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Wed, 05 Feb 2020

UP gets ready to host its first Def Expo

It is touted as the biggest-ever defence expo in India in terms of participation, the area, and the revenue to be earned

It is a rather important feather in UP's cap. Defence Expo, now an enviable entity will this year be held at Uttar Pradesh. "India will become the hub of defence equipment production as well as export and Uttar Pradesh will play an important role in it in the near future." said Rajnath Singh, Defence Minister. The theme of the DEF EXPO 2020 is "Digital Transformation of Defence" and the exhibition will be inaugurated by Prime Minister Narendra Modi.

India has budgeted \$100 billion for defence acquisitions over the next five years — including a 15% increase in 2018 over 2017. With the defence spending on the rise, preference is being given to the private sector companies as well as indigenous manufacturers and suppliers, thus new channels have been opened for global supplychain partnerships and inviting overseas interests to invest in local operations.



This year, the DefExpo is expected to capitalize on this momentum in an effort to present a world-class showcase of and for the Indian aerospace, defence and security industries. The DefExpo in its 11th biennial edition will be highlighting the emergence of India as an attractive destination for investment in the defence sector apart from providing a suitable platform for tie-ups and joint ventures in the defence manufacturing arena.

This is the first time the expo is being held in Uttar Pradesh. Defence Expo 2020 will be held in Lucknow from February 5 to 9. The mega event is being touted as the biggest ever defence exhibition in the country in terms of participation of the exhibitors, the area of the exhibition and the revenue to be earned. Delegations from more than 18 countries have confirmed to be a part of the Defence Expo 2020. What is more, as many as 70 nations are expected to participate in the expo. The numbers have been growing steadily over the years. If Defence Expo 2018 saw the participation of 702 exhibitors this year, the number has swollen further. More than 900 international defence manufacturing companies have registered for the expo to be held over an area of almost 42,000 square meters. The 11th biennial edition of DefExpo India2020 will see all the global industry elite to present their weaponry and defence equipment. The government has been showcasing the potential of different states through these defence industry events.

Hindustan Aeronautics Limited (HAL) has been made the nodal agency by the Ministry of Defence for conducting the four-day expo. HAL is the stateowned aerospace and defence company. It has been given the responsibility of overseeing other preparations such as emergency services, catering and management of entry-exit points. It will display the indigenous fighter jet 'Tejas' and 'Dhruv helicopter' at the expo, both manufactured by HAL.

The 11th DefExpo will highlight India as a destination for investment in defence

Defence Exhibition Organisation is an autonomous organisation of the Indian Government established in 1981. The organisation was established to promote the export potential of the Indian defence industry. The agency is responsible for organising international exhibitions such as DEFEXPO and Indian participation at overseas exhibitions.

Besides the major presence of the Indian companies, there is huge global participation from the US, UK, France, Russia, Brazil, France, Italy, Bulgaria, Czech Republic, Australia, Israel, Austria, Ukraine, Spain, Sweden, South Africa, Switzerland, Japan, Kazakhstan, Norway, Portugal, Russia, Singapore this year.

Also, according to officials, those countries which are not putting up their stands will be sending in defence delegations led by their respective defence ministers or service chiefs.

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Wed, 05 Feb 2020

UP: The next destination for global defence companies

UP is already home to four units of HAL, one unit of BEL

For the first time, Uttar Pradesh (UP) will be hosting DefExpo India- 2020, and which offer an excellent opportunity for the Indian defence industry to showcase its capabilities and promote its export potential. More than 100 business events and seminars are being planned with over 1,000 exhibitors are taking part this year.

The main theme of the DefExpo India- 2020 is 'India: The Emerging Defence Manufacturing Hub' and focus will be on 'Digital Transformation of Defence'. This time the Expo is going to highlight the emergence of UP as an attractive destination for investment in the defence sector and will also act as a platform for alliances and joint ventures in the defence industry. It will also play a significant role in promoting one of the two Defence Industrial Corridors (DICs) that is coming up in the state. This is expected to open up major opportunities for the defence Micro Small and Medium Enterprises (MSMEs), including top foreign and local industry.

DefExpo which is an international show conducted at an international level, not only facilitates Business-to-Business (B2B) interaction with senior foreign delegations but also Government-to-Government (G2G) meetings and also act as a platform for alliances and joint ventures in the defence industry.

UP already has a strong defence industrial infrastructure and is home to four units of Hindustan Aeronautics Ltd at Lucknow, Kanpur, Korwa and Naini (Prayagraj), nine ordnance factory units, including Kanpur, Korwa, Shahjahanpur, Firozabad and one unit of Bharat Electronics Limited at Ghaziabad. Under a joint venture with Russia for producing more than 7, 50,000 units of AK-103 assault rifles, the third generation of AK-47, the manufacturing will soon start at a factory based in Amethi.

The DefExpo will provide an opportunity for the major foreign Original Equipment Manufacturers (OEMs) to collaborate with the Indian defence industry and help promote 'Make in India' initiative of Prime Minister Narendra Modi. This will also give a chance to the exhibitors to explore options for

tying up with companies to set up manufacturing bases in the state and help in creating thousands of jobs.

To encourage investors to set up shop in the Defence Industrial Corridor, the UP government is offering various incentives. Those companies which are taking part in the Expo by setting up their stands and are willing to invest defence corridor will get a chance to visit different locations in the state and identify land for their projects. The state government is also offering investors tax rebates for companies willing to set up units in Bundelkhand in order to bring more investors. In fact, in 2018, the state government had released a UP Defence and Manufacturing Policy 2018. In 2019 February Prime Minister Narendra Modi had laid the foundation for Rs 20,000 crore Bundelkhand defence industrial corridor in Jhansi district in UP.

According to the state government, almost 3 thousand acres land is available in the state at 6 different nodes for defence corridor and in the coming Defence Expo 2020 and will be available for investors also.

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Wed, 05 Feb 2020

Indian armed forces need to modernise

With the possibility of a “two front” war on both our northern and western borders, the modernisation and digitisation of the Indian Armed Forces is very critical

Efforts are on to equip all three services with latest capabilities, as China is ramping up air, naval powers

For the modernization of the Indian Armed Forces, a road map to spend USD 130 billion in the next five to seven years has been planned by the government. Such a plan will help to bolster the combat capabilities over rivals in the region. The plan includes the procurement of a wide range of weapons, missiles, air defence systems, fighter jets, submarines and warships, drones, surveillance equipment and developing infrastructure for extensive use of artificial intelligence, are part of the plan.

With the possibility of a “two front” war on both northern and western borders, the modernisation of the Indian Army’s Infantry is very critical. Also, it is concentrating on modernising the Infantry, Digitalising the battlefield; more punch to Armour; Artillery and Air Defence; as also, other High Technology areas. The immediate priority is to fast-track pending proposals including procuring 2,600 infantry combat vehicles, 1,700 future-ready combat vehicles for the Indian Army and to also, push for 110 multirole fighter aircraft to the Indian Air Force (IAF).

Efforts are on to equip all the three services with the latest capabilities as China is significantly ramping up its air and naval powers.

A deal of 72,400 assault rifles for the Indian Army’s infantry from the US-based M/s Sig Sauer has been inked, and under a joint venture with Russia more than 7,50,000 units of AK-103 assault rifles, the third generation of AK-47 will be made in India. As part of the deal around 50,000 assault rifles will be handed over to India as there is an urgent requirement for rifles of two different types – a very accurate rifle with a high rate of fire and secondly a lighter assault rifle meant for infantry troops.

Last month the Indian Army received the first batch of 10,000 American Sig Sauer assault rifles – and another batch of 10,000 rifles will arrive soon. The Army has been planning to move to a rifle that fires a larger, more powerful rifle cartridge than the 5.56x45mm intermediate cartridge used by the Insas. The SIG716 uses the more powerful 7.62x51mm cartridge. These are going to help the troops in

operation will help them to operate more effectively in engagements with the terrorists in Pakistan and PoK.

In an effort to further strengthen India's border with Pakistan along the Line of Control (LoC) in the Northern Command, the Army has decided to induct anti-tank guided missiles (ATGMs) 'Spike'. The 'fire and forget' ATGMs 'Spike' has been manufactured by Rafael Advanced Defence Systems of Israel. This system comes with a range of up to 4 Kms and is used effectively to not only destroy bunkers but also training camps that have come close to the LoC.

There is a need for around 70,000 different types of ATGM and 850 different launchers.

Digital Battlefield

The Indian Army has been taking baby steps towards the process of digitisation. As far as the Indian Army is concerned the digitisation is handled by the Directorate General of Information Systems which deals with this important element of NonContact Warfare. The heart of the system is the Command Information Decision Support System (CIDSS) which comprises 'Tactical Command Control Communications and Information System' (Tac C3I), the Artillery Combat Command and Control System (ACCCS), 'Battlefield Surveillance System' (BSS), 'Air Defence Control & Reporting System' (ADC&RS), 'Electronic Warfare System' (EWS) and 'Electronic Intelligence System' (ELINT).

The Tac C3 I is to provide state-of-the-art connectivity from the Corps HQ and below. Upward connectivity from Corps HQ to Army HQ is to be provided by the Army Strategic Operational Information Dissemination System (ASTROIDS).

With roads being upgraded, the T-72 tank and the BMP-2 are currently deployed in Ladakh and the North East. To meet the need for a light tank, the DRDO is developing a prototype based on the Sarath chassis and the BAE system Combat Vehicle 90.

By the end of 2020, India is expected to have a total of 2,011 T-90 tanks which are 40 Armoured Regiments. Plans have been confirmed for the raising of six additional regiments for High Altitude conditions. Also, the Indian Army is upgrading about 1,600 T-72 tanks with night vision devices and the rest would comprise indigenous Arjun tank which is heavier than the T-90.

Around 1,600 BMP-2s with a 350 Horse Power (HP) engine are being upgraded. The Indian Army currently also has 700 BMP-1 in active service. Meanwhile, the Future Infantry Combat Vehicle (FICV) worth \$8 billion is yet to come up for approval before the Defence Acquisition Council.

Artillery

The Regiment of Artillery has a variety of weapons -- Guns, Rockets and Missiles. Last year the 155mm (39 calibre) UltraLight Howitzer, the 155mm (52 calibre) K-9 Vajra SP Howitzer and the 155 mm (45 Calibre) Dhanush have been inducted. Orders have been placed for 200 of 155mm (52 Calibre) Advanced Towed Artillery Gun.

