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समाचार पत्रों से चयनित अंश
Newspapers Clippings

डीआरडीओ समुदाय को डीआरडीओ प्रौद्योगिकियों, रक्षा प्रौद्योगिकियों, रक्षा नीतियों, अंतर्राष्ट्रीय संबंधों और विज्ञान एवं प्रौद्योगिकी की नूतन जानकारी से अवगत कराने हेतु दैनिक सेवा

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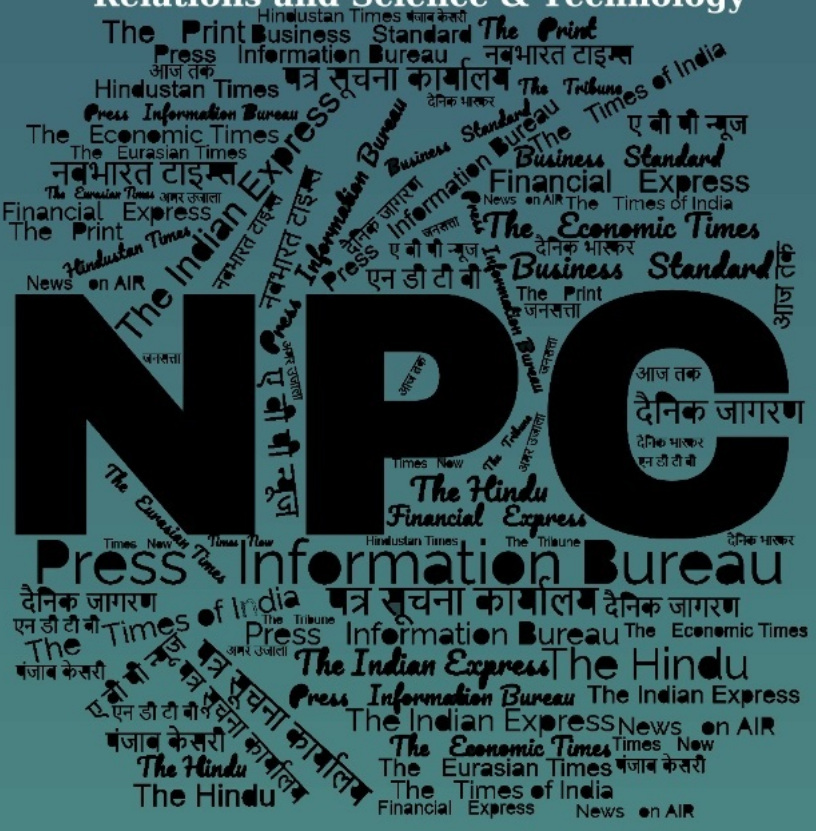

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Defence News

क्वाड बैठक आज समुद्र सुरक्षा पर होगी बात

Source: NavBharat Times, Dt. 26 May 2026

दिल्ली में 26 मई को क्वाड देशों के विदेश मंत्रियों की बैठक होगी। क्वॉड में अमेरिका, जापान, ऑस्ट्रेलिया और भारत शामिल हैं। इसी साल भारत ब्रिक्स समूह की अध्यक्षता भी कर रहा है और हाल में दिल्ली में ब्रिक्स देशों के विदेश मंत्रियों की बैठक अहम है क्योंकि दुनिया ये भी देख रही है कि क्या भारत एक साथ दो अलग-अलग खेमों के बीच संतुलन बना पा रहा है। इसी साल सितंबर में ब्रिक्स समिट में रूस के राष्ट्रपति ब्लादिमीर पूतिन, चीन के राष्ट्रपति चिनफिंग भारत आ सकते हैं।

क्वॉड और ब्रिक्स की सोच काफी अलग मानी जाती है। क्वॉड को ऐसे देशों का समूह माना जाता है जो इंडो-पेसिफिक क्षेत्र में चीन के बढ़ते असर को संतुलित करना चाहते हैं। इसका फोकस सुरक्षा, समुद्री ताकत, टेक्नॉलजी और सप्लाई चेन जैसे मुद्दें पर है। वहीं ब्रिक्स खुद को पश्चिमी देशों के दबदबे के विकल्प के रूप में पेश करता है।

