part of the celebrations of the 15th Anniversary of IBSA. Over 150 Indian companies including Tata, Mahindra, Vedanta and Motherson Sumi have invested in South Africa employing over 20,000 locals. India is among the top five trading partners of South Africa. The bilateral trade has increased to \$ 10.65 billion in 2018-19 from \$ 9.38 billion in 2017-18, growing steadily from S\$4.7 billion in 2007 to the present. The total trade reached a peak of \$15 billion in 2012 – before the global economic slowdown and domestic political factors put a brake on the rapid expansion. According to the Ministry of External Affairs (MEA), President Ramaphosa accompanied by the First Lady, Dr. Tshepo Motsepe will witness the Republic Day parade as Guest of Honour and later attend the ‘At Home’ hosted by the President Ram Nath Kovind later in the day before departing for South Africa. He is

the second President of South Africa after President Nelson Mandela to be the Chief Guest at the Republic Day.

As reported by FE ONLINE earlier, South Africa's active involvement in multilateral organizations, such as the IBSA Forum (IBSA), the New Asia-Africa Strategic Partnership (NAASP), the Indian Ocean Rim Association for Regional Co-operation (IORARC), and the annual BRICS Summits has helped in the partial recovery in bilateral trade.

In the defence sector, South African State-owned defence industrial group Denel is looking for opportunities to tie up with Indian companies in the defence sector. As reported earlier, Denel is suited for ammunition supplies to the armed forces in which Indian companies have to create new facilities. Denel was one of the prime contenders for small arms, ammunition and artillery programs in the 1980s in India. The two countries are also working together through IBSA (India, Brazil and South Africa) and BRICS (Brazil, Russia, India, China and South Africa). The two sides are also keen on better connectivity as currently there are no direct flights and with direct flights both trade and tourism will improve between the two countries. Both countries have close cooperation in the areas of vocational training, capacity building etc. And the two share a common vision on a range of global issues and closely cooperate in various multilateral fora: UN, BRICS, G-20, Commonwealth, IORA and the IBSA. South Africa is also a member of the Indian Ocean Naval Symposium (IONS) an extremely significant regional maritime security initiative launched by India in February 2008 under the aegis of the Indian Navy. This seeks to increase maritime co-operation among navies of the littoral states of the IOR (Indian Ocean Rim) by providing an open and inclusive forum for discussion of regionally relevant maritime issues. The visiting leader accompanied by First Lady will pay his respects to the Father of the Nation, Mahatma Gandhi at Rajghat whose 150th birth anniversary is being celebrated both nationally and internationally and who has a special resonance in South Africa.

Source: [www.financialexpress.com](http://www.financialexpress.com), 22 Jan 19



## MARINE ENVIRONMENT



### **How Fighting Global Warming endangers shipping, coastal States and environment**

- Mikhail Voytenko

Bulk carrier SSI PRIDE is under investigation in Brake Germany, since arrival on Jan 16, suspect in air pollution. The ship used heavy fuel being in area with restricted fuel sulphur content. Security deposit of 30,000 euro was already imposed. The ship was to dock at Brake, on arrival from Varna Bulgaria, on Jan 7, but was informed, that spare berth will be available on Jan 16 only, so she had to anchor at outer anchorage. Weather deteriorated, anchorage wasn't safe, the ship had to leave anchorage to weather out storm, and in the process, used all compliant fuel she had. So she had to switch to heavy fuel – in order, you, know, to remain under way and seaworthy. Well, and that's considered to be the crime nowadays, judging from the deposit sum. Investigation is under way.

Whether the ship will be fined or not, Master, crew, the ship and the owner already have enough headaches – and why? Because Master did what he had to do, to ensure ship's safety? Because ship's emission now is considered to be air pollution, threat to the environment and every living soul in town? Anyone curious enough to check facts and figures, knows, that it is not true, that it is a fake-threat, non-existent threat, fear-mongering, which has nothing to do with the reality. But already imposed on shipping restrictions already threaten shipping safety and your dear Mother Nature safety, too, because ships run into trouble, switching from on fuel to another, all the time, under constant threat of engine failure in most navigationally unsafe waters.

What's more risky for coastal area and communities, for shipping and for dear Mother Nature – non-existent bubble of “air pollution from ships exhaust” or very real danger of major accident, such as collision or grounding? How much more insane will it all become? Where does it lead us all?

You all that worried about pollution risks? Look at open borders, at multiculturalism, at “sustainability” projects, at countless NGOs and many, many other things, real dangerous things, brain-children of greedy and irresponsible people, fabricating non-existent threats, and vulturing on honest, hard-working men and industries.