The three-decade-old Air Defence System needs to be replaced. Two Regiments of Akash Missiles have been ordered from DRDO. The supply of Very Short Range Air Defence (VSHORAD) missile system worth \$1.3 billion for the Indian Army Air Defence is in the pipeline.

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Redefining the future of combat in India

The vision for the future is to evolve beyond the traditional technology transfer and create a broader ecosystem

It is with co-creation and co-development programmes that 'Make in India' will find its true calling

By Kishore Jayaraman, President, Rolls-Royce India & South Asia

2020 has begun on a note of caution and concern on the security front for the world in general and India in particular. The renewed conflicts in West Asia, heightened military pressure and action from the United States and the continuing tensions along the Indian borders point to an emerging new landscape of combat that was different in many ways from what existed in the past decade. What are the implications of the above on the future of combat? The first impact is on preparedness.

Almost on cue, India has finalised an ambitious and aggressive roadmap to spend US\$130 billion in the next five to seven years to modernise all arms of the armed forces to bolster their combat capabilities. This plan includes procurement of a range of weapons, missiles, air defence systems, fighter jets, submarines and warships, drones, surveillance equipment and developing infrastructure for extensive use of artificial intelligence.

The second impact is on the speed and size which will become defining factors in future warfare. Not surprisingly, today, India has the third largest Army, the fourth largest Air Force and the seventh largest Navy in the world. India is fifth on the list of the world's biggest military spenders. Its military expenditure grew to \$55.9 billion last year. The geopolitical realities have pushed India's Defence budget and the spends upwards year on year. The defence sector thus has become an important and a growth sector for India.

The third impact is on securing national priorities and nationalism. Despite India being one of the world's top defence importers, the Narendra Modi government has made it a priority to create a robust defence industrial base under its 'Make in India' initiative. A self-reliant Aerospace, Navy and Army is the vision of the government.

The above combination of developments and exigencies will redefine the future of combat in India in three significant ways.

Co-creation and partnerships: In the defence sector, the country's aspiration to evolve from a regional power to a global power has led to the creation of well-defined initiatives focused on indigenisation and self-reliance. Currently, the country is at the right juncture to build a vibrant local defence industry ecosystem that could support both domestic and export demand. India can offer both scale and large resource capacity, but still lacks the right capabilities in some areas. The answer lies perhaps in bringing the two together by pursuing opportunities in partnership, cocreation and co-production.



At Rolls-Royce, we have established successful partnerships with government agencies like Indian Air Force (IAF), and public sector companies like Hindustan Aeronautics Ltd (HAL). Such partnerships between global and Indian suppliers are helping build capabilities to create an ecosystem of suppliers that matches global quality and delivery standards.

The vision for the future is to evolve beyond the traditional technology transfer and manufacturing model and to create a broader ecosystem that includes co-design, codevelopment, co-manufacturing, supply chain and support. This entails capability creation and skilling rather than just technology transfer and it is something that we consider a core strength.

It is with co-creation and co-development programmes that 'Make in India' will find its true calling. When India as a partner has a stake in the manufacturing IP, its commercialisation will be a naturally corollary to building of a local supply chain and an entire industry.

Industry 4.0: This is another very important area of opportunity where India could benefit through partnerships with established global technology suppliers. Through this, India can leapfrog to high end manufacturing, skipping the cycle of low-cost manufacturing. Deploying complementary technology strengths can lead to the creation of high value jobs in emerging innovation clusters in India, creating opportunities for India's increasingly skilled and ambitious workforce. Of strategic importance could be technological collaboration in 'Sunrise' Future Tech sectors such as: AI; health technologies; clean technologies, smart urbanisation and future mobility.

Combining indigenisation and global best practices: Rolls-Royce opened its Defence Service Delivery Centre (SDC) in Bengaluru four years ago. This is the only one in Asia and is specifically for the Indian Armed Forces and Hindustan Aeronautics Limited. Its principal role is to further improve our responsiveness to the customer, enabling the customer to optimize engine availability. The SDC will be able to respond to many queries incountry with its team of qualified Indian engineers which is another source of pride. It will continue to support today's fleets, including those that have been in service for many years. With this, India not only benefits from global best practices but also gets the best of research and development expertise.

21st century certainly promises to be momentous for the nation in many ways. Despite the turbulent times, the potential rise of India as a major power would require development of all elements of national power, to secure country's interests and enable us to play a more effective role in the regional and global arena. Over the last decade, the Armed Forces have played a crucial role in meeting challenges from traditional adversaries. In the future, in an increasingly multipolar world, strategic autonomy and technological far-sightedness are important to anticipate and respond to the challenges of the future. India has already demonstrated in recent years not just the ability to react but to be proactive too. Co-creation, Industry 4.0 and global best practices will help the nation achieve this.

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Wed, 05 Feb 2020

Making in India for the Indian Naval forces

*The story of our 'Making In India' is best seen in practice and execution, says Soumyajyoti Basu
We are reinventing principles of design, construction, maintenance of naval platforms*

How is the company participating in the country's Make in India and Skills India program?

Naval Group India, the subsidiary of the group, has carved long-term partnerships in the country and developed industrial cooperation and technology transfers in line with the "Make in India" policy of the Indian Government.

We are one of the only foreign OEM having fully operating subsidiary in India for more than a decade and dedicatedly functioning in 'Make in India' activities for stringent submarine building industry. We have developed a sustainable Indian defence eco-system, as well as center of excellence for design services in India with talented Indian engineers.

This TOT to MDL encompasses transferring manufacturing capabilities and expertise in quality control for several tasks including the safety dive. This has resulted in training and qualification of skilled local man power. Today MDL is undoubtedly one of the few players in the elite league around the world having comprehensive knowledge, infrastructure and manpower dedicated to submarine building.

The story of our 'Make in India' is best seen in practice and execution: locally manufactured in the categories of Float (Hulls, Hatches, Ballast Valves), Move (Steering Consoles) and Fight (Weapon Handling) for P75 Kalvari class submarines speaks for itself. All this have been achieved without having any contractual obligation and based on best intent to have sovereign submarine building capabilities in India. Our future growth in India and beyond will be paved by this successful industrial engagement with Indian industry and shipbuilders.

Which are the projects the company is pursuing in India?

Taking into account Indian Navy's experience and existing infrastructure at its naval bases, Naval Group is proposing to adapted assistance to Indian Navy to support them in maintenance of the Kalvari class submarines through an onsite team comprising of Indian and French engineers. This is to ensure optimized operability and sea time of Indian Navy's modern and latest submarine fleet.

We have responded to the recent tender from Indian Navy for heavy weight torpedo (HWT) with our latest generation F21 torpedo. F21 has been developed for the French navy for its latest strategic SSN submarines and whose characteristics far exceed all other heavy torpedoes currently in service.

In addition, we are in discussion with Indian shipyards for future surface ship programs and also proposing latest simulators and tools for training and maintenance for P75 submarines.

What are you showcasing at the DefExpo? Which are the new innovations of the company and if you can share details of these.

Naval Group will attend Defexpo 2020 at Lucknow and will present several innovations (in frame of technology bricks, platforms, underwater weapons and sensors, network centric operations...etc.). Some of the are being detailed herein: SMX 3.0: With a displacement around 3,000 tonnes, SMX@3.0 integrates the latest digital technologies for strengthened operational efficiency and significant versatility of use. The on-board data systems are completely interconnected, robust, secure, fast and upgradeable. Belh@rra: This combat and crisis management frigate empowers modern navies, who seek to adapt to the digitization of the warfare. Ensuring naval supremacy, this compact frigate

performs all the operations conducted by large surface vessels with increased precision and high level capabilities in anti-air, anti-surface, anti-submarine and asymmetric warfare domains.

F21 Heavy Weight Torpedo: The need for having unparalleled performances, while fulfilling the highest enhanced safety rules and standards for French nuclear submarine program resulted in the development of a totally new F-21 Heavy Weight Torpedo by the French Navy.

The F-21 Heavy Weight Torpedo development successfully integrates the mastery of aluminium silver oxide technology which allows the torpedo to enjoy higher range and maximum available speed, making it a much more lethal weapon than other available torpedoes. At the same time, its most important and salient feature is that of safety i.e. designed to never explode on-board a submarine even in case of platform being on fire, itself being dropped, or being fired accidentally. Naval Group as a manufacturer, integrator as well as developer of advanced combat management systems of these torpedoes, also undertakes the complex task of seamless integration of this torpedo on-board the Scorpene® submarines.

In terms of R&D, what have been the new developments at Naval Group? Naval Group is very active when it comes to R&D activities. For several years, the pace of innovation picked up, involving shorter cycles. Naval Group raises its capacity to innovate and offer competitive products able to provide a real capabilities and advantages in naval defence operations. The Group is able to integrate required innovations for its customers' present and future platforms. It is reinventing the principles of design, construction and maintenance of naval platforms, while making use of new technologies (numeric, artificial intelligence, smart factory among others).

Our latest innovative systems include the digital twin ship, additive manufacturing which enabled us to produce innovative 3D printed propellers, digital maintenance services and others. For the mine warfare program, Naval Group achieved developing world's first in its kind launch and recovery of drones (LARS), which is performing regardless any sea state. The innovation is also in solutions dedicated to drone mission management and to real time integration of all data collected, for the benefit of ships and naval forces.

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Wed, 05 Feb 2020

Making waves with its with its plans to modernise

The Indian Navy is responsible not only for the protection of India's territorial integrity, but also its economic interests that stretch across the globe

China is leaving no stone unturned in its effort to build a powerful navy and maritime security

Indian armed forces are getting ready for the changing scenario and the Indian Navy is no far behind. In fact even as you read this, the Indian Navy will be busy adding another step in its modernization journey. New warships; submarines and aircraft besides expanding its overall influence in the strategic maritime zones area part of amega plan to significantly boost its operational capability.