ब्रिक्स में भारत के अलावा चीन, रूस, ब्राजील, दक्षिण अफ्रीका और पट नए सदस्य देश शामिल हैं। चीन और रूस चाहते हैं कि दुनिया सिर्फ अमेरिका और पश्चिमी देशों के हिसाब से न चले। वे डॉलर पर निर्भरता कम करने और नई आर्थिक व्यवस्था की बात करते रहे हैं।

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Energy, maritime security in focus, Quad meets today

Source: The Indian Express, Dt. 26 May 2026

The foreign ministers of the Quad grouping will meet on Tuesday and are expected to discuss critical minerals, maritime and energy security, sources told The Indian Express. External Affairs Minister S Jaishankar will host Foreign Minister of Australia Penny Wong, Foreign Minister of Japan Toshimitsu Motegi and United States Secretary of State Marco Rubio for the meeting at Hyderabad House.

The Quad foreign ministers will also call on Prime Minister Narendra Modi. Sources said the war in West Asia has impacted maritime security and energy security – that will be one of the challenges and concerns which will be discussed during the meeting.

Besides, the four maritime democracies are concerned at the impact of the closure of Strait of Hormuz, and how that will impact freedom of navigation across the chokepoints in the world, including in the Indo-Pacific. So, in that context, the ministers are expected to recommit to a free and open Indo-Pacific – at a time when China is observing the chokehold on the Strait of Hormuz and its impact.

This concern is significant since much of the movement of critical minerals and semiconductors are carried through maritime traffic and their disruption can cause supply-chain challenges in the world's race in the AI industry.

These issues are expected to be discussed by the ministers, who had last met in July 2025 in Washington DC – when Rubio had hosted the Quad foreign ministers as his first diplomatic engagement after assuming office in January last year. Both meetings were held in the US, hosted by Rubio. The US Secretary of State is in India for a bilateral visit, and went on a sightseeing trip on Monday to Agra and Jaipur. He held bilateral talks with Jaishankar on Sunday.

Japanese Foreign Minister Motegi Toshimitsu and Australian Foreign Minister Penny Wong arrived in Delhi on Monday. While meeting Motegi, Jaishankar said, "India and Japan have a special strategic and global partnership and that signals that our ties have a larger implication, larger importance and larger impact." He also mentioned the upcoming Quad meeting and said they will discuss how to advance a free and open Indo-Pacific.

In the talks, the two sides deliberated on bilateral cooperation, global and regional issues, especially the West Asia crisis and its impact on energy supply chains. Jaishankar suggested that both India and Japan are impacted by the conflict as both are energy importing and trading nations and have maritime interests.

Wong, who reached Delhi in the evening, said, "In these uncertain times, the Quad is a vital partnership – four nations working together to shape a peaceful, stable and prosperous future for the Indo-Pacific region. Together, Australia, India, Japan and the United States are delivering concrete outcomes on shared interests including maritime security, critical minerals supply, infrastructure development and disaster relief."

She will meet Jaishankar for the bilateral meeting on Tuesday evening, and said, "Australia and India's partnership has never been more consequential." She added: "As Comprehensive Strategic Partners, Australia and India are deepening cooperation in trade and investment, defence and maritime security, climate and energy transition, strategic technology, and education and skills; with an enduring social connection at the heart of our partnership." This meet will also pave the way for Quad leaders' summit later this year.

https://indianexpress.com/article/india/energy-maritime-security-in-focus-quad-meets-today-10707754/

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400 military personnel from 12 nations take part in PRAGATI 2026 in Meghalaya

Source: The Times of India, Dt. 26 May 2026

The maiden edition of multinational joint military exercise PRAGATI 2026 has brought together 400 military personnel from 12 friendly nations in a shared commitment towards regional peace, security and cooperation.The exercise, which started at Umroi in Meghalaya on May 20, witnessed mixed teams training in semi-mountainous and jungle terrain, undertaking rock craft, ambush and counter-ambush drills, slithering, jungle lane shooting, and bus intervention. Sniper and AK-203 firing competitions have also been conducted to enhance operational proficiency, confidence, and professional understanding among the participants.

The military drill has also focused on strengthening camaraderie and military bonding through sports and informal interactions. Exercise PRAGATI 2026 continues to strengthen collective readiness, deepen military-to-military cooperation, and build enduring bonds among regional partners.