Source: [maritimebulletin.net/](http://maritimebulletin.net/), 18 Jan 19

### **Plastics are being glued together in the ocean by bacteria, scientists find**

Glue-like substances secreted by bacteria are sticking tiny particles of plastic together in the ocean to form larger masses, scientists have discovered. During experiments in seawater, the micro and nano plastics joined with biopolymers made by bacteria to form larger clumps within minutes. Scientists believe this could lead to the larger items being mistaken for food by marine mammals. They also fear this could alter the flow of food from the surface to the seafloor, potentially leading to deep sea creatures being starved. We found that the biopolymers envelope or engulf the nanoplastic particles, which caused the plastics to agglomerate into clumps. Researchers at Heriot-Watt University in Edinburgh used water collected from the Faroe-Shetland Channel and the Firth of Forth to set up their experiments.

Plastics were added to the seawater and then incubated in conditions simulating the ocean's surface. Within minutes, the minuscule pieces of plastic grouped together with bacteria, algae and other organic particles. The scientists are said to have been surprised to discover large masses of biopolymers formed the bulk of these plastic agglomerates. Team member Stephen Summers said: "This is a first step towards understanding how Nano plastics interact with natural biopolymers throughout the world's oceans. "This is very important, as it is at this small scale that much of the world's biogeochemistry occurs. "We found that the biopolymers envelope or engulf the nanoplastic particles, which caused the plastics to agglomerate into clumps. "The nanoplastics, which are 100-200 times smaller than a bacterial cell, were actually incorporated into the agglomerates, which became visible to the naked eye in our lab experiments. "The fact that these agglomerates become large enough to see raises concern, as they are likely to be seen as a food source by small marine animals."

Tony Gutierrez, the microbial ecologist who led the study, outlined the concerns about the potential impact on deep sea and geochemical cycles. He said: "The agglomerates form in something similar to marine snow, the shower of organic detritus that carries carbon and nutrients from the surface to the ocean floor and feeds deep-sea ecosystems. "It will be interesting to understand if nano- and micro-scale plastics of different densities could affect the food flux from the upper to lower reaches of the ocean.

“Heavier plastics could drive marine snow to fall at a faster rate to the sea floor, while the opposite could happen with lighter forms of plastics in making it more buoyant and to fall more slowly. “In that case, deep-sea ecosystems could become starved of food. “To understand this scenario, we need data on how abundant these invisible plastics are in the ocean.” Heriot-Watt Professor Ted Henry said the larger masses are “much more complex than simple pieces of plastic”. He added: “Research like this is beginning to fill the gaps in scientists’ knowledge, but we need more evidence in order to prioritise and manage plastic pollution effectively.” The experiments were part of the Natural Environment Research Council’s £1.1 million RealRiskNano project and the research was published in the Marine Pollution Bulletin.

Source: [www.breakingnews.ie](http://www.breakingnews.ie), 04 Feb 19

### **Japan to propose obligatory framework to tackle plastic marine pollution at G-20 Osaka**

TOKYO -- Prime Minister Shinzo Abe will propose and seek agreement on an obligatory action framework to tackle plastic marine pollution at the June summit of the Group of 20 major countries and regions to be held in Osaka, western Japan, according to people familiar with the decision. Abe plans to announce the initiative in his speech on Jan. 23 at the World Economic Forum in Davos, Switzerland, expressing his determination to establish a common understanding that a "worldwide effort" is needed to fight plastics pollution. The premier wants to assume a leading role in tackling the problem, which has attracted global concern. In the Davos speech, the prime minister will call for understanding and support for the framework by stating that the Osaka summit should serve as a springboard to widen efforts to contain plastic pollution across the world. The government will begin discussions with participants in the June meeting on the Japanese initiative.

The framework will detail required countermeasures to fight the pollution, such as collection and management of waste as well as the development of plastic products that degrade in sea water. The initiative is designed to encourage action by requiring countries to publish annually countermeasures they took and their achievements.

Curbing plastic pollution in the oceans has become a major international issue. In the summit of the Group of Seven major industrialized countries, five of the participants agreed on the Ocean Plastic Charter, which includes numerical targets such as the

introduction of 100 percent reusable, recyclable or recoverable plastics by 2040. The United States opposed the charter out of concerns for restrictions on the domestic industries, and Japan failed to sign up as the government explained that it could not win support from the business community in time. The two countries thus faced tough criticism from environmental protection groups and other organizations. Learning from this experience, the government of Japan intends to come up with a framework agreeable to all G-20 participants. Many G-20 members are emerging economies such as China, India and Indonesia with higher economic growth rates, and Japanese government officials think that too much focus on numerical targets to fight plastic pollutions would make it difficult to reach a consensus. The government is thus considering an arrangement in which countries can choose programs freely from a list of detailed countermeasures to be included in the framework, depending on their economic situations. Meanwhile in his Davos speech, Abe will announce a plan to fight global warming by lowering the production cost of hydrogen to 10 percent or less of the current level and below the price of liquefied natural gas by 2050. The premier also intends to reveal a plan to invite scientific and technological leaders from across the G-20 to Japan to seek innovations such as using greenhouse gasses as resources.