Of course, modernisation and enhancement of naval capabilities are an ongoing process but the strides are way bigger now. In fact, the Navy is striving to address the capability voids in areas such as aircraft carriers, tankers, landing platform docks, mine countermeasures vessels, submarines and integral helicopters. In the offing are also efforts to enhance surveillance capabilities through induction of long-range maritime reconnaissance aircraft, integral helicopters and high-altitude long-endurance

aircraft or remotely piloted aircraft. The main focus has been to augment capability through induction of modern platforms, weapons and sensors.

Currently, the Navy holds a mix of weapons, sensors and equipment of varied vintage. Now it also plans to induct ships and submarines through the indigenous route; 48 of 50 ships and submarines on order are from Indian shipyards. In fact, the procurement of new equipment, including several indigenous cases under the Make in India initiative, has contributed towards a mix of state-of-the-art, contemporary and vintage weapons, sensors and equipment have not gone unnoticed.



The Navy also envisages induction of 12 MCMVs. These ships will be capable of route survey or sanitisation, local naval defence, and search and rescue operations. The intent is to build these ships at an Indian shipyard, through the transfer of technology from a foreign shipyard.

Not just these, it is also in the process of procuring 24 MH-60R multi-role helicopters (MRH) and 10 more P-8I long-range maritime patrol aircraft (LRMPA) from the US through the Foreign Military Sales route. Under the strategic partnership model, there are deals on the cards for 111 Naval Utility Helicopters and six conventional submarines under Project-75I.

If one is to look at the current figures, there are 36 ships and submarines under construction in Indian shipyards. These include the aircraft carrier Vikrant, P-15B class destroyers, P17A class stealth frigates, P28 ASW corvettes, offshore patrol vessels and Scorpene-class submarines.

That is not it. The Navy had also floated a request for proposal for 57 deck-based fighter aircraft for its underconstruction indigenous aircraft carrier Vikrant.

The Indian Navy's foray into indigenization began over five decades ago with the design and construction of warships in the country. Today, forty-eight of its state-of-the-art ships and submarines are under construction in Indian shipyards, both public and private, a clear reflection of the Indian Navy's enduring support to India's indigenous warship building endeavour.

While much has been achieved in our pursuit of indigenization over the past decades, the time is now ripe for launching into a new phase of self-reliance by manufacturing technologically advanced equipment within India, in pursuance of the Government of India's vision of 'Make in India'. Recognizing this, the Indian Navy has embarked upon an initiative to evolve a guideline document, the "Indian Naval Indigenization Plan (INIP) 20152030", to enunciate the need for developing various advanced systems for its platforms. This supersedes the Indigenization Plan published in 2008 for the period 2008-2022.

If one is to look at our neighbour, China is leaving no stone unturned in its effort to build a powerful navy and associated maritime security capability. In fact, the 21st century has been defined by China's "Mahanian" approach to global superpower status through maritime power. Its assertive stance in the IndoPacific region is part of a larger strategic design aimed at shaping the globe through domination of the maritime domain in all its facets. This further underlines the importance of a strong navy to further a country's foreign policy objectives, pursue and protect its global interests and exercise influence in its area of interest to deter and to dominate.

It's peninsular conformation notwithstanding, India is essentially a maritime nation, an emerging superpower. With two strategically located island chains, the Andaman and Nicobar chain on the east and the Lakshadweep group on the west provide India strategic leverage. It has an Exclusive Economic Zone covering a sea area of over two million sq km which may increase to over 3 million sq km which will be almost at par with the area of India's landmass. Its economic sustenance is

dependent on the sea (over 90% of its trade by volume and over 74% by value is seaborne) and over 80% of India's energy requirements are met from seawards, whether imported or indigenous. It has a 7516 km long coastline dotted with 13 major and over 200 minor ports, nine coastal states and four coastal UTs with a large coastal community dependent on the sea for its livelihood.

The Indian Navy, as the principal instrument of India's maritime power is therefore responsible not only for the protection of India's territorial integrity but also its widespread economic interests which stretch across the globe. This also includes the protection of the lives and interests of the large Indian Diaspora which not only contributes significantly to India's foreign exchange reserves but also projects India's soft power across the world. In the larger context, this responsibility also extends to safeguarding and securing the maritime interests of the entire region and the safety of trade that transit through the Indian Ocean on over 100,000 ships annually. India's maritime credentials, its status as the leading Indian Ocean power and its mandate as the net security provider in the region place on it a responsibility that extends much beyond its own maritime boundaries.

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Wed, 05 Feb 2020

Land, sea or air: Cooperation is in its DNA

DefExpo 2020 sees exciting developments from MBDA as it continues to expand and deliver on its vision to 'Make in India'

MBDA will be exhibiting a full range of missile systems portfolio on its own stand

A recent highlight in the defence sector is that L&T MBDA Missile Systems Ltd has submitted its first bid to the Indian Armed Forces, by offering Sea Ceptor, the latest generation naval air defence system, in its RFP response for the Indian Navy's ShortRange Surface to Air Missile (SRSAM) requirement with the aim to making in India. This development comes rather soon in the JV's history, which only made its debut at the DefExpo 2018.

Loïc Piedevache, India Country Head, MBDA, says that the company has two exciting focuses during DefExpo 2020: "Providing the highest performing missile technologies to India, and secondly delivering on 'Make in India' as part of our longstanding partnership strategy with India." This year is noteworthy for it sees the arrival in India of the first Rafale fighter aircraft for the IAF, which will be armed with a game changing set of weapons from MBDA including the SCALP deep strike and Meteor air-to-air missile. "These are the highest performing missiles of their type available anywhere in the world, providing India the ability to stealthily strike deep at enemy targets and to dominate totally in air combat," adds Piedevache.

MBDA has been actively working in partnership with India's government and industry to build the country's defence industrial capabilities for over 50 years. MBDA is recognised globally as an absolute leader in the field of missile



technologies. It is also recognised as being the only truly integrated MNC in the defence sector, and Piedevache adds that “cooperation is in our DNA in a way that is unique in the defence sector, and particularly in the field of missiles.” The company says that it has the technological knowhow needed to transform India’s industry, has the experience of making partnerships work for the long-term, but most importantly, has the right attitude. “We view our relationship as one of true partners, not of buyer and seller,” says Piedevache.

To deliver this, MBDA has a dedicated and strong industrial cooperation and offset (ICO) team that works solely on partnerships with India. This team has delivered extensive and significant transfers of technology (ToT) to develop India’s defence industrial capabilities. It includes the manufacturing by Indian industry of 15 major subassemblies of MICA missile covering various complex technologies such as mechanical, electrical, electromechanical and pyrotechnic items.

Similar transfers to build India’s defence industrial capabilities have occurred on the Mistral and ASRAAM missiles, including ToT for setting up industrial capabilities, complete missile integration and final assembly and test.

L&T MBDA Missile Systems Ltd is a key channel for MBDA in delivering the next generation of complex weapons capabilities to the Indian armed forces and developing the capabilities of India’s defence industry in the complex weapons sector. L&T MBDA Missile Systems Ltd will have its own unique stand and it will be showcasing a number of products, including SRSAM, ATGM5 and Exocet MM40 B3.

Piedevache says that each of these are unique in more ways than one. For example, ATGM5, which draws on the next generation technologies of the MMP battlefield anti-tank weapon as the advanced successor to the highly successful MILAN, will be designed and manufactured in India to meet India’s specific operational requirements. “It will be a true Indian Designed, Developed and Manufactured (IDDM) product, involving the transfer of next generation key technologies to India,” he says.

Exocet MM40 Block 3 is the latest version of the famous Exocet anti-ship missile family, with extended range of 200 km. The Indian Navy already operates the Exocet SM 39 from its submarines and could benefit from using Exocet in other operational areas. MM40 Exocet Block 3 is being offered by L&T MBDA Missile Systems Ltd in response to India’s RFI for the Medium Range Anti-Ship Missile, and will be present on the stand of L&T MBDA Missile Systems Ltd.

The Mistral ATAM air-to-air missile launcher has been delivered to India to equip the ALH and LCH. “Mistral has proven itself a major success story with a 96% success rate in all firings. MBDA will exhibit at DefExpo 2020 this very high-performing missile also as a man portable air defence system (MANPADS), which performed exceptionally well in India’s firing trials,” Piedevache says.

Other systems include the Sea Ceptor (latest generation all-weather air defence system); MICA that is being delivered for the IAF’s Mirage 2000 upgrade; ASRAAM is being delivered to the IAF as its New Generation Close Combat Missile programme; METEOR which is MBDA’s revolutionary ramjet powered and network-enabled beyond visual range air-to-air missile; and a host of other advanced systems.

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Future-ready intelligence in defence needed

*Artificial Intelligence in defence services is set to be the game-changer in the future
AI is ready to disrupt defence industry, and Indian tech majors must prepare*

Technology is an integral part of our lives today. And if indicators are anything to go by, it is all set to grow further. It is no different for our armed forces. In fact, Artificial Intelligence (AI), Big Data, improved machine-learning approaches and growth of computer processing power in the global Aerospace & Defence (A&D) industry is a bigger reality now than it ever was.

AI technologies are integral to help better military decisions, minimize human casualties and enhance the combat potential of forces. In the process, there is bound to be a dramatic change, if not a complete revolution in the design of military systems. This holds true more so in a wartime environment when data availability is high, decision periods are short, and decision effectiveness is an absolute necessity.

Interestingly, since there is no, one universally agreed definition of Artificial Intelligence (AI), it is a dynamic playing field. That said, a general, albeit oversimplified definition of AI is the capacity of a computer system to perform tasks that typically require human intelligence, such as visual observation, decision making and speech recognition. In fact, Artificial Intelligence has expanded the space of function, for machines, by delivering artificial cognition to computers. This is not helping not only to let machines execute certain errands but also make decisions. Consequently, with every passing day, the applications of AI in defence are seeing speedy progressions.



In India, some progress in this direction has already been made. In fact, it would not be incorrect to say, the tech industry in India has arrived at a point where it produces software engineering talent on an unmatched scale. In fact, a multi-stakeholder task force on Strategic Implementation of Artificial Intelligence for National Security and Defence was constituted by the Ministry of Defence in 2018. The task force researches various innovation in Artificial Intelligence globally and how it can be embraced by the defence sector, the Defence Public Sector Undertakings (DPSUs) and ordnance factories have been requested to build AI-assisted products..