In a separate incident, the Indian Army, under the aegis of the Spear Corps, conducted a special yoga session at Aalo in the West Siang district of Arunachal Pradesh on May 23. The event also highlighted the importance of yoga in building physical fitness, inner balance, discipline and positivity in daily life. It provided a meaningful platform for youth engagement and interaction between Army personnel and local students.

https://timesofindia.indiatimes.com/defence/400-military-personnel-from-12-nations-take-part-in-pragati-2026-in-meghalaya/articleshow/131317321.cms

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इजरायल को मजबूती प्रदान करेंगे महाराष्ट्र में बनने वाले रक्षा उत्पाद

Source: Dainik Jagran, Dt. 26 May 2026

विश्व बाजार में भारत निर्मित मिसाइलों एवं अन्य रक्षा उत्पादनों की जो धाक जमी है, उसी का नतीजा है इजरायल के साथ 1.75 अरब डालर के राकेट लांचर उत्पादन के समझौते पर हस्ताक्षर होना। पिछले वर्ष हुए इस समझौते को जमीन पर उतारने का काम अब महाराष्ट्र के अहिल्यानगर में पूरा होने जा रहा है, जिसकी पुष्टि सोमवार को महाराष्ट्र के सीएम देवेंद्र फडणवीस ने कर दी है। रक्षा मंत्री राजनाथ सिंह ने बीते शनिवार को ही शिरडी में निजी क्षेत्र की रक्षा उत्पादन कंपनी निबे लिमिटेड विशाल इकाई का उद्घाटन किया था। इसमें हर साल तोप के गोले, मिसाइल लांचर, राकेट का उत्पादन किया जाना है। निबे लिमिटेड के सीएमडी गणेश निबे ने इशारा किया था कि रक्षा उत्पाद इजरायल के काम आएंगे। सोमवार को फडणवीस ने स्पष्ट कर दिया कि इस इकाई में पांच वर्ष तक ही इजरायल के लिए ही उत्पाद बनेंगे।

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India’s strategic dilemma: from non-alignment to multi-alignment

-by Ashok K Mehta (retd Maj Gen)

Source: The Tribune, Dt. 26 May 2026

DURING his recent tour of Europe, PM Narendra Modi upgraded bilateral relations to strategic partnerships with the Netherlands as the Dutch produce a critical component of chips; with Norway as Oslo is a source of green oil and gas; and with Italy for its innovation and high-tech. India is an observer state of the Arctic Council since 2013. Earlier this month, Modi said India would not bow to anyone, recalling the nuclear tests in defiance of US sanctions in 1998, signifying the birth of India's strategic autonomy. A galaxy of diplomats gathered this month in New Delhi to celebrate what many describe as India's crown jewel: strategic autonomy, whose fragility the Trump 2.0 era has exposed.

'Strategic' is the most overused adjective in diplomatic lexicon. It is attached to restraint, patience, sovereignty and national interest. The word 'partnership' is variable, dynamic and transactional. But strategic autonomy - hedging or balancing relationships by making sovereign choices -- has prospered. The concept originates in India's policy of non-alignment, adopted after Independence when New Delhi punched above its weight. As adversarial relations with US increased, India was pulled towards the Soviet Union. Even as it confronted triple threats from Pakistan, China and US in 1971, it was forced to sign the first formal Treaty of Peace and Friendship with USSR. The then PM, Indira Gandhi, insisted that "India is a non-aligned country' be inserted in the treaty, which was de facto an alliance. It enabled India to build conditions for the creation of Bangladesh from East Pakistan.

India has graduated from non-alignment to multi-alignment and multi-engagement to multi-polarity, culminating in strategic autonomy, whose utility has been diminishing in a disrupted world order. Since national security policy and strategy documents have not been produced, strategic autonomy is an immaculate conception, though six draft policy documents have been gathering dust.

With India's oldest ally Russia, the partnership is special, privileged and strategic. The partnership with the US has transformed from 'estranged democracy' to 'comprehensive, global and strategic'. Relations with China have fluctuated from 'developmental' and 'civilisational' to 'strategic and cooperative', and from 'peace and prosperity' to 'stable, but abnormal' after Doklam and Galwan. India and France are 'strategic and reliable' partners, both coveting their autonomy. The EU is a recent entrant to the strategic club, though it is more in the category of trade and commerce. A China adversary, Vietnam was elevated to 'enhanced comprehensive strategic partnership' during the visit of its President To Lam to India earlier this month.