Source: [mainichi.jp](http://mainichi.jp), 21 Jan 19

### **Kenya plastic boat raises pollution awareness**

A traditional dhow made entirely of trash and tap goes on an expedition along the Kenyan coast to raise awareness of the harmful effects of plastic waste. The dhows, with their swollen triangular veils, are an icon on the Kenyan coast, having crossed these waters of the Indian Ocean for about 2,000 years. With its characteristic triangular sail, this boat, having embarked on an expedition along the East African coast, has almost everything from traditional dhow. “We wanted to have a colourful, beautiful message and that's what the Flipflop dhow is, so it's really clear, positive message about the value of plastic and that's what we've built.” Ali Skanda is builder of the ‘Flipflop’: “We had this dream of doing plastic dhow, as we are doing so much in the world, and we feel it's our responsibility to make this solution, because we are polluting our environment, many creatures are suffering from this jungle of plastic.”

The Flipflop was built thanks to plastic waste collected especially on Kenyan beaches. With the goal of raising awareness on the devastating effects of plastic pollution, Flipflop

began a 500-kilometer trek on Thursday in Lamu, north of the Kenyan coast. It is expected to reach its final destination, the Zanzibar Island, on February 6. – The rest of the boat, was built using 10 tons of shredded plastic and then molded. Only the mast is made of wood. The hull was then covered with 30,000 sandals “tong” garish colors, also picked on the beaches, which gave their name to the boat (these sandals are called flipflop in English) and gives it the appearance of a multicolored patchwork. According to Ben Morrison, founder of the Fliflopi project, “it seems so simple to me, so obvious the motivation is just to share something positive, we wanted to have a colourful, beautiful message and that’s what the Flipflopi dhow is, so it’s really clear, positive message about the value of plastic and that’s what we’ve built.”

The Flipflopi was built 9 years ago at Lamu by traditional Dhow builders, using simple techniques that can be easily reproduced. Like many countries around the world, where plastic bottles, bags and straws are only used once and thrown away, Kenya suffers the harmful effects of plastic pollution. With more than 12 million people working in the fisheries sector in Africa, and many others dependent on fish for their food, marine pollution, remains a real threat to the world.

Source: [www.africanews.com](http://www.africanews.com), 28 Jan 19

### **Hopes on ‘greener’ plastics to turn tide on battle for environment**

- Nophakhun Limsamarnphun

Plastics that have been labelled as biodegradable by industry have become more popular and affordable due to increased public awareness of environmental issues resulting from the many kinds of damage caused by single-use plastic bags, food containers, straws and other non-compostable items. According to Pralong Damrong-thai, director-general of the Pollution Control Department, the Kingdom’s garbage increased 1.64 per cent over the past year, to a total of 27.82 million tonnes in 2018. The main causes were an expansion of urban areas and the increase in migrant workers, tourists and in household consumption.

Of the total volume of garbage, 34 per cent or 9.58 million tonnes were properly separated and recycled while 7.36 million tonnes of garbage were not correctly managed. Overall, Thailand churned out some two million tonnes of plastic garbage in 2018 with only 500,000 tonnes recycled. The remaining plastic garbage has become a major environmental issue, as it is for the most part not compostable and poses hazards to both

people and marine life. Micro and nano-plastics are a major source of pollution, affecting both fresh and salt water environments and the organisms living within. Experts have also warned that tiny bits of these plastics have also entered the human food chain, with unknown future health consequences. In a bid to help reduce plastic garbage, the Cabinet earlier instructed the Ministry of Natural Resources and Environment to launch a nationwide campaign, and for all state agencies to ban single-use plastic bags, foam containers and water cups.

According to Apilux Tiwananta-korn, communication and CSR department manager of Thantawan Industry, a producer of compostable plastics, the prices of green plastic products are now much lower than before, helping to boost the popularity of less environmentally hazardous products. Thantawan Industry has launched the Sunbio brand of compostable T-shirt bags and straws made from corn, tapioca and sugarcane, which they claim are 100 per cent compostable within 180 days. The demand for compostable bags and straws has been growing rapidly, especially in retail and restaurant sectors where consumer sentiment for environmental protection is relatively strong. Previously, prices of compostable bags and straws were as much as three times that of the large majority of products that are made from petrochemicals and remain in the environment for hundreds of years. Now, the price difference has shrunk, bringing the products within reach of businesses that want to switch to “greener” products.

Supermarkets, department stores and other retail outlets are among the major users of non-compostable plastic bags, and so some operators have encouraged customers to use textile bags instead of single-use plastics. Some customers are asking that restaurant chains replace single-use plastic straws with stainless steel foldable straws that can be re-used for a long time. Another choice is for restaurants to switch to compostable straws and supermarkets to carry compostable T-shirt bags. The private sector has also suggested that the government grant tax incentives to help boost the demand for “green” plastic products by lowering their price, thus reducing the amount of single-use plastic garbage in the country. Concerned about sea pollution and the deaths of birds and turtles, the European Parliament in October 2018 voted to ban the plastics. The ban, which comes into effect in 2021, includes straws, plates, cups and cotton buds which experts said are then consumed by marine life. The European Union also plans to reduce plastic packaging for food by 25 per cent by 2025 while 90 per cent of beverage bottles must be collected and recycled by the same date.