Consequently, many Indian technology companies that are interested in the country's defence sector are now waiting for more clarity, simplification, hastening of procedures to help cooperate with the government. In practice, this could necessitate a requirements-setting procedure that appears more like viable business models, with procedures that permit industry to meritoriously contest ideas that are incoherent with cost and schedule constrictions. It is both sensible and crucial for the industry to aspire for a relationship of equals in the creation of multifarious mission solutions.

Given so many right indicators, there is every reason why the technology sector in India should not invest in these rewarding areas. In fact if one goes back to talking World War II where brigades went

from 12 thousand soldiers to about 9 thousand soldiers, but the volume of firepower increased enormously in terms of firepower and weight of fire, and with the time that has only lasted.

The current ties then, of course, have changed drastically. These days, a rifleman can carry rockets to destroy tanks, helicopters, artillery weapons as well as a rifle with all-weather day-night optics and great accuracy. Add to that the capability to carry more ammunition than anyone before him just with a small autonomous armoured vehicle, that does nothing apart from trail him around on the battlefield when he is on the move. Such vehicles can sit as a sentry and protect the soldier with motion sensors and communications systems. For mechanized infantry, small aerial and ground-based UAVs can offer support. Even just having armoured sentries that can observe in the dark and all-weather conditions, including sensors that can see through dust storms and white-outs, with powerful machine gun level weapons and enormous ready to fire ammunition reserves, they could engage large enemy forces.

Today AI is ready for a big wave of disruption in the defence industry and Indian tech companies should prepare and prepare now. While a few products are in the market, a few more will arrive soon to drive instant and extensive adoption.

Worth mentioning are Drones, an effective, cheap and a politically desired instrument for neutralising high-value targets, especially selected individual operating in public areas. Based on the attack approach selected, these drones could be either a 'kamikaze' aerial attack or a 'directed attack'. A 'Kamikaze' attack could be as simple as feeding the target Latitude and Longitude into the drone's brain, so that the drones cruise to the target and crash these explosive mounted drones into them to destroy.

For this, usually, a man on the ground supplying accurate real-time information on the target of choice is an important criterion for a successful drone strike, especially with restrictions in public areas. Vehicles like car or military trucks always make for a large trackable target with a linear movement and are the best suited for drone strikes. Always, in every drone strike, the precision combined with a surprise element is a key.

Drones carrying Air-to-Surface missiles are a capability not yet harnessed by India and are an essential technology in today's asymmetric warfare. Definitely such drone launched a missile strike shall require Indian HUMINT operatives in the region of interest and may evolve an altogether new but effective warfare tactic for India, very similar to one being successfully exploited by the US using the weaponised drones. Nurturing this drone R&D as a home-grown technology by the defence for all three services could be the first positive step.

The three Services have used imported well-proven fixed-wing drones for ISR (Intelligence, Surveillance and Reconnaissance) missions in India. Indigenisation efforts by Defence Research and Development Organisation (DRDO), Defence PSU HAL and multiple private agencies have been in the progress but due to various dynamics like a lack of Drone regulations which support military and commercial industry. Unmanned Combat Aerial Vehicles (UCAVs) are exclusively meant for the military for delivering stealthily an explosive payload and missiles, with the capability to engage targets on the ground, on the sea surface or in the air. A swarm of weaponised drones too shall have the potential for offensive and a defensive role.

The early mover advantage for companies with AI in place will definitely be the game-changer.

http://epaper.business-standard.com/bsepaper/svww_index1.php

DefExpo to open Wednesday, focus on India's potential as manufacturing hub

Defence Minister Rajnath Singh said delegates from 70 countries and 172 foreign military manufacturers will attend the five-day mega exhibition

Lucknow: India's biennial DefExpo will kickstart in Lucknow on Wednesday with the aim to showcase the potential of the country to become a global defence manufacturing hub.

Defence Minister Rajnath Singh said delegates from 70 countries and 172 foreign military manufacturers will attend the five-day mega exhibition. As many as 856 Indian defence firms will also showcase their products at the event.

"We want to make India a hub of defence manufacturing. The DefExpo is a step in this direction," Singh said.

"The participation of a large number of foreign firms in the DefExpo reflects India's growing stature," he said.

Uttar Pradesh Chief Minister Yogi Adityanath said his government has been encouraging defence manufacturing in the state. He said two Dornier aircraft of aerospace major Hindustan Aeronautics Limited will be used by the state government for civil purposes on two routes.

It will be for the first time that the 19-seater aircraft will be used by a state government for civilian purposes.

Singh said India cannot continue to rely on imports for defence platforms and the country has to create its defence manufacturing space.

"By end of this decade, I am confident that India will be among the top three economies in the world. The indigenous defence production will contribute significantly in taking India's economy forward," Singh said.

The 11th edition of DefExpo promises to bring new technologies and technological solutions, and a single platform for Defence manufacturing companies from India and abroad to showcase their products and services in the defence sector.

The main theme of the DefExpo India -- 2020 is 'India: The Emerging Defence Manufacturing Hub' and the focus will be on 'Digital Transformation of Defence', a release said.

Reflecting the government's focus on 'Make in India', DefExpo 2020 would offer an excellent opportunity for the Indian defence industry to showcase its capabilities and promote its export potential.

The formal inauguration of the event by Prime Minister Narendra Modi will be held on Wednesday followed by a live demonstration of naval systems, aero systems and land systems.

Live demonstration will be done for systems which are designed or built in India.

Three parallel business seminars, organised by industry associations and business chambers, will also be held on the opening day. The themes of the seminars will be 'Skill Development in Aviation & Defence', 'India France Defence Industry Seminar' and 'Indo- Israel -- Opportunities in Defence Cooperation- Future Vectors of the Digital Battlefield'.

The fifth India Russia Military Industry Conference will also be held on the sidelines of DefExpo with over 100 Russian and over 200 Indian industry leaders expected to participate.



Singh will preside over African Defence Ministers' Conclave and host a dinner in the honour of African Defence Ministers.

There will be live demonstration of large platforms and also flying display at the Gomti riverfront and the DefExpo venue.

https://www.business-standard.com/article/pti-stories/defexpo-to-open-wednesday-focus-on-showcasing-india-s-potential-to-become-manufacturing-hub-120020401838_1.html

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DefExpo 2020 attracts more than 1,000 defence companies: Rajnath Singh

Like Parrikar and Sitharaman, Singh claimed on Tuesday that the current version of DefExpo had broken all previous records

By Ajai Shukla

Lucknow: Continuing the practice of Bharatiya Janata Party (BJP) defence ministers shifting the biennial DefExpo defence equipment exhibition to their home state, Defence Minister Rajnath Singh will kick off DefExpo_2020 in Lucknow on Wednesday.

In 2016, then defence minister Manohar Parrikar shifted DefExpo from New Delhi to Goa, amidst huge opposition from environmental activists. Two years later, Nirmala Sitharaman shifted DefExpo 2018 to Chennai.

Like Parrikar and Sitharaman, Singh claimed on Tuesday that the current version of DefExpo had broken all previous records. Addressing the media in Lucknow, along with his co-host, Uttar Pradesh Chief Minister Yogi Adityanath, the defence minister stated that more than 1,000 defence firms — including 856 Indian and 172 foreign companies — would participate in Defexpo.

“In the DefExpo 2018, held in Chennai, 702 companies had participated. Thus, this has become by far the biggest ever DefExpo to be held in India,” stated the defence ministry in an official release on Tuesday.

The ministry also claimed that exhibitors had booked 42,800 square metres of exhibition space this year, 60 per cent higher than the 26,774 square metres booked in Chennai.

Defence ministers and military chiefs of 40 countries will attend the event this year, the Ministry of Defence (MoD) said. Two hundred memoranda of undertaking (MoUs) are expected to be inked, forging new business collaborations.

For the first time, the presence of the local chief minister noticeably eclipsed that of the defence minister. Adityanath's visage adorned all the posters on equal terms with that of Singh. The defence minister's pre-event press conference was not attended by a single uniformed military officer. Instead, with Adityanath sharing the stage, UP police officers and bureaucrats were everywhere.

One of Adityanath's official's addressed the media before Singh, explaining why UP was hosting the event. They said UP had the third-largest economy amongst India's states, the highest consumer base, the second highest highway network at 11,737 kilometres and the largest rail network at 16,000 km of track.

They claimed a world record in that 56 per cent of the state's population of 220 million was of working age. The state has 53 universities, 345 colleges and 168 polytechnics, they stated.

Adityanath talked up the UP Defence Industrial Corridor, which would provide an infrastructure backbone for the defence industry, which would come up around nine nodes: Chitrakoot, Jhansi, Kanpur, Agra, Aligarh, Ghaziabad and Meerut.

UP has set a land acquisition target of 25,000 acres for defence industry. The first phase of this was already well underway, with close to 3,000 acres already identified.

Singh said the DefExpo would provide the opportunity for the military to get familiar with changing global technology.

“We will not just achieve our target of being a \$5 trillion economy by 2024, but by the time this decade is over, we will be amongst the world’s top three economies,” said the defence minister.

Singh said there would be skeptics, but those would go through four stages of opposition: “First they ignore you, then they laugh at you, then they fight you, then you win,” he said.

After an informal start to DefExpo 2020 on Wednesday, Prime Minister Narendra Modi is slated to formally inaugurate the exhibition in the afternoon. It is slated to run till Sunday, with the last two days being open to public.

https://www.business-standard.com/article/defence/defexpo-2020-attracts-more-than-1-000-defence-companies-rajnath-singh-120020500050_1.html

The Indian **EXPRESS**

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Govt working towards developing India as defence manufacturing hub: Rajnath

Speaking on the eve of the DefExpo 2020 in Lucknow, Singh said the government aims to become the third-largest economy in the world by the end of the decade

By Maulshree Seth

Lucknow: Defence Minister Rajnath Singh on Tuesday said the Union government is working to develop India as a “defence manufacturing hub”, adding that the country cannot be dependent on imported arms for a long time, and thus the target is to create a world-class domestic industry.

Speaking on the eve of the DefExpo 2020 in Lucknow, Singh said the government aims to become the third-largest economy in the world by the end of the decade.

Stating that the DefExpo 2020 is the biggest such exposition in the country, Singh said about 70 countries and over 1,000 exhibitors – including 856 Indian companies will participate. He said that the defense ministers of more than 35 countries have already arrived for the event, and there would be a special dialogue to explore and share defense capabilities.