At a recent seminar, Foreign Minister S Jaishankar outlined the neighbourhood first policy, with India positioning itself as the 'go-to option' for regional infrastructure support of neighbouring countries. He added that the purpose of India's policy (strategic autonomy) "is not to solve problems but manage relationships to national advantage", including neighbours "respecting India's red lines." The ground reality in the neighbourhood, though, is different despite India calling itself "the first responder and net security provider" as the recent sinking of an Iranian ship returning from Indian Fleet Review 2026 by a US submarine in the IOR proved. The lawless acts and events of the Trump 2.0 era have become a testbed of strategic autonomy. These have baffled the international community, especially the UN and affiliated organisations. India's less-than-successful record in protecting its international image results from a lack of strategic leverage and independent capacities; due to excessive external dependencies.

The special and privileged strategic partnership with Russia, civilisational relationship with Iran and membership of BRICS have all been targeted by the US. India's lead role in the Quad, three-decade old multi-layered defence ties with the US and pivotal position in countering China have been undermined by the US' dramatic policy shifts towards China -- with whom it seeks respectful relations -- "as reflected in Trump's recent visit to China. The astonishingly blunt statement of US Deputy Secretary of State Christopher Landau at the Raisina Dialogue: "US will not make the same mistake as it made with China and Japan, with India" was merely a warning.

India is one of the most US-sanctioned countries: on Russian and Iranian oil, having been pressured to switch to Venezuelan oil; on Chabahar Port and Russian military platforms, though waivers were provided. In addition, the US has imposed penal tariffs on transactions with Russia. India has yielded mainly to US sanctions, except the S400 AD system whose fourth battery arrived

this month. Had India not complied with sanctions on Chabahar port, it would have been able to construct infrastructure, leading to the development of the International North South Transport Corridor through Iran's Bandar Abbas Port and reduced dependencies through the double-blockaded Strait of Hormuz. Further, it would have enhanced its image among the Global South and credibility of strategic autonomy.

Where token appeasement and diplomatic finesse would have helped is in recognising Trump's claim in facilitating the ceasefire during Operation Sindoor, which is a reality. This would not have undermined strategic autonomy, but New Delhi's persistent contradiction of Trump's claims led to avoidable diplomatic friction. Pakistan played its cards well, transforming its image from a state sponsor of terrorism to a responsible mediator in conflict resolution and as the go-between during the negotiations between the US and Iran, in which Israel is conspicuously missing. Pakistan's international profile has risen and instead of re-hyphenation with India, it is now in a different class. At the Delhi seminar, Ambassador Jawed Ashraf said: "Silence is not strategic autonomy", hinting at India's maun vrat (strategic silence) over illegitimate actions of the US and Israel against Iran and others. Elsewhere, former NSA Shivshankar Menon, former FS Nirupama Rao have said India has lost its voice, maintaining strategic silence; also its credibility among Global South and neighbourhood. The disrupted world order requires pro-active strategic autonomy.

https://www.tribuneindia.com/news/comment/indias-strategic-dilemma-from-non-alignment-to-multi-alignment/

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Armed forces must adapt to tackle future battles

-by Harsh Kakkar (retd Maj Gen)

Source: The Statesman, Dt. 26 May 2026

Recent conflicts have displayed two distinct characteristics. The first is a war between neighbouring countries primarily with territorial disputes while the second is when a state or an alliance, without a common border with the adversary, seeks to force it into submission or accept its terms. The Azerbaijan-Armenia war of 2020 and 2023 and the RussoUkraine conflict, into its fifth year, fall in the first category, while the US-Israel-Iran war comes in the second.

India has territorial disputes with two neighbours and any conflict with either would come in the first category. Wars in recent times have been influenced by technological changes, including AI. In the Azerbaijan-Armenia conflict, rockets, drones, missiles, EW and loitering ammunition were successfully employed for the first time. Armenia accepted a ceasefire because its forces were severely depleted because of coordinated strikes by Azerbaijan, utilizing T urkish UAVs and loitering ammunition. Technology has dominated the Russo-Ukraine conflict in far more imaginative ways. Russia was successful in the initial stages as Ukraine had yet to develop its UAV and counter-UAV capabilities.

As the war progressed, imaginative use of UAVs and commercial satellites made the battlefield transparent, while the inclusion of armed robots and UAVs alongside missiles added to destruction. Surprise was no longer possible nor was deployment and use of large-scale mechanized forces. As lessons emerged, Russian mechanized forces began to be equipped with counter-drone and loitering munition capabilities, while their tactics also changed. Capture of

territory remains the primary intent; hence troops are deployed to gain or deny this despite challenges. Currently, progress is slow and the frontlines are largely frozen.