The Thai government has yet to consider similar measures to check the phenomenal growth of single-use plastics. Thus the cheapest and most convenient option continues to pose a growing environmental and health challenge to people and marine life.

Source: [www.nationmultimedia.com](http://www.nationmultimedia.com), 02 Feb 19



## GEOPOLITICS



### **Russia, China, India, & Iran: The Magic Quadrant that is Changing the World**

*With the end of the unipolar moment, which saw Washington dominate international relations, the richest and most powerful Eurasian countries are beginning to organize themselves into alliance structures and agreements that aim to facilitate trade, development and cooperation.*

At the height of the US unipolar moment, Bill Clinton was leading a country in full economic recovery and the strategists at the Pentagon were drawing up plans to shape the world in their own image and likeness. The undeclared goal was regime change in all countries with unapproved political systems, which would allow for the proliferation of us-made “democracy” to the four corners of the earth. Clearly Eurasian countries like Russia, India, China and Iran were on top of the to-do list, as were countries in the Middle East and North Africa.

The bombing and destruction of Yugoslavia was the final step in the assault on the Russian Federation following the dissolution of the Warsaw Pact. Yeltsin represented the means by which Western high finance decided to suck all Russia’s wealth, privatizing companies and plundering strategic resources.

China, on the other hand, saw a rebirth as a result of American and European manufacturing companies relocating to the country to take advantage of the cheap labor it offered. India, historically close to the USSR, and Iran, historically averse to Washington, were struggling to find a new balance in a world dominated by Washington.

Tehran was clearly in an open conflict with the United States because of the 1979 Islamic revolution that liberated the country from Western submission under the Shah Mohammad Reza Pahlavi. India understood the new reality, laying the foundations for a close cooperation with Washington. Previously, the use of jihadism in Afghanistan, through the coordination between Pakistan, Saudi Arabia and the United States, had severely undermined relations between India and the United States, remembering that New Delhi was an important ally of Moscow during the Cold War.

Following the fall of the Berlin Wall and the commencement of the unipolar era, India, Russia, China and Iran started down their paths of historical rebirth, though starting from very different positions and following different paths. India understood that Washington had immense economic and military power at its disposal. Despite the early embraces between Clinton and Indian prime minister Atal Bihari Vajpayee, relations between New Delhi and Washington reached unexpected heights during the Bush era. A series of factors helped to weld the bond. There was, firstly, the reality of India's great economic growth. Secondly, India offered the opportunity of counterbalancing and containing China, a classic geopolitical scenario.

During this delicate unipolar period, there were two highly significant events for Russia and China that represented the beginning of the end for Washington's plans to dominate the planet. First of all, Putin became president of the Russian Federation on December 31, 1999. Secondly, Beijing was accepted into the World Trade Organization (WTO). Today's Chinese economic power took flight thanks to the Western industrial companies relocating their manufacturing to China so as to see their dividends triplicate and costs more than halve. It was a winning model for the capitalist, and a loser for the Western factory worker, as we would come to see 20 years later. The strategic thinking of the newly elected Putin was geopolitically visionary and had at its base a complete revamp of Russia's military doctrine.

China and Russia both initially sought to follow the Indian path of cooperation and development with Washington. Moscow attempted a frank dialogue with Washington and NATO, but the decision by the US in 2002 to withdraw from the Anti-Ballistic Missile Treaty (ABM Treaty) marked the beginning of the end of the Western dream of integrating the Russian Federation into NATO. For Beijing, the path was more downhill, thanks to a vicious circle whereby the West relocated to China to increase profits, which were then invested into the US stock market, multiplying the gains several times. It seemed like the Americans were onto something until, 20 years later, the entire middle and working classes found themselves being reduced to penury.

In this period following September 11, 2001, Washington's focus shifted rapidly away from confronting rival powers to the so called "fight" against terrorism. It was an expedient way of occupying tactically important countries in strategically important regions of the planet. In Eurasia, US forces settled in Afghanistan on the pretext of fighting al-Qaeda and the Taliban. In the Middle East, they occupy Iraq for the second time and have made it an operational base from which to destabilize the rest of the region in the decades since.

While India and China mainly pursued peaceful growth as a means of economically empowering the Asian region, Russia and Iran early understood that Washington's attention would eventually fall on them. Moscow was still considered the deadly enemy by the neoconservative Cold War warriors, while the Islamic revolution of 1979 was neither forgotten nor forgiven. In the decade following 9/11, the foundations for the creation of a multipolar order were laid, generating in the process the huge transitional chaos we are currently experiencing.