“The prosperity and strength of this country is in the backdrop of this event as the stature of the country has increased across the world, and entire world takes India seriously,” Singh said. “We are developing India as a defence manufacturing hub.”

Singh said that it is his strong belief that by the end of the decade, India would be among the top three economies of the world. However, he added that India cannot depend on imports for long and thus the target is to develop a “vibrant” and “world class domestic industry” in which the dependence of import decreases and industry becomes self-reliant.

He said that while the target of a \$5 trillion economy might seem beyond reach, and some people might have criticised it, “if you do something out of the league, they first ignore you, then they laugh at you, then they fight with you and then you win”.

Singh said that Uttar Pradesh has been given the opportunity to hold this international event, and it is a moment of pride for the state as many global investors are showing interest in investing in UP. He said the event would act as a flag-bearer of the government, adding that this would also ensure more job opportunities for the youth.

Earlier, Uttar Pradesh Chief Minister Yogi Adityanath announced that UP will be the first state to use 19-seater Indian-made Dornier aircrafts manufactured by Hindustan Aeronautics Limited (HAL) for domestic travel between cities in the state, like Lucknow and Varanasi, Lucknow and Bareilly, Lucknow and Agra, etc. He said that the foundation for the Bundelkhand Expressway would also be laid this month in Chitrakoot district.

Talking about the defense manufacturing corridor in Uttar Pradesh, Adityanath said his government has identified land banks along the corridor for industries near six nodes including Lucknow, Agra, Kanpur, Chitrakoot, Jhansi and Aligarh. The CM said Uttar Pradesh has been chosen for the event as the state has huge potential – not just in terms of land bank but also inter terms of better connectivity.

<https://indianexpress.com/article/india/govt-working-towards-developing-india-as-defence-manufacturing-hub-rajnath-singh-6251295/>



Wed, 05 Feb 2020

DefExpo 2020 will be an opportunity for domestic defence companies to prove their might to woo foreign firms

By Prabhjote Gill

- *The DefExpo kicks off tomorrow and it will be teeming with 1,000 companies from 40 countries around the world.*
- *It will be an opportunity for domestic firms to find international partners to boost their technological capabilities.*
- *According to Sameer Patil, an international security expert with GatewayHouse, India's Armed Forces prefer to import equipment because domestic products either don't meet their requirement or are of inferior quality.*

As DefExpo 2020 is all set to kick off tomorrow, the many foreign players who will arrive for it, will bank on Indian love for imported equipment. Despite the push for 'Make in India', Indian Armed Forces prefer to purchase high-quality products from global majors.

"The DefExpo 2020 would provide a unique platform for defence industry OEMs, exhibitors and private industry to display their latest innovations and capabilities," said defence minister Rajnath Singh.

According to him, over 1,000 companies from 40 different countries are scheduled to be present at the five-day event. However, the theme of the event is 'Digital Transformation of Defence' — an area where domestic firms don't excel.

"We have defence industrial capacity but our defence industrial capacity is not geared towards high-tech items but low-tech items, which doesn't require complex expertise," Sameer Patil, an international security expert with Mumbai-based think tank Gateway House told Business Insider India.

An opportunity for foreign players to bag big deals

India's short-term requirements are mostly off-the-shelf items that foreign defence firms are already producing. The Armed Forces don't favour picking up these items at home because homegrown products normally don't live up to the hype.

"The armed forces are saying that they would prefer imports rather than rely on the Defence Research and Development Organisation (DRDO) to develop the equipment because sometimes it's of inferior quality and sometimes it doesn't meet the requirements of the Armed Forces," explained Patil.

For instance, the Navy rejected the Naval Light Combat Aircraft — or Tejas — developed by the DRDO and Hindustan Aeronautics Limited (HAL) because it was 'overweight'. Its size made it difficult to operate the aircraft from a carrier.

However, the Tejas took nearly four decades to make in India. Regardless of the rejection, HAL is pursuing the project.

The government's military equipment manufacturing arm also saw tough times when the Dhruv helicopter crash instigated return-and-refund requests from Ecuador and the Maldives.

The Navy also wanted an upgrade over the Dhruv helicopter. It applied to buy new naval utility helicopters with foldable rotor blades. However, HAL argued that its own design was robust enough and that it could develop foldable blades on its own over the next two to three years.

An opportunity for domestic firms to tie up with foreign players

When HAL first partnered with United Aircraft Corporation to manufacture the Sukhoi Su-57, the government expected a transfer of technology. "But because there was no planning or management culture in defence at that time, no one bothered to absorb those technical skills," explained Patil.

However, history is trying to correct itself. Tata, for example, already has a tie-up with Lockheed Martin to build F-16 wings and the F-21 fighter jet. Bharat Electronics Limited (BEL) and Larsen & Toubro (L&T) have also signed a pact to develop and manufacture defence products.

"Because the private sector is more efficient, there is an expectation that they will absorb those tech skills. Given a chance, they can come up with indigenous equipment," said Patil.

However, defence indigenisation doesn't happen overnight. According to Patil, it takes at least two decades to get the ball rolling and see visible results. Its realisation will mean catering to India's medium and long term requirements for weaponry that isn't available off the shelf — like robotic technologies.

<https://www.businessinsider.in/defense/news/defexpo-2020-will-be-an-opportunity-for-domestic-defence-companies-to-prove-their-might-to-woo-foreign-firms/articleshow/73936870.cms>

Weapons' import up despite Centre's 'Make in India' push

Defence ministry data indicates dependence on foreign vendors rising. 75 contracts (worth Rs 1,67,898 cr) of 210 in last four financial years have been signed with foreign vendors

By Ajay Banerjee

Lucknow: As the 'DefExpo 2020' opens here, the emerging contours of India's military equipment acquisition are clear: the 'Make in India' push is unfolding and could lead to possible exports of some equipment; however, for now, the reality is that India's import dependence has grown, instead of getting reduced.

The Ministry of Defence supplied data to the parliamentary standing committee and it indicates 'dependence on the foreign vendors is rising'.

In the financial year April 1, 2014 to March 31, 2015, the total procurement of weapons and equipment was worth Rs 65,859 crore (approximately \$9.40 billion). The committee report, tabled in December 2019, says during the period, the procurement from foreign vendors was worth Rs 25,980 crore (approximately \$3.71 billion) which works out to be 39.62 per cent of the total expenditure.

FINANCIAL YEAR	PROCUREMENT	IMPORT
2014-2015	₹65,859 cr	₹25,980 cr
2017-18	₹72,732 cr	₹29,035 cr
2018-2019	₹75,920 cr	₹36,957 cr

In the financial year April 1, 2018 to March 31, 2019, the total procurement was worth Rs 75,920 crore (approximately \$10.84 billion) and the purchase of foreign equipment amounted to Rs 36,957 crore (approximately \$ 5.2 billion). It comprised 48.67 percent of the spending.

Actually, the last fiscal (2018-19) saw sharp spike over the one (2017-2018) previous to that. Imports increased by almost 10 per cent largely due to part-payment for cutting-edge imported equipment like Rafale fighter jets, the heavy lift helicopters, Chinook CH 47, and attack copters, the Apache AH64E.

In 2017-18 the total procurement was worth Rs 72,732 crore (\$10.39 billion) off this a sum of Rs 29,035 crore (\$ 4.14 billion) or 39.92 percent of it, was on imports. In the past few years, imports have hovered between 37 and 39 per cent of all procurement.

In the last four financial years (2015-16 to 2018-19), a total of 210 contracts were signed, off these 75 contracts worth about Rs 1,67,898 crore (\$23.98 billion) have been signed with foreign vendors, including those from the USA, Russia, Israel, France, etc., for procurement of defence equipment for armed forces. The defence equipment imported during this period includes helicopters, aircrafts, missiles, rifles, artillery guns, simulators and ammunition.

The five-day defence expo (February 5 to 9) opens in this city tomorrow and Prime Minister Narendra Modi is expected to inaugurate it.

<https://www.tribuneindia.com/news/weapons-import-up-despite-centres-make-in-india-push-35846>

India eyes partnering with global players

TRIBUNE NEWS SERVICE

LUCKNOW, FEBRUARY 4

As yet another defence expo opens, India looks to have its industry join the global supply chain of major military-equipment makers. Prime Minister Narendra Modi would have his task cut out to ensure investors that New Delhi has the money to keep a steady flow of investments in defence manufacturing sector.

Rajnath Singh Defence Minister today said: "The expo provides the opportunity to work with countries like the US, Russia and South Korea among others in the defence manufacturing sector".

Defence manufacturing will play a major role in propelling India as a big economy, he said. "We cannot be reliant on imported arms for long. Import of weapons is not in line with our goal to be a major power," he said.

In all 70 countries are here. There will be 856 Indian and 172 foreign countries. "The interest of foreign exhibitors shows that people want to

MoD TARGET

₹1,70,000 CR

defence turnover

₹35,000 CRORE

exports by 2025

Self-reliance in key technologies by 2025

associate with India as an industrial powerhouse".

US Ambassador to India Kenneth Juster said: "It is our goal to identify obstacles and formulate solutions to build a closer defence relationship." The US delegation to DefExpo 2020 will be largest. The two countries have an \$18 billion trade so far in military equipment.

UP CM Yogi Adityanath said: "UP is ready to leverage the promise of growth offered by the military equipment manufacturing sector". Baba Kalyani, Chairman and Managing Director of Bharat Forge, said: "By 2030 we want to be artillery power house of the world". His company is already getting a new gun system validated from the Indian Army.

France, India are committed to strategic autonomy. To this end, France supports Make in India in defence

Defence cooperation has been one of the fundamentals of the bilateral relationship, which enabled us to develop a close and ambitious strategic partnership for over 20 years

By Emmanuel Lenain

I recently received an Indian visitor who was surprised to see a bust of General Charles de Gaulle in my office. I chose it because this 20th-century French political figure theorised about the strategic autonomy of France. A country with the independence to make its own strategic choices. And that's a vision we have shared with India since its Independence.