There are no longer large mechanized forces bunched together and breaking through, but smaller teams backed by firepower and UAVs. Ukraine has realized that despite its vast exploitation of UAVs and armed robots (to make up for a shortfall in troops), it cannot stop Russian advances without boots on the ground. Land forces remain essential in conflicts involving territorial disputes. Use of airpower has also changed. The Russian air force, far superior to Ukraine's, changed its philosophy of operational employment once it encountered multi-layered Ukrainian air defences, resulting in heavy losses.

It began avoiding contested air spaces to prevent attrition and instead relied on its accurate long-range weapons, including cruise missiles and glide bombs, releasing them beyond the range of Ukraine's air defences. This also affected close air support traditionally provided to ground forces in contact battle. Ground troops have to be self-reliant in defence as air support is only available from a distance. To target Ukraine's industrial complexes, energy infrastructure and re-supply depots, Russia utilizes UAVs and missiles, fired from deep within. Ukraine's ability to hit Russian air bases has forced Moscow to move its air power resources further back.

Troops on the frontlines are dependent on FPV (First Person View) drones and loitering munitions. These are utilized to monitor movements of the adversary and to target advancing troops. UAVs and ground drones are employed for re-supply and casualty evacuation. Drones are now modified with anti-jamming capabilities and anti-drone nets are common over defensive positions. Iran is a different kettle of fish and the war here cannot be compared to Ukraine. Neither the US nor Israel share a border with Iran and hence operations are based on US-Israel air power and Iran's missile and drone power. India's Operation Sindoor largely followed the Russo-Ukraine model.

With Pakistan possessing Chinese air defence systems, Indian air power exploited its long-range weapon systems and its loitering ammunition alongside Brahmos missiles fired from well within our own side, targeting Pakistan's air defence systems and military bases. India's S-400 anti-aircraft missile system achieved a record-breaking surface-to-air kill of Pakistan's Airborne Early Warning and Control aircraft at a distance of 314 km. Air defences on both sides ensured air power stayed well within its own territory to avoid being targeted. This scenario will only get more complex in the future. Employment of air power close to the border or in enemy territory can only happen once air defence systems of the adversary are negated which is unlikely in short conflicts.

Air operations in Sindoor were different from Operation Bandar in 2019 targeting Balakote, where a dog fight resulted in air losses to both Pakistan and India. Simultaneously, Indian artillery fired precision-guided ammunition to degrade Pakistan's terrorist camps and posts, which had supported movement of terrorists. The Indian army has since Sindoor gone in for induction of UAVs and loitering munitions from the battalion level upwards to enhance staying power of troops on the ground. It is also restructuring its firepower by inducting long-range weapons with precision targeting. The raising of Rudra brigades and Integrated Battle Groups is to offset presenting large mechanized forces. There are also reports of the army raising a rocket and missile force for targeting positions in depth and for defending its troops in a contact battle.

The artillery has adopted fire-and-scoot tactics to avoid being engaged by the adversary's loitering munitions and counter-bombardment. The air force is enhancing its long-range strike capabilities. The ongoing/ planned induction of Rampage, Brahmos, and Crystal Maze missiles for air-to-ground targets, Gaurav, TARA glide bombs and SAAW (Smart Anti-Airfield Weapons) for the enemy's strategic installations and Meteor, Astra Mk II, etc. for long-range air-to-air combat, apart

from loitering munitions and smart drones, indicate that engagement in future conflicts would be from beyond the range of the adversary's air defence systems. Future airspaces would be contested, dominated by air defence systems, and preventing traditional employment of air power.

This implies that close air support for the army, once contact battle commences, would flow from a distance exploiting accurate air-to-ground weapon systems. Hence, troops on the ground must possess the ability to identify threats and defend themselves with UAVs and loitering ammunition directly under their control alongside dedicated artillery and missile power. The airspace over the TBA (Tactical Battle Area) would be congested, being simultaneously utilized by multiple forces.