India and China continued on their path to becoming economic giants, even as there is a latent but constant rivalry, while Iran and Russia continued on their path of military rejuvenation in order to ensure a deterrent sufficient to discourage any attacks by Israel or the US respectively.

The breaking point for this delicate geopolitical balance came in the form of the "Arab Spring" of 2011. While India and China continued their economic growth, and Russia and Iran grew to become regional powers that were difficult to push around, the US continued its unipolar rampage, bombing Somalia, Afghanistan and Iraq after having earlier bombed Yugoslavia, as the Pentagon devising light-footprint operations in the Middle East with the help of the Saudis, Israelis, Brits and French, who aided and armed local jihadis to wreak havoc. First Tunisia, then Egypt, and finally Libya. More dead, more bombs, more chaos. The warning signs were apparent to all regional powers, from China and Russia to India and Iran. Even if the synergies were still not in place, it was clear to everyone what had to be done. US destabilization around the world had to be contained, with particular focus on Eurasia, the Middle East and North Africa.

Slowly, and not without problems, these four countries began a military, economic, political and diplomatic cooperation that, almost a decade later, allowed for the ending of the US unipolar moment and the creation of a multipolar reality with different centers of power.

The first confirmation of this new phase in international relations, favoured by historical ties, was the increasingly multifaceted cooperation between India and Russia. Another factor was China and Russia being drawn to the Middle East and North Africa as a result of the Obama administration's actions in the Middle East with its Arab Springs, bombing of Libya and destabilization of Syria. They feared that prolonged chaos in the region would eventually have a negative effect on their own economies and social stability.

The final straw was the coup d'état in Ukraine, as well as the escalation of provocations in the South China Sea following the launch by the US of its so-called "Pivot to Asia". Russia and China were thus forced into a situation neither had thought impossible for the previous 40 years: the joining of hands to change the world order by removing Washington from its superpower dais. Initially there were amazing economic agreements that left the Western planners stumped. Then came the military synergies, and finally the diplomatic ones, expressed by coordinated voting in the United Nations Security Council. From 2014 onwards, Russia and China signed important agreements that laid the foundations for a long-running Eurasian duopoly.

Obama's legacy did not stop, with more than 100,000 jihadists unleashed on the country, financed by US and her allies. This led Moscow to intervene in Syria to protect its borders and obviate the jihadists' eventual advance on the Caucasus, historically Russia's soft underbelly. This move was hailed by the Pentagon as a new "Vietnam" for Russia. But these calculations were completely wrong, and Moscow, in addition to saving Syria and frustrating the plans of Washington and her confederates, greatly strengthened its relationship with Iran (not always a simple relationship, especially during the Soviet period), elevating it to the high level of regional cooperation.

Obama's legacy was to inadvertently create a strategic triangle involving Iran, China and Russia and their development of high-level projects and programs for the region and beyond. It represents a disaster for US foreign policy as well as the unquestionable end of the unipolar dream.

Jumping forward a few years, we find Trump in the driving seat of the United States, repeating just one mantra: America First. From the Indian point of view, this has further aggravated the relations between the two countries, with sanctions and duties placed on India for what was a Western decision in the first place to shift manufacturing to low-wage India in order to further fatten the paychecks of the CEOs of Euro-American companies.

Modi's India is forced to significantly increase its ties to Iran to guarantee its strategic autonomy in terms of energy supply, without forgetting the geographic proximity of the two countries. In this context, Russia and Iran's victory against terrorism in the Middle East pacifies the region and stabilizes Syria, Egypt, Iraq and Libya, thereby allowing for the development of such new projects as the mega Silk Road 2.0 investment on which Beijing places considerable importance.

We could go on in this vein, detailing how even China and India have overcome their historical mistrust, well aware that divide and rule only benefits those who are on the other side of the ocean, certainly not two countries experiencing great economic growth with a common border spanning thousands of miles. The meetings between Modi and Xi Jinping, as well as those between Putin and Xi Jinping or Putin with Modi, show how the intention of these three leaders is to ensure a peaceful and prosperous future for their citizens, and this cannot be separated from a stronger union together with an abandonment of disputes and differences.

The synergies in recent years have shifted from the military and diplomatic arenas to the economic one, especially thanks to Donald Trump and his aggressive policy of wielding the dollar like a club with which to strike political opponents. One last step that these countries need to take is that of de-dollarization, which plays an important role in how the the US is able to exercise economic influence. Even if the US dollar were to remain central for several years, the process of de-dollarization is irreversible. Right now Iran plays a vital role in how countries like India, Russia and China are able to respond asymmetrically to the US. Russia uses military power in Syria, China seeks economic integration in the Silk Road 2.0, and India bypasses the dollar by selling oil in exchange for goods or other currency.