It is thus with great satisfaction that I am visiting Lucknow today for the inauguration of DefExpo — an exhibition as old as France and India's strategic partnership — which will again see a strong French representation in 2020. France's seven biggest defence companies (Airbus, Dassault, MBDA, Naval Group, Nexter, Safran and Thalès) will be present, and around 15 SMEs will showcase their know-how of naval, land and air defence technologies, either at the French stand or with their Indian partners.

Apart from the expertise of the French arms industry, this presence also marks France's full commitment to supporting the Indian government's Make in India programme in the defence sector. This is not a new-found commitment nor one of convenience, but is part of our longstanding bilateral relations. It is also in line with a certain idea that India and France have of themselves and their way of carrying weight in global matters — that of building their strategic autonomy.

The defence cooperation between our two countries can be traced back to the first few years following India's Independence. As early as 1953, the Indian Air Force was equipped with a hundred Toofani fighter jets from Dassault, then the Mystère IV, which defended India in tough times. This marked the first page in the history of our cooperation in military aviation, which also recorded the supply of 60 Mirage 2000s in the 1980s — whose performance continues at superlative levels; and, of course, the ongoing delivery of 36 Rafales on schedule. The first batch of aircraft, currently being used to train Indian pilots, will land at Air Force Station Ambala within a few months.

Defence cooperation has been one of the fundamentals of the bilateral relationship, which enabled us to develop a close and ambitious strategic partnership for over 20 years. Today, that partnership has been deployed in the maritime domain, in support of our joint strategic vision for the maintenance of stability and security in the Indo-Pacific. As far as naval equipment is concerned, the Indian Navy has already commissioned two of the six submarines built in Mumbai as part of an industrial partnership between Mazagon Dock Shipbuilders Limited (MDL) and Naval Group. French companies will, of course, continue to be there to contribute to meeting needs for additional capabilities for the Indian Navy or the Indian Coast Guard.

As for industrial cooperation, the French approach has always been, whenever possible, to offer partial indigenous production in India. France was largely a precursor with regard to Make in India, with HAL manufacturing the light helicopters Cheetah and Chetak, and BDL's Milan anti-tank missile in India in the 1960s. It continues this policy today. The plant built under the Dassault Aviation and Reliance joint venture will enable, for example, the complete production of the Falcon 2000 business jet here in India by 2022. After the delivery of the first two Scorpene submarines, transfers of

technology provided by the Naval Group enabled MDL to be solely in charge of building the next four submarines: The design of these submarines has thus become a largely Indian knowhow. Safran will soon inaugurate an aircraft wiring systems factory in Hyderabad and also build another major facility to manufacture LEAP turbofan engine components. Thales is investing massively in engineering works in Bengaluru, MBDA is building a plant in Coimbatore and French aeronautical equipment manufacturer Latécoère recently inaugurated a factory in Belgaum. Over 7,000 people, including 1,500 engineers, are currently employed in Airbus projects across the country. I could continue giving more such examples that show how Make in India has been and is a practice for French aeronautical and defence firms, both yesterday and today.

I am convinced that these concrete industrial partnerships benefiting both our countries are the future of our defence relations. So is our industry. The French aerospace industries association, GIFAS, and GICAN, the French Marine Industry Group, are organising a seminar focused on this subject during DefExpo. Along with the Society of Indian Defence Manufacturers (SIDM), they are exploring opportunities for developing Indo-French industrial partnerships at all stages of the production chain. This long-term bet by France is illustrated by the roots set down by our industries in India: GIFAS opened a permanent office in Delhi in 2018 and 60 of its members are in India through 75 organisations, 20 joint ventures and more than 25 production plants. Further, more than 15 French companies from the naval sector are present in India to work on ongoing projects.

India can count on France being by its side for its Make in India enterprise. We share the same vision for a new balanced multipolar world, which must be based on the rule of law. We also share the same vision on the main challenges of our times, be they security developments in Asia and the Indo-Pacific, or combating international terrorism. But it is by possessing the capability of ensuring our national security and making our strategic choices that we most efficiently defend our shared principles and visions.

It is first and foremost because we are convinced that our joint action must rest on a network of solid cooperation as well as the principle of autonomy that France and India are such strategic partners today.

(This article first appeared in the print edition on February 5, 2020 under the title 'In defence of a shared vision'. The writer is France's ambassador to India.)

<https://indianexpress.com/article/opinion/columns/france-india-relations-make-in-india-in-defence-6251108/>

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DefExpo 2020: US wants security partner India to purchase its arms

Asked whether the flat Indian defence Budget was impeding US sales, the US ambassador to India blamed 'the slowdown'

By Ajai Shukla

Lucknow: The US ambassador to India, Kenneth Juster, has pitched strongly for India buying American military equipment because, as security partners, it would be useful for the country's weaponry and command and communications networks to be interoperable with those of the United States'.

“We believe that India must ultimately move toward systems that are interoperable with the equipment and networks of its security partners,” said Juster.

The US envoy was interacting with the media on the eve of DefExpo 2020. With DefExpo 2020 featuring all-time high participation by US firms, Juster minced no words in urging India to buy American weaponry. “US firms at this exhibition... have supplied modern land- and sea-based fighter aircraft, ballistic missile defence systems, the most advanced, networked avionics equipment, and secure communications equipment for the United States and our partners. They are poised to offer the same to India,” he stated.

Asked whether the flat Indian defence budget, with just \$15 billion allocated for capex, was impeding US defence sales, Juster blamed “the economic slowdown.”

“One of my concerns about an economic slowdown is that it affects all elements of a country, including its ability to modernise its defence capabilities as rapidly as possible,” the envoy said.

Juster was blunt in criticising New Delhi’s 49 per cent cap on foreign direct investment (FDI) in defence manufacture, as well as its offset policy. “In terms of foreign investment, if you’re trying to attract investment into your country to develop your indigenous capabilities, I think having caps limits that degree of flexibility. My sense is that fewer caps will lead to greater investment, which will lead to greater domestic production and better long-term indigenous capability over time.”

Stating that “offsets are not efficient” and that Washington had no truck with them, Juster said: “If India believes offsets are essential... it’s got to be done in a practical and effective way so that companies can utilise the offset requirements to enhance their production capabilities so that there is flexibility in what can be counted as an offset... and that they get credit for their offset operations, so that they can continue to engage in the production activities that are desired.”

Juster urged setting up co-production ventures between US and Indian firms to establish India as a “global hub for manufacturing defence equipment”.

Meanwhile, Lockheed Martin — the world’s biggest defence firm, which hopes to win an ongoing \$20-25 billion tender for supplying the IAF with 114 medium fighters — revealed that India could buy more C-130J Super Hercules transport aircraft, over and above the 12 already in the IAF fleet. The IAF bought six C-130Js in 2010, and the delivery of those and an additional six aircraft was completed in December. Given the IAF’s satisfaction, and India’s vast borders and coastline, Lockheed Martin said more C-130Js would inevitably be procured.

https://www.business-standard.com/article/defence/defexpo-2020-us-wants-security-partner-india-to-purchase-its-arms-120020500051_1.html

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US envoy: Opportunity to see talent of India’s defence industry

The theme of DefExpo 2020 is ‘Digital Transformation of Defence’. Defence exhibitions such as these demonstrate that industry in the US and India, along with our respective governments, share a common understanding regarding the nature of the modern battlefield, Juster said

Lucknow: Kenneth I. Juster, US Ambassador to India, who is leading the US delegation at the 11th edition of the Government of India’s Defence Exhibition, DefExpo 2020, here, said Tuesday that it was a “great opportunity to see the talent and innovation of India’s defence industry.”

The theme of DefExpo 2020 is ‘Digital Transformation of Defence.’ Defence exhibitions such as these demonstrate that industry in the United States and India, along with our respective governments, share a common understanding regarding the nature of the modern battlefield, Juster said.

“We share the belief that, in order for India to ensure its defence and work with like-minded nations in pursuit of common security objectives, it is critical that India moves toward systems – not just weapons – that are effective, agile, and resilient. In addition, we believe that India must ultimately move toward systems that are interoperable with the equipment and networks of its security partners.” the US Ambassador told media persons in Lucknow.

He said the US firms that are participating in the exposition produce battle-proven, high-technology equipment and networks and have supplied modern land and sea-based fighter aircraft; ballistic missile defence systems; the most advanced, networked avionics equipment; and secure communications equipment for the United States and partners. “They are poised to offer the same to India.” said the Ambassador.

He added, “I have found in my travels in Uttar Pradesh and elsewhere in India that the potential for industry partnership between our two countries on state-of-the-art defence equipment is enormous.” Juster said he looked forward to pursuing opportunities to expand India-US cooperation as the Indian government was in the process of establishing defence industrial corridors in Uttar Pradesh and Tamil Nadu.

He said US firms participating in the event were partnering with companies across India, including in Uttar Pradesh’s Defence Corridor, to produce defence equipment not just for his countries’ militaries, but for partner nations, too. Citing an example, he said Tata has partnered with Lockheed Martin to build all C-130 tails and F-16 wings, while Boeing is collaborating with HAL [Hindustan Aeronautics Limited] to produce all AH-64 Apache fuselages in Hyderabad.

Maintaining that along with strengthening of ties, the need is also to overcome the barriers, Ambassador said, “US defense cooperation with India continues to grow stronger – and defence trade among our companies is creating skilled jobs right here in India.”

Replying to a question on current bilateral cooperation between India and US, he said that when he first started working in the area of US-India relationship in 2001, there were virtually no defence sales between India and US, adding that today this number (defence sales) stands at nearly \$18 billion.

<https://indianexpress.com/article/india/us-envoy-opportunity-to-see-talent-of-indias-defence-industry-6251307/>

hindustantimes

Wed, 05 Feb 2020

India to get theatre commands for Pak, China borders: CDS Rawat

Chief of Defence Staff Gen Bipin Rawat said the country’s armed forces are poised for the biggest reorganisation ever with the creation of the “Air Defence Command.”

By Sudhi Ranjan Sen

New Delhi: India will have theatre commands overseeing the country’s borders with China in the North/North-east; Pakistan in the North/West; and a peninsular command looking at the country’s eastern and western seaboard, Chief of Defence Staff (CDS) Bipin Rawat said in an interaction with reporters on Tuesday.

While this will take three years, he added that the country’s armed forces are poised for the biggest reorganisation ever with the creation of the “Air Defence Command.”