Expecting the airspace to be coordinated by a single agency, except by altitude, or UAVs being controlled by a specific service or command for better coordination of the airspace, will not be feasible in the future battlefield. Adding to the confusion would be intense Electronic Warfare actions aiming to disrupt command, control and communications. We need to find realistic solutions to manage the airspace if we are to fight the next war effectively.

https://www.thestatesman.com/opinion/armed-forces-must-adapt-to-tackle-future-battles-1503598180.html

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India eyes Amphibians for coastal watch

-by Sanjay Singh, aviation expert

Source: The Pioneer, Dt. 26 May 2026

The description of India as a vast Himalayan sub-continent overshadows India's claim as being the world's second-largest peninsula, with the Tropic of Cancer bisecting the country into two equal halves. Peninsular India, surrounded by the Arabian Sea to the west, the Indian Ocean to the south, and the Bay of Bengal to the east, has a formidable maritime boundary running unbroken for 7,500 kms. The geostrategic importance of India's peninsular boundary becomes critical in light of her maritime neighbours - the Maldives and Pakistan to the west, and Bangladesh, Myanmar, Thailand, Malaysia, Indonesia, and Sri Lanka to the east and south. The archipelagos of Lakshadweep and the Andaman and Nicobar Islands further define her position as a maritime nation.

Till now, the peninsular location of India has protected it from misadventures by unfriendly neighbours. But history does not give any advance notice of a strategic paradigm shift. The strategic aspect of India's maritime dream is comprehensively captured in India's Maritime Doctrine 2025, authored by the Indian Navy, while the economic aspect is covered by the Maritime Vision 2030 released by the Ministry of Ports, Shipping and Waterways. The first document highlights the ever-lurking threats in waters within India's sovereign zones and beyond, and the need for extensive and intensive patrolling. The second document underlines the need to fully exploit the economic benefits of our maritime assets and the steps necessary to secure our Blue Economy dream.

In light of recent political developments in the Gulf that have altered the global order, India is faced with new realities regarding the nature and direction of hidden threats. It is now commonly accepted that the costs of land wars may far outweigh the gains. The loss of civilian lives, damage to schools and hospitals, and the cost of maintaining and feeding a huge army in peacetime amount to self-goals. Among the newer and more cost-effective ways to cripple an enemy would

be selective attacks on logistics and the choking of supply lines, leading to the depletion of agricultural and industrial inputs. Moving away from the era of land wars, such attacks are likely to be launched from the sea, air, land, or through a combination of all three.

Securing India's maritime dreams will require a different kind of wings in the air and hulls in the water. Before India can become Atmanirbhar in the range of equipment required to safeguard its maritime boundaries, it must first identify its precise requirements and create a critical inventory capable of responding to emergencies. The changing nature of warfare is also likely to render huge inventories of traditional military hardware obsolete. Can India's manufacturing infrastructure — both public and private - along with its defence research capabilities, address these emerging needs?

The changing nature of warfare also demands a reassessment of how we perceive threats. We need to clearly pinpoint and assign responsibility for guarding India's maritime interests. Is it the responsibility of the state police in coastal states, the Indian Coast Guard, or the Indian Navy? The seas on both sides of the Indian peninsula are replete with unidentified, unregulated, and unregistered vessels sailing casually. These may well be the prying eyes and spying ears of hostile forces. The Indian Coast Guard, the guardians of our coastline and the first line of coastal defence, has performed an exemplary role in patrolling the seas. It can claim credit for several daring rescue and reconnaissance missions. Hundreds of distress calls are made to the Coast Guard every week, and it is expected to respond each time.

This brings us to the moot point: what equipment do we currently possess that can effectively meet the challenges along our maritime borders? Of course, we can create more road access to the coast and along the coastline, or build new airports and heliports. However, roads and airports require land acquisition and often result in environmental degradation through the depletion of arable land and green cover. Airports can also become vulnerable targets, easily crippled by a well-directed attack. Helicopters are limited by their range and speed. Speedboats? Pirates may possess faster vessels equipped with superior avionics and firepower.

Pirates have mastered the art of deception by flying misleading flags and even waving casually at our coast guards, fully aware that Coast Guard Dornier aircraft cannot land on water and are not weaponised. At best, they can alert nearby vessels, but reaching the location may take considerable time. How do we rescue naval crews in response to an SOS from a stranded vessel in the high seas? Or respond swiftly to distress calls from India's offshore oil rigs? History has repeatedly demonstrated the catastrophic cost of delays in reaching burning oil rigs despite timely SOS signals.