India, China and Russia use the Middle East as a stepping stone to advance energy, economic and military integration, pushing out the plans of the neocons in the region, thereby indirectly sending a signal to Israel and Saudi Arabia. On the other hand, conflicts in Syria, Iraq and Afghanistan are occasions for peacemaking, advancing the integration of dozens of countries by incorporating them into a major project that includes Eurasia, the Middle East and North Africa instead of the US and her proxy states.

Soon there will be a breaking point, not so much militarily (as the nuclear MAD doctrine is still valid) but rather economically. Of course the spark will come from changing the denomination in which oil is sold, namely the US dollar. This process will still take time, but it is an indispensable condition for Iran becoming a regional hegemon. China is increasingly clashing with Washington; Russia is increasingly influential in OPEC; and India may finally decide to embrace the Eurasian revolution by forming an impenetrable strategic square against Washington, which will shift the balance of global power to the East after more than 500 years of domination by the West.

Source: [www.strategic-culture.org](http://www.strategic-culture.org), 25 Jan 19

## **Where will India fit in a Missile Defence Partnership in the Indo-Pacific?**

Rajeswari Pillai Rajagopalan

Last week, US President Donald Trump announced the 2019 Missile Defense Review (MDR), outlining the rapidly evolving threats and the US measures and capabilities that are required to protect the homeland, bases abroad and US allies and partners around the world. The document, the latest among a series of strategy documents released under the Trump administration, bears noting in terms of what it means for India and the wider Indo-Pacific.

The Indo-Pacific factors significantly in the MDR. There is a mention of threats such as North Korea, Iran, Russia, and China, the advancements in missile defense and anti-satellite (ASAT) advancements in a few countries that could negatively impact the United States, and references to the importance of working with US allies and partners including Japan, South Korea, Australia, and India.

The references to these like-minded states in particular bears noting. Both Japan and South Korea are already working with the United States in developing their respective missile defense shields which are also “increasingly interoperable” with US systems. Australia also plays an important role in strengthening the regional missile defense cooperation through a trilateral engagement with the United States and Japan. Where does India fit into this emerging missile defense partnership in the Indo-Pacific?

India is no stranger to this conversation: It has been trying to manage growing missile threats in its neighborhood for about two decades now. China-Pakistan collaboration in this regard has been a significant driver in pushing New Delhi in developing certain limited missile defense capabilities. In the early 1990s, proliferation of short- and medium-range ballistic missiles such as the M-9 and M-11 from China to Pakistan pushed India to explore missile defense options. India had learned to live with China’s inventory of long-range missiles, but Pakistan was always a more prominent and unpredictable rival for India, and thus India has felt compelled to respond with greater swiftness.

India’s missile defense options included both indigenously developing missile defense technology as well as procuring it from the outside. At the time, this effort represented a major shift in India’s policy on missile defenses: India had

vociferously criticized the US “Star Wars” missile defense programs of the 1980s. A changing missile threat perception along with a strategic reorientation toward the US enabled these policy shifts in India.

In recognition of this fact, the MDR makes a pointed reference to the “advanced and diverse range of ballistic and cruise missile capabilities in South Asia.” The review further notes that this is a potential area of cooperation between India and the United States especially given the convergence of strategic interests between the two sides and sees this as “a natural outgrowth of India’s status as a Major Defense Partner and key element of our Indo-Pacific Strategy.”

There is certainly some indication of a greater weight being placed on India in Washington’s calculations about how it deals with US alliances and partnerships in the region. To take just one example, the United States had, just a few months ago, granted India a “Strategic Trade Authorisation-1 (STA-1)” status, that was previously given only to Japan and South Korea in Asia. But in reality, though India has a growing interest in missile defenses, whether it will be able to partner with the United States is open to question.

For instance, interestingly, this comes in the backdrop of India’s decision to buy the Russian S-400 air defense system for \$5 billion. The Indian decision to proceed with the S-400 systems is indicative of the scale of the missile threats in India’s neighborhood. But it also means it is unclear whether India will look to the United States for BMD systems: a US and Russian defense system could be complicated in terms of interoperability, though some analysts argue that it is a sensible option to have different radars and different encryption systems to deal with an array of threats.

Another problem is that India’s DRDO is already developing its own two-tiered BMD system. In addition, at the lower end, India is purchasing the US-Norwegian NASAMS-2 system, as well as the Indo-Israel MRSAM (a land version of the Barak-8 naval system). Given all this, whether or not there is space for further operational cooperation with the United States within the Indian ballistic missile defense architecture remains to be seen.

Source: [www.orfonline.org](http://www.orfonline.org), 25 Jan 19

## **'Profound dependency' between Maldives and Indian Ocean: foreign minister**

-Fathmath Shaahunaz

Minister of Foreign Affairs Abdulla Shahid declared Wednesday that there was a "profound dependency" between Maldives and the Indian Ocean. "There is a profound dependency, a mutual dependency, between Indian Ocean and the Maldives", he said at the Round Table held at the Center for Strategic and International Studies (CSIS) in Washington DC. Shahid stated that a stronger partnership between Maldives and the US was crucial to promote maritime security. The foreign minister added that such ties with the US would also strengthen the security of the South Asia region, and make the archipelago stronger in the areas of regional and global politics.