“The Air Defence Command is low-hanging fruit,” General Rawat said, adding that “during the transition, the theatre commanders will be assigned to be under the service chief” so that the change doesn’t impact the battle capabilities of the forces.

This means that during the transition, the theatre commander will take orders from his service chief, who will take inputs from the other chiefs. The new structure that will emerge after the transition process is still not clear.

“The process of transition will be deliberate and gradual,” General Rawat, India’s first CDS, said. Among the other new commands that are expected are a “Logistics Command” that will look into logistics of all three services in a holistic manner.

And with the creation of the peninsula command, the Navy Chief can disinvest himself from the closer Indian Ocean region and look at the bigger picture, the CDS said.

“Our thought process is that let us go with the peninsula command. Currently there is East and West command in Navy over Indian Ocean,” he said. “If you look at the Navy Chief, these two commands are just one of his charters. Look at his charter; he is looking at the entire Indian Ocean region. He is looking from east coast of Africa to right down to Australia. So, he has got a bigger picture to look at,” he said. General Rawat was named CDS on December 31, 2019, almost two decades after the Group of Ministers formed to look into the Kargil Review Committee report recommended the creation of the post to promote jointmanship or synergy between the forces.

“Theatre commands are the need of the hour, the sooner we have it the better it is. We need theatre commands because no single force is capable of discerning and importantly countering growing threats alone. Importantly we have better utilize meagre resources. India strategic frontiers are expanding, it is time we look at the bigger picture and not be confined to silos. The threats from other countries need to be understood and prepared for. The world is looking at India with great expectation. It requires vision and combined might of force to meet the expectation. Therefore in our report, we had suggested that from Defence forces we need to move to armed forces and from thereon to becoming an armed power,” Lieutenant General DB Shekatkar said.

General Shekatkar chaired the high-level committee that recommended “measures to enhance combat capability and rebalance defence expenditure of the armed forces”. The committee submitted its report in December 2016.

“Air Defence command is a good first step. Air Defence needs to be integrated to avoid instances of friendly fire when you have Army, IAF using aerial platforms. Theatre commands will ultimately come in as per the mandate of the CDS. Importantly, theatre commands are the need of the hour,” said Lieutenant General Satish Dua who recently retired as the Chief of Integrated Defence Staff to the Chairman Chief of Staff Committee.

Describing the reorganisation in detail, the CDS said that he has had initial discussions with the chiefs of the three services. “I have asked for suggestions from them,” he said. He added that India is following neither the US model, which has geographical theatre commands, nor the Chinese model, which are according to regions. “We will devise it according to our needs and terrain,” General Rawat said. Describing the Air Defence Command, the CDS said that the Indian Air Force is responsible for the management of the Indian air space. “While air assets will be integrated,” and put in the Air Defence Command, those with very specific duties such as fighters with the Indian Navy or air elements with the Strike Corps of the Indian Army will continue to be with the respective forces, he explained. Integrating the logistics units of all three services “has great potential” in increasing “efficiency”, and cutting costs through “common contract management”, the CDS said.

Commenting on “jointness” between three services, General Rawat said, “We are armed forces of the Union (of India) and the time has come to genuinely behave like one.” He added that medical and training facilities could be integrated. It is important to better understand the “capabilities” available with the other forces, he said. “I came to know about the capabilities of the US-made long-range

surveillance aircraft P8i during the Doklam crisis.” Indian and Chinese troops were deployed eyeball to eyeball at the Doklam plateau in Bhutan for 73 days in 2017. The naval aircraft gathered crucial data that allowed better decision-making, the CDS said.

Significantly, days after the Union government presented the Union budget for the fiscal year 2020-21, the CDS expressed concern about the burgeoning pension budget. “It is Rs 1.33 lakh crore next fiscal as against Rs 1.1 lakh crore this year,” the CDS said and wondered whether this is “feasible” to sustain. Pension budgets have soared after the government implemented the One-Rank- One Pension (OROP) scheme for the military. OROP was a long-standing demand of the armed forces. The budget allocated to forces was adequate, the CDS said. “Management of budget is critical. Budget is more a management issue than an issue of (adequate) funds.”

<https://www.hindustantimes.com/india-news/india-to-get-theatre-commands-for-pak-china-borders-rawat/story-iiQLG5WGt9LzgBnjEETQ5J.html>



Wed, 05 Feb 2020

L&T, MBDA initiate missile integration facility in India

By Jon Grevatt

A joint venture (JV) between Indian group Larsen & Toubro (L&T) and pan-European missile specialist MBDA has set up a missile integration facility in the southern Indian state of Tamil Nadu.

L&T said in a stock exchange filing on 3 February that the new facility will undertake activities including missile assembly, the integration of non-explosive missile components, and testing.

L&T said that the JV – named L&T MBDA Missile Systems Limited (LTMMSL) – has received “a few export orders” and that the facility will start delivering on these contracted requirements in 2020.

The company added that LTMMSL would also bid to build “complete missile systems” for the Indian armed forces and explore prospects to deliver such products under procurement categories that promote indigenous manufacturing.

MBDA has previously confirmed to *Jane's* that its JV with L&T will initially be focused on three main programmes for the Indian armed forces.

These include an offer to supply MBDA's fifth-generation anti-tank guided missile (ATGM) known as the ATGM5, which will be produced in India under a procurement category – known as Buy Indigenously Designed, Developed, and Manufactured (IDDM) – geared towards encouraging domestically-sourced components and materials.

MBDA said other systems being offered through the JV include the Exocet MM40 Block 3 for the Indian Navy's Medium Range Anti-Ship Missile (MRAShM) requirement, and the Sea Ceptor for the Indian Navy's Short-Range Surface-to-Air Missile (SRSAM) programme.

The new facility is located in a special economic zone in Coimbatore, which forms part of the Indian government's new “defence industrial corridor” in the Tamil Nadu region. Another corridor is being established in the northern Indian region of Bundelkhand.

LTMMSL was established as a JV in 2017, with L&T owning 51% and MBDA the remainder.

https://janes.ihs.com/Janes/Display/FG_2692555-JDW

Wed, 05 Feb 2020

India leans on defence attachés to boost exports

By Jon Grevatt

India is planning to appoint defence attachés in 10 additional countries to boost efforts to expand military exports, Defence Minister Rajnath Singh announced on 3 February.

Singh did not elaborate on the location of the new defence attachés but said they would be expected to utilise state funding to promote defence sales in the countries.

“A large country like India cannot restrict its defence co-operation to a few countries,” said Singh in comments published by national news agencies. “Efforts should be made to expand continuously. This will further strengthen India’s defence diplomacy.”

India’s effort to increase diplomatic engagement in new defence markets was outlined in a plan unveiled by the Ministry of Defence (MoD) in June 2019.

The plan is focused on positioning defence attachés in target export countries and providing them with funding to promote Indian defence products. Promotion activities including participating in defence exhibitions, publicity campaigns, undertaking market studies, and organising seminars.

In countries classified by the MoD as ‘Category A’ the Indian government will provide defence attachés with USD50,000 annually to promote exports, and in Category B and Category C defence attachés will be allocated USD30,000 and USD20,000, respectively.

Under the scheme, the MoD is targeting defence exports to a total of 85 countries. Category A countries – or those with the biggest potential – include Egypt, Malaysia, Nigeria, Saudi Arabia, Thailand, Turkey, the UK, the US, and Uzbekistan.

Category B includes Australia, France, Indonesia, Japan, Kenya, the Philippines, while Category C includes Belgium, Brazil, Greece, Hungary, Israel, the Netherlands, Poland, and Russia.

https://janes.ih.com/Janes/Display/FG_2692554-JDW

Wed, 05 Feb 2020

India’s CAG criticises army for providing poor quality gear to troops in Siachen region

By Rahul Bedi

New Delhi: India’s Comptroller and Auditor General (CAG) has censured the Indian Army (IA) for enduring shortages of essential high-altitude clothing, equipment, and rations for soldiers posted in the disputed Himalayan region of Siachen, which borders Pakistan and China, an audit report tabled in parliament on 3 February revealed.

In the report the CAG stated that these “acute” deficiencies persisted for up to four years until 2018, pointing out that shortages of snow goggles ranged between 62% and 98%, while the lack of snow boots compelled soldiers on the Siachen Glacier to use ‘recycled’ footwear.

The audit further criticised the IA for purchasing 31,779 “substandard” sleeping bags at inflated rates, in addition to acquiring “inferior” backpacks that failed to meet the stipulated specifications.

IA personnel also had to make do with “older versions” of essential items such as face masks and jackets, instead of better and more modern varieties, stated the CAG.

The report also stated that a “deficiency” of special rations essential at high altitudes had “compromised the calorie intake of soldiers by 82%”.

The CAG also rebuked the federal government for continuing delays in establishing the Indian National Defence University (INDU), the construction of which near New Delhi was approved in 1999. This postponement resulted in the INDU’s overall cost escalating 914% from INR3.95 billion (USD55.4 million) in May 2010 to INR40.07 billion in late 2017, said the CAG.

https://janes.ihs.com/Janes/Display/FG_2692703-JDW



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CAG slams Defence Ministry for delays in procuring high-altitude clothing, equipment for troops

There was a critical shortage of snow goggles ranging from 62 per cent to 98 per cent

New Delhi: The Comptroller and Auditor General (CAG) has come down heavily on the Defence Ministry for the delays of up to four years in the procurement of high-altitude clothing and equipment for Indian troops in areas like Siachen and Ladakh to enable them to withstand the inclement weather and ailments caused from extreme cold weather conditions.

There was a critical shortage of snow goggles ranging from 62 per cent to 98 per cent. The troops were not issued ‘multi-purpose boots’ from November 2015-September 2016 forcing them to resort to recycling of available boots, it said in its report on the working of the Defence Ministry tabled in Parliament.

The CAG said old versions of items such as face mask, jacket, and sleeping bags were procured, depriving the troops from the benefits of using improved products. Lack of research and development at defence laboratories led to continued dependence on imports, it added.

The report noted that special scales of rations were authorised to the troops to meet their daily energy requirements. However, substitutes in lieu of scaled items were authorised on ‘cost to cost’ basis which resulted in supply of reduced quantity of substitutes. This compromised the calorie intake of troops by as high as 82 per cent.