Disasters have also occurred in the Himalayas - avalanches, glacial lake outbursts, and earthquakes. Is there a vehicle capable of rapid rescue and evacuation in such conditions? The answer lies in the emergency services provided by amphibian aircraft. They can conduct search, rescue, and evacuation operations on virtually any surface, including alpine glaciers. They fly faster than helicopters, possess greater range, can operate in adverse weather, and carry heavier payloads. Today, specialised amphibians perform highly diverse roles. Fire-retardant water scoopers can collect 6,000 litres of water in just 12 seconds while in motion, dump the load instantly, reload within minutes, and repeat the process. As forests in Kumaon continue to burn, India still appears to lack a robust solution. Amphibians can also be modified into air ambulances equipped with operating theatres and ICUs — effectively becoming flying hospitals.

Amphibians can be weaponised to land alongside pirate vessels unexpectedly and identify illegal, unregulated, or falsely registered ships. As India strengthens its domestic borders, the coastline

increasingly becomes the preferred route for unauthorised entry. One only has to recall how Ajmal Kasab and his associates used the sea route to reach Mumbai and enter the Taj Mahal Palace Hotel.

India's maritime responsibility also extends to disaster mitigation and regional humanitarian assistance. India aspires to be regarded as the most dependable neighbour in the Bay of Bengal, the Indian Ocean, and the Arabian Sea during natural disasters and crises. This requires the capability to deliver relief rapidly. Amphibian-enabled rapid response systems for tsunamis, floods, and volcanic eruptions would strengthen India's diplomatic standing as a soft power. The world remembers the first responder to a disaster; others are relegated to footnotes. One of the world's most dramatic rescue missions, undertaken by the USAF and the US Marines in 1956 under "Project Magnate", involved rescuing six stranded scientists and crew members after an air crash deep in Antarctica in sub-zero temperatures. With only a few hours available for survival, the amphibian aircraft flew hundreds of miles in inclement weather, located the wreckage, and landed on ice when the sea proved too rough. All six survivors were rescued and flown to safety. Does India possess an amphibian aircraft with such capabilities? Hundreds of Himalayan lakes could be accessed using such aircraft, whether requiring landings on ice, water, or makeshift dirt tracks.

A maritime economy fundamentally uses water as a resource for mobility, economic value creation, livelihoods, and sustenance. More than 18 per cent of India's population lives in 72 districts situated along the coastline across nine states. These regions include fishing communities, coconut growers, rice and cashew farmers, and skilled workers engaged in tourism, healthcare, and wellness industries. With coastal tourism emerging as one of the fastest-growing sectors for sustainable employment, Maritime India is strongly positioned to become a major beneficiary of India's growth story. India is blessed with eighteen "Blue Flag" certified beaches distributed across the nine coastal states, awaiting development. However, private-sector investment will materialise only with reliable all-weather connectivity. Many of these beach destinations remain pristine and hold enormous development potential.

One of the major constraints in offshore tourism development is island connectivity. Both Lakshadweep and the Andaman & Nicobar Islands are archipelagos consisting of numerous islands and atolls, many of which remain connected only by slow-moving boats. India's ultimate maritime dream, recently unveiled, is the transformation of the Andaman & Nicobar Islands into a world-class destination rivalling Hong Kong and Vietnam. This would involve the creation of new townships, resorts, recreational centres, and hotels. Yet, inter-island connectivity infrastructure remains virtually absent today. The Maldives operates nearly 200 amphibian aircraft lined up along the keys like a fleet of black-and-yellow taxis. In the Andamans, a tourist may look out from a hotel window at a nearby island without any practical means of reaching it. India needs to rethink amphibian aviation. Large international aircraft can bring tourists into metropolitan hubs, after which amphibians could instantly connect them to islands - or even directly to hotels. Amphibian flying can also transform commuting and water sports. It could reduce travel time from Mumbai to Alibaug to a few minutes, Navi Mumbai Airport to the Gateway of India to ten minutes, Mumbai to Lonavala to forty minutes, and Delhi to Rishikesh to about an hour.

https://dailypioneer.com/news/india-eyes-amphibians-for-coastal-watch

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Science & Technology News

High-level delegation led by Dr Eva Ortega-Paíno, Secretary General, Ministry of Science, Innovation and Universities, Govt of Spain, calls on Union Minister Dr Jitendra Singh

Source: Press Information Bureau, Dt. 25 May 2026

A high-level delegation led by Dr. Eva Ortega-Paíno, Secretary General, Ministry of Science, Innovation and Universities, Govt of Spain, called on Union Minister of State (Independent Charge) for Science & Technology, Earth Sciences and Minister of State for PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr. Jitendra Singh at Kartvaya Bhawan, here today and today held high-level discussions primarily on astrophysics collaboration as well as strengthening India-Spain cooperation in science, technology and innovation, with focus on emerging technologies, industrial research, innovation-driven partnerships and astrophysics.