Shahid is currently on a four-day official visit to the US, where he met with the CSIS, United States Department of Treasury and the USAID. He is also scheduled to address the United Nations' Security Council on the issue of climate change and security. The foreign minister is accompanied on his trip by Minister of State for Foreign Affairs, Ahmed Khaleel, Permanent Representative of the Maldives to the UN and Ambassador to the United States, Ali Naseer Mohamed, and officials of the Maldives Mission in New York.

Source: <https://edition.mv/news/8881>, 23 Jan 19

## **Christopher Pyne says China has raised regional 'anxiety' over its activities in the South China Sea**

Defence Minister Christopher Pyne has called on Beijing to act responsibly in the South China Sea and avoid mimicking Russia's "might is right" approach to diplomacy. Delivering a keynote speech to military leaders in Singapore, Mr Pyne stressed that no country wanted to stifle China's growth and prosperity. But he urged Beijing to rethink its approach to the politically-charged waters of the South China Sea, arguing the world power was eroding regional confidence and increasing anxiety, including with activities like building artificial islands in disputed waters. "Resolving disputes in the South China Sea in accordance with international law would build confidence in China's willingness to support and champion a strategic culture that respects the rights of all states," Mr Pyne said.

"As the exhortation goes, to those that much is given, much is expected; similarly for nation states, for those with great power comes great responsibility, and so I call on China to act with great responsibility in the South China Sea." The Minister pledged Australian support for multilateral activities in the South China Sea, if required, to remind Beijing they are international waters. China is pitted against smaller neighbours in those waters that it claims almost in entirety. While Australia is "not interested in containing China," it wants Indo-Pacific countries to not have to make "choices between economic gain and sovereignty," Mr Pyne said. Mr Pyne described ongoing tensions between the United States and China as "the defining great power rivalry of our times".

However, he shrugged off suggestions of a potential cold war between the duelling world heavyweights. "It's a simplistic and unsophisticated characterisation of what is a much more complex and dynamic geo-strategic paradigm," Mr Pyne said. "Any division of the region into Cold War-like blocs is doomed to failure since it would necessitate false choices between prosperity and security." While he did not directly name Russia, the Minister took a thinly-veiled swipe at its annexation of the Crimea from Ukraine in 2014 and referred to Vladimir Putin's Government as an oligarchy threatening the rule of law. "It is under threat from oligarchies who think it is their birthright to simply annexe their neighbour at will," Mr Pyne said. "It is under threat from countries who treat all of cyberspace like their own personal fiefdom, to do with as they will; to take what is not rightfully theirs." The Commonwealth has earmarked over \$90 billion for a new fleet of attack class submarines, frigates and other ships to strengthen Australian maritime capabilities. But, when compared to the sheer size of a navy such as China's People's Liberation Army, Australia pales in comparison. The Australian fleet consists of 48 ships, boats and submarines compared to about 220 combat ships alone in the PLA Navy (China plans to increase this to 351 by 2020).

In an earlier interview with the ABC, Jai Galliot, leader of the Values in Defence & Security Technology Group within the University of New South Wales's School of Engineering and Information Technology at the Australian Defence Force Academy, said that "countries like Australia are always 10 to 30 years behind the US and certain European players". "And even if Australia worked toward getting 80 decent ships, the PLA Navy's sheer size will be our main issue," Dr Galliot said. Mr Pyne said the country hoped to grow its defence budget to over 2 per cent of its gross domestic product by 2021. "Australia sees its role as one of being able to talk to both China and the United States openly and frankly," he said. "We are clearly a very close ally of the United States ... but we don't believe we need to choose between security and prosperity, and we haven't in the past and we don't intend to in the future."

The Defence Minister visited Beijing last week for a meeting with his Chinese counterpart Wei Fenghe. They discussed the detention of Chinese-Australian writer Yang Hengjun, whom China has accused of endangering its national security. Mr Pyne said consular access to Yang, a 53-year-old novelist and online commentator "has been granted". He did not give further details on the matter but said Australia's relations with China were in a "positive shape".

Source: [www.abc.net.au](http://www.abc.net.au), 28 Jan 19

### **With eyes on Indo-Pacific, US discusses Potential Missile Defence Cooperation with India**

Acknowledging India's leadership role in the Indian Ocean security, the Trump administration discussed potential missile defence cooperation with India as part of its effort to deepen the bilateral strategic partnership. New Delhi is set to play a major role in the Pentagon's strategy which is looking forward to increasing its influence in the Indo-Pacific region. The 81-page 'Missile Defense Review' report released by President Donald Trump is important given the fact that India placed a USD 5 billion order to purchase S-400 air defence system from Russia, which angered Washington.