At the Leh station in one instance, it was noticed that the special ration items were shown as issued to troops for consumption without their actual receipt. Handing over assets created under the pilot project to the units got delayed much beyond the stipulated time frame, depriving users of resources which were already scant in challenging climatic conditions. There were discrepancies between the assets shown in Numerical Asset Register and assets on the ground.

The CAG said the project for improvement in housing conditions of troops in high-altitude areas was executed in an ad-hoc manner. In the first two phases of the pilot project, extensive summer/winter trials were conducted. The third phase constituted a confirmatory trial, at a cost of Rs`63.65 crore. This was avoidable, since the first two phases were exhaustive. Further, the sanction by the competent authority for the main project was not obtained.

The CAG’s audit report also noted that the Indian National Defence University, whose setting up by the Kargil Review Committee that went into security lapses which resulted in Pakistani army regulars

and terrorists taking commanding positions on the heights of the mountains in Kashmir's Kargil region, had not yet been established. This was despite the government giving in principle approval in May 2010 for the university to address deficiencies in India's security management system. The project whose cost was Rs 395 crore in 2010 had escalated to Rs 4,007.22 crore in December 2017, it noted.

<https://www.thestatesman.com/india/cag-slams-defence-ministry-delays-procuring-high-altitude-clothing-equipment-troops-1502853042.html>



Wed, 05 Feb 2020

Soldiers without boots

*The CAG report flags a chronic shortage of gear for our forces
in Siachen and raises questions about fund allocations*

The latest CAG report about the pathetic lack of snow gear and supplies for our soldiers on guard at the freezing and inhospitable Siachen glacier is only shocking as a headline. For such findings do not change year after year when the defence accounts are assessed. They show the same lopsided allocation of funds that has been compromising the health and functionality of our troops. This is irrespective of Governments and consistent warnings by a series of CAG reports. This report is no different from the earlier ones relating to March 2013, which said that we would run out of ammunition in 10 days in a conventional war. So apart from this grim state of affairs bothering us for a while, there is no determined policy push to set it right. Some of the details are indeed so disturbing that it makes us wonder if we are among the top armies of the world. Such was the shortage of multi-purpose boots, which can protect feet in -55 degrees Celsius, that our personnel had to opt for recycled ones. They fell short of snow goggles in a region where you would go blind without them, simply because there weren't enough stocks at the Ordnance Factory in Dehradun. If shortages aren't alarming, raising questions about why the funds ran dry or if they had mysteriously leached during dissemination, then irregularities in the selection of rucksacks, face masks, high mountain clothing and equipment are more than plain serious. Apparently, they didn't meet any specifications. Worse, about 31,779 sleeping bags were found "sub-standard." And though these conformed to old specifications, nothing explains why they were procured at an extra cost of Rs 7.74 crore. The saddest part is all of these make for the most basic kit for such extreme conditions and are not even orders for upgraded gear. Still their procurement was delayed inexplicably by four years. Predictably, the Narendra Modi Government may pass on the blame to the systemic paralysis of the Manmohan Singh years and claim clemency that it only assumed power in 2014. But then can it explain why it couldn't accelerate the empowered committee on provisioning reviews? As it turns out, some of our benchmarks are not even commensurate with international standards. And this is still not a priority considering soldiers are forever under threat in a treacherous terrain where more die to avalanches and climate extremes than any military action.

Year after year, there is always a demand for increasing the defence outlay. Last year's Budget made the headline for being the lowest since 1962, which was when India fought the war against China. And though this time it has been hiked by about six per cent, mostly to factor in inflation, it is not enough to make big purchases for enhancing capabilities. Yet a lion's share of the Budget is allocated to the Army, followed by the Navy and the Air Force. A majority of the budget then goes towards the salary and pension bill. And with both only expected to grow in the future, the cascading effect will undoubtedly stretch the procurement list at the seams for some time to come. So unless

there is a strict cost rationalisation review, there can be no redress. Much of the revenue expenditure has been wasteful, due to outdated processes of maintenance and upkeep and a flabby supply chain management. Then there is the menace of corruption in procurement, skeletons of dodgy deals tumbling out of cupboards every other year, all of which compromise spends. At the moment, there is very little manoeuvring space to set aside funds for infrastructure. And if this is the case with basic equipment, one shudders to think what will happen to technological upgrades of arsenal and strategic inductions. Most of this year's defence expenditure will go towards the new Tejas Mk 1A aircraft. Although developed at home, its capabilities pale in comparison to other fighter jets around the world and will need fortifications. Which means that we will continue to import rather than buy home-grown tech, simply because it is not up to the mark. Due to the low budget, the Navy, too, has had to roll back plans on having 200 warships by 2027. One just hopes that the appointment of the Chief of Defence Staff, aimed at improving the coordination between forces, streamlining resources, professionalising operations and sharpening our preparedness in the neighbourhood, can synergise security requirements and prioritise them according to the budget. Hopefully, we can then give our soldiers the boots they need to march with.

<https://www.dailypioneer.com/2020/columnists/soldiers-without-boots.html>

Business Standard

Wed, 05 Feb 2020

Kalyani Group plans to set up production facility in Uttar Pradesh

Group CMD Baba N Kalyani said the firm had held a series of discussions with the Uttar Pradesh government and signed a memorandum of understanding in this regard

By Virendra Singh Rawat

Defence hardware manufacturer Kalyani Group is looking to invest in a greenfield production facility in the proposed Uttar Pradesh Defence Corridor.

Group CMD Baba N Kalyani said the firm had held a series of discussions with the Uttar Pradesh government and signed a memorandum of understanding in this regard. "The state government has offered to allot us the required land at two to three places for our plant," he said, adding the firm would soon take a call. It's also planning to set up a small arms unit in the country in association with DRDO.

https://www.business-standard.com/article/companies/kalyani-group-plans-to-set-up-production-facility-in-uttar-pradesh-120020500076_1.html

Ready to partner India, transfer technology of jet engine: Safran

The offer gains significance as India has embarked on an ambitious plan to develop an advanced multirole fighter jet, with the Air Force insisting that it should be powered with an indigenous engine and home developed weapon systems

By Manu Pubby

New Delhi: Leading French engine manufacturer Safran has said that it is ready to transfer the full technology for jet engines that can power next generation fighter jets and has initiated talks on the matter as it is committed to staying in India for the long term.

The offer gains significance as India has embarked on an ambitious plan to develop an advanced multirole fighter jet, with the Air Force insisting that it should be powered with an indigenous engine and home developed weapon systems.

In his first remarks after taking over as Safran senior executive vice president, Alexandre Ziegler, who was the French Ambassador to India till last year, said exchanges have started between the two sides for a potential partnership for the next generation jets. “The development of an indigenous fighter jet engine is a key factor for strategic autonomy. If India chooses to cooperate with France in this field, we will be delighted and honoured to make our contribution. We are ready to propose a full transfer of technology and knowhow. That is the strength of our partnership,” the senior executive told ET. The French manufacturer is already a partner in major Indian space projects and helicopter engines, besides being a significant supplier of systems for the Rafale fighter jets ordered for the Air Force. “Our technologies make France one of the four countries in the world to master the complete development of a fighter jet engine. And if India needs us on this particularly strategic field, we will be there. Safran is definitely ready for a partnership with India, with the full support of the French government. Exchanges on this subject have already begun,” Ziegler said.

The comments come even as France has made fresh efforts to revive plans to develop the indigenous Kaveri jet engine as part of the Rafale offsets deal, with a briefing for the project made to Defence Minister Rajnath Singh during his visit to Paris in October.

As reported by ET, plans to revive the indigenous Kaveri project with the help of French technology stalled over differences in the pricing mechanism for the deal. The upgraded Kaveri engine is not being considered for the next batch of 83 LCAs to be made in India and the jets will be powered by engines supplied by US’ General Electric but the Indian Air Force has mandated that the next generation Advanced Medium Combat Aircraft (AMCA) has to operate on Indian engines after the first two squadrons.

Engines form a major part of the cost of fighter jets, with estimates showing that for a fleet of 200 LCAs in service, the cost of engines alone would be in excess of 25 billion euros over the lifecycle of the planes.

On its plans to utilise the offsets from the Rafale contract, Zeigler said Safran is committed to achieving the 50% offset clause with its Indian partners. “The Group’s purchases from Indian companies have grown considerably and now reach dozens of millions of euros each year. In addition, we have great ambitions in terms of Make in India and industrial investments in India, whether in production, like we are already doing in Bengaluru and Hyderabad, or in aeronautics MRO,” he said.

<https://economictimes.indiatimes.com/news/defence/ready-to-partner-india-transfer-technology-of-jet-engine-safran/articleshow/73950370.cms>

Indo-Pacific plan gains steam with India meet

New Delhi: As it turns the Indo-Pacific from concept to reality, India will be hosting East Asian Summit countries to discuss maritime security cooperation in Chennai beginning Thursday this week. Explaining the policy, Vikram Doraiswami, additional secretary in foreign ministry told a think-tank on Monday that India sees Indo-Pacific as a nonbinary, less contested space which will increase India's diplomatic space. Describing the seven pillars of India's Indo-Pacific policy, he listed them as "maritime domain awareness, marine environment, humanitarian assistance and disaster relief, sustainable use of maritime resources, science and technology, capacity building, maritime transportation and trade."

"We are looking at creating loose, cooperation-friendly and structure-lite mechanisms that help us move the Indo-Pacific from an idea to something far more real. We're broadening the concept to include economic and environmental issues," he said, which have a direct bearing on peoples' lives.

As per an MEA statement, the Indo-Pacific conference in Chennai will feature about 100 participants, including 50 from EAS countries. "Officials and experts from the EAS-participating countries will deliberate upon various aspects of maritime security cooperation under five thematic sessions; namely Holistic Maritime Security, Maritime Safety, Transition to a Regional Blue Economy, India's Indo-Pacific Oceans' Initiative and the Way Forward. These sessions will be interactive in nature."

The conference is being organised by India, Australia and Indonesia jointly. "The conference is expected to serve as a platform for free and open dialogue among all the EAS partners on various issues of maritime security cooperation and to come up with suggestions on tackling in a cooperative manner, the challenges in maritime domain," MEA said.

<https://timesofindia.indiatimes.com/india/indo-pacific-plan-gains-steam-with-india-meet/articleshow/73948476.cms>