The meeting reflected the growing momentum in India-Spain scientific engagement and the shared commitment of both countries to deepen collaboration in futuristic and technology-driven sectors. The discussions covered areas including circular economy, digital transformation, artificial intelligence, advanced materials, digital health, medical devices, biotechnology, space sciences and industrial innovation.

The Spanish delegation was led by Dr. Eva Ortega-Paíno, Secretary General, Ministry of Science, Innovation and Universities, Spain. The delegation also included Dr. José Moisés Martín, Director-General, Centre for Technological Development and Innovation (CDTI). Senior officials and scientists from the Department of Science and Technology (DST) for the Ministry of Science of Technology (Govt of India) and associated scientific institutions participated in the meeting.

Dr. Jitendra Singh appreciated the decade-long India-Spain partnership in industrial R&D and said that the bilateral science and technology engagement has steadily expanded into several cutting-edge domains. He expressed satisfaction that collaborative programmes between the two countries have generated productive research outcomes and commercially relevant technologies benefiting industries and innovation ecosystems on both sides.

The Minister welcomed the growing participation of industries, startups, innovators and research institutions under the India-Spain collaborative framework and said the partnership has created new opportunities for technology development, innovation-led growth and scientific advancement.

During the discussions, both sides reviewed ongoing cooperation mechanisms and explored ways to further strengthen institutional linkages, industry participation and researcher collaborations. The meeting also witnessed discussions on expanding cooperation in astrophysics and other mega-science initiatives of mutual interest.

India and Spain also exchanged views on promoting collaboration in biomedical sciences, oncology research, biotechnology and innovation networks, while encouraging greater synergy between academic institutions, scientific organizations and industries.

The two sides acknowledged that India-Spain cooperation in science and technology has evolved significantly over the past two decades and agreed to explore new thematic areas aligned with emerging global scientific priorities and technological transformations.

The meeting reaffirmed the commitment of India and Spain to further deepen bilateral cooperation in science, technology and innovation and to build stronger partnerships for research, industrial development and knowledge-sharing in the years ahead.

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CSIR-NISCPR and NIAS sign MOU to strengthen collaboration in science communication and S&T policy research

Source: Press Information Bureau, Dt. 25 May 2026

CSIR-National Institute of Science Communication and Policy Research (NIScPR), New Delhi, has signed a Memorandum of Understanding (MoU) with the National Institute of Advanced Studies (NIAS), Bengaluru, on 25 May 2026. The MoU aims to strengthen collaboration in science communication & public engagement and S&T policy research. This collaboration will also promote joint research projects, exchange of faculty and research scholars, organising joint events and capacity-building programmes.

Dr Shailesh Nayak, Director NIAS, in his welcome address, mentioned the importance of institutional collaborations for strengthening science communication and the need for joint capacity building programmes. Dr Geetha Vani Rayasam, Director CSIR- NIScPR, discussed the importance of inclusive science communication, tailoring content effectively for target audiences, and the use of modern technologies to foster public engagement in science. Dr Rayasam also emphasized the relevance of ethical use of AI in communication in the Indian languages.

A brainstorming discussion on “Inclusive Science Communication in the Digital Era: Priorities, Practices and Policies” was organised after the MoU signing ceremony. Prof DK Srivastava, Prof Sanjay Srivastava, Prof Rajani MB, Prof Sisir Roy, Dr Anant Kamath and Dr V V Binoy, from NIAS, Dr Geetha Vani Rayasam, Dr Kasturi Mandal, and Dr Paramananda Barman from NIScPR, Dr H S Sudhira from Gubbi Labs and Dr Suryesh K Namdeo, CSP, IISc shared their thoughts in the discussion. The panellists highlighted the gaps and priorities for strengthening responsible and inclusive science communication and the need for SciComm policies suitable for the Indian context. Major recommendations include encouraging trust in science, training science communicators and journalists, managing misinformation effectively, building a larger community of public intellectuals, strengthening SciComm in schools, popularising citizen science, developing and implementing effective guidelines and promoting interaction between scientists, policy-makers and communicators.

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