In the report, the Pentagon claims that threats posed by offensive missile capabilities are no longer limited to a few regions around the world and added that many countries in South Asia have developed or are developing an advanced range of ballistic and cruise missiles. "Within this context, the United States has discussed potential missile defence cooperation with India. This is a natural outgrowth of India's status as a Major Defense Partner and key element of our Indo-Pacific Strategy," said the Pentagon report. The report identifies missile development projects by Russia and China as major threats to the US. It should be noted that the US had earlier shown reluctance to offer its missile defence system to India. New Delhi had expressed its interest in acquiring a missile defence system from the US, particularly the Terminal High Altitude Area Defense system popular as THAAD but the Obama administration was not willing to share its advanced missile defence system with India after which New Delhi procured the S-400 systems from Russia.

Source: [www.timesnownews.com](http://www.timesnownews.com), 18 Jan 19

## **ADECS 2019: A 'dragon' is tilting the Indo-Pacific's Naval Balance of Power**

- Gordon Arthur

At this year's ADECS 2019 conference in Singapore, there were few delegates willing to address the South China Sea and China's growing assertive in the Indo-Pacific region. However, one of those who did was Sarabjeet Parmar, an Indian Navy captain and a senior fellow at the Delhi-based National Maritime Foundation.

In terms of the Western Pacific, Parmar described China as a middle power with leanings towards a great power and aspirations of being the dominant nation. In the Indian Ocean Region, he likened China to a middle power with great aspirations.

The problem is that in both maritime regions, the US is the great power with dominant nation status. Of course, the latter depends upon alliances, coalitions and/or strategic partnerships. Former US Defense Secretary John Mattis acknowledged this when he said, 'While the US remains the indispensable nation in the free world, we cannot protect our interests or serve that role effectively without maintaining strong alliances and showing respect to those allies.' Plying the Indian Ocean annually are some 120,000 ships. More than 20 navies have a presence there, and perhaps 120-140 warships are roaming the sea at any one time.

However, India is alarmed most by the entry and permanent presence of Chinese warships of the People's Liberation Army Navy (PLAN) in the region, including submarines. Plus another cause of concern is the arrival of the Chinese flag following the expanding Maritime Silk Road. After Beijing's embarrassing defeat by the Permanent Court of Arbitration's decision over the South China Sea case brought by Manila, Parmar described a 'change of tack' by China there. China is seeking 'protection of its sovereign territory', particularly its claims over four groups of islands (Xisha/Paracels, Nansha/Spratlys, Zhongsha/MacClesfield Bank and Dongsha/Pratas). China has been busy arming reclaimed islands in the South China Sea as part of its antiaccess/area denial (A2/AD) policy. The first goal of balancing military power is for China to discourage the entry of foreign powers (particularly the US) into the area, and denying area by preventing the enemy from manoeuvring into a position of advantage. However, Parmar spoke of a third goal, one that is not mentioned as regularly as A2/AD. He described a strategy of active strategic counterattacks on exterior lines (ASCEL). He noted that ASCEL works at the strategic rather than the operational level.

The idea is to conduct conflict as far away from the Chinese coast as possible, especially using asymmetric tactics against a superior enemy. The strategy thus extends into the area somewhere between the First and Second Island Chains. Because ASCEL by definition involves counterattack, Parmar believes, 'In my mind, China will never fire the first shot,' although this is not to say that the PLA would force an opponent into firing first. The Indian naval officer outlined China's intentions with its A2/AD and ASCEL strategy. They give strategic depth, buffering the mainland from threats, but also encircling and isolating Taiwan. It is also a 'training ground and springboard for power projection beyond the First Island Chain'.

Furthermore, it benefits maritime and undersea resource collection, as well as securing Chinese sea lines of communication. Parmar presented a table of comparative naval fleet strengths, with the PLAN currently having 330 surface ships and 66 submarines, in contrast to the US Navy's 211 surface ships and 72 submarines. However, by 2030, based on current shipbuilding rates, he predicts China will have 450 ships and 99 submarines, while the USN may have 355 ships, if it is lucky. Of course, the US will have no more than 60% of its fleet in the Pacific region, giving the PLAN numerical superiority.

In fact, every year, the PLA is adding the equivalent of a Pakistan Navy to its own fleet. The Indian presenter at ADECS also discussed the topic of tolerance warfare, 'the persistent effort to test the tolerances for different forms of aggression against settled states'. China is thus probing for avenues with minimal resistance or weaknesses it can exploit, while unilaterally asserting rights and not complying with accepted conventions. Also part of it is 'establishing or creating new facts'. Of course, this approach is not unique to China, because all weaker nations challenging the status quo do it at some stage. China is doing it overtly, which indicates strength and confidence, as well as covertly or via proxies, which shows a lack of capacity to operate freely. All the while, the naval balance of power is tipping more in China's favour. BACK TO NEWS

Source: [www.shephardmedia.com](http://www.shephardmedia.com), 30 Jan 19