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Cutting Edge: Aerospace and Defence

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Editorial

Shashank Tripathi

Partner and Leader, Aerospace and Defence

PwC India

Dear readers,

Greetings for the third quarter of 2020–21! As we start to come out of the COVID-19 induced economic saturation, it is time to look afresh at the Aerospace and Defence (A&D) sector and plan for 2021 with renewed ideas and energy.

The 44th edition of Cutting Edge, PwC India's Aerospace and Defence newsletter, brings this story of revival to you. Through this quarterly publication, we update our clients on news, analysis and the latest developments in the A&D sector in India. I would also like you to consider reading PwC India's recent report 'Full Potential Revival & Growth: Charting India's medium-term journey', for which I had the privilege of being the lead author. This report outlines a view of India's revival and growth in nine key sectors of the economy for the next two–three years.

The Government of India (GoI) started issuing further guidelines for resuming economic activities after the nation was placed under a lockdown to tackle the COVID-19 crisis. There were several important events and market developments in the A&D sector, both in civil and military segments, such as the release of the Defence Acquisition Procedure (DAP) 2020, amendments in the foreign direct investment (FDI) policy for the defence sector, introduction of a negative import list for defense equipment to boost indigenisation, efforts by the Defence Research and Development Organisation (DRDO) in building India's missile-strike capabilities, signing of the Basic Exchange and Cooperation Agreement (BECA) between India and the US, setting up of a separate Drone Directorate and inclusion of aircraft and component leasing under the IFSC Authority Act, 2019.

Defence sector

To push the sector's growth and encourage indigenisation under the GoI's Aatmanirbhar Bharat (self-reliant India) initiative to transform India into a global defence manufacturing hub, the Department for Promotion of Industry and Internal Trade (DPIIT) has notified changes to the FDI policy in the defence sector. The limit of foreign investment in the defence industry that is subject to industrial license (IL) under the Industries (Development and Regulation) Act, 1951, and manufacturing of small arms and ammunition under the Arms Act, 1959, has been increased from 49% to 74% under the automatic route for greenfield investments.[1]

DAP 2020

Another substantial move was the release of the DAP 2020. The DAP 2020 is aimed at empowering the Indian domestic industry through the Make in India initiative. It is focused on enhancing self-reliance in defence production, indigenising spares, overhauling trial and testing procedures based on realistic services qualitative requirements (SQRs), ensuring requisite monitoring by a project management unit (PMU) for time-bound procurement and empowering the Indian domestic defence manufacturing industry.

1 https://dipp.gov.in/sites/default/files/pn4-2020_0.PDF

Together with the enhancement of the FDI limit for defence products requiring IL, the DAP is expected to encourage investments from global original equipment manufacturers (OEMs) in establishing manufacturing hubs in India for both import substitution and exports while protecting the interests of the Indian domestic defence manufacturing industry.

In a major intervention to boost indigenous development of defence equipment and platforms, a negative import list for defence equipment has been published. The Department of Military Affairs (DMA), Ministry of Defence (MoD), has prepared a list of 101 items that would be embargoed from being imported. The embargo would be implemented in a phased manner till 2024. The list includes not just simple parts and components, but also some high-technology weapon systems like artillery guns, assault rifles, corvettes, sonar systems, transport aircrafts, light combat helicopters (LCHs) and radars.

Missile testing

In order to boost to India's missile-strike capabilities, the DRDO test fired the Hypersonic Technology Demonstrator Vehicle (HSTDV), which is expected to lay the foundation for developing a hypersonic cruise missile system. The DRDO is confident of developing a complete hypersonic cruise missile system in the next four–five years. The system will be capable of striking its targets at speeds at least double those of the BrahMos supersonic cruise missile, which is presently the world's fastest cruise missile. Furthermore, the DRDO successfully carried out the final trial of its anti-tank guided missile, Nag, at the Pokhran field firing ranges in Rajasthan. The missile will be inducted into the Indian Army soon. The missile was integrated with an actual warhead and launched from Nag missile carrier NAMICA. It has 'fire and forget' and 'top attack' capabilities to defeat all main battle tanks equipped with composite and reactive armour in both day and night conditions. The DRDO also successfully test fired its indigenous anti-radiation missile, Rudram, and the Supersonic Missile Assisted Release of Torpedo (SMART) system.

BECA signed

Another key event in the defence sector in the last quarter was the signing of BECA between India and the US for exploring capacity building and joint military cooperation with countries in Africa and Central Asia. A combined approach to capacity building in countries of interest would support in countering the expanding Chinese footprint that has been powered by supply of arms and creation of dual-use infrastructure by Beijing. BECA is the final foundational agreement that the US signed with its trusted partners to exchange classified information and interoperability of forces. The agreement also includes maritime information sharing and domain awareness between Indian and US naval forces, and affirms their commitment to building on existing defence information sharing at the joint-service and service-to-service levels.

Civil aviation

India's domestic passenger traffic reached more than half of its pre-COVID levels as the number of daily air travellers crossed more than 0.2 million in November 2020. As per the Ministry of Civil Aviation (MoCA), only 30,000 passengers flew on the first day after flight services resumed operations after the lockdown. The daily number of passengers reached over 2 lakh (0.2 million) in November.[2] India's aviation industry has adapted to the new normal as all ticket bookings and check-ins have been digitalised.

The Central Government has established an international financial services centres (IFSC), with its head office at Gandhinagar, Gujarat. The IFSC will develop and regulate financial products (including aircraft leases) and financial institutions (persons engaged in the provision of financial services, viz. aircraft leases). Notifying aircraft leases as a financial product will pave the way for development of the civil aviation sector in India. Additionally, it will promote aircraft leasing and financing activities from Indian entities. This will support onshore aircraft leasing and financing, which is the most profitable segment of the aviation value chain, and will support local carriers who have placed orders for more than 1,000 aircraft.

Drones

The Ministry of Finance approved the setting up of a separate Drones Directorate by the Directorate General of Civil Aviation (DGCA), the civil aviation

2 https://timesofindia.indiatimes.com/business/india-business/indias-domestic-air-passenger-traffic-reaches-over-half-of-pre-covid-levels-moca-secy/articleshow/79099640.cms

regulator. The Directorate will initially start functioning with eight DGCA officials and the number of officials will be increased in the future. The Directorate will solely focus on maintaining the country's drone ecosystem is expected to plan its own budget. This is a major step towards making India the world's drone capital.

The Central Government owned flight training institute Indira Gandhi Rashtriya Uran Akademi (IGRUA) collaborated with Drone Destination, a Delhi-based private firm, to introduce drone pilot training courses. This is a part of MoCA's drive to recruit and train drone pilots to make commercial unmanned aerial vehicles (UAVs) a reality in India. The training of drone pilots will begin shortly at the institute's campus in Fursatganj, Amethi. IGRUA will provide its resources and Drone Destination will provide its expertise to train aspirants.

These efforts will support the Central Government's plan to introduce drones in various industries, including agriculture, law enforcement and disaster management.

As evident from the key developments, India's A&D sector is poised for growth, with a focus on manufacturing, developing strategic partnerships and leveraging technology for transforming the armed forces.

We trust that you will find this edition of Cutting Edge useful. Your feedback, trust and support are encouraging us to persevere in reporting and creating value in the A&D sector. I would like to thank you all for your continued support and trust in PwC.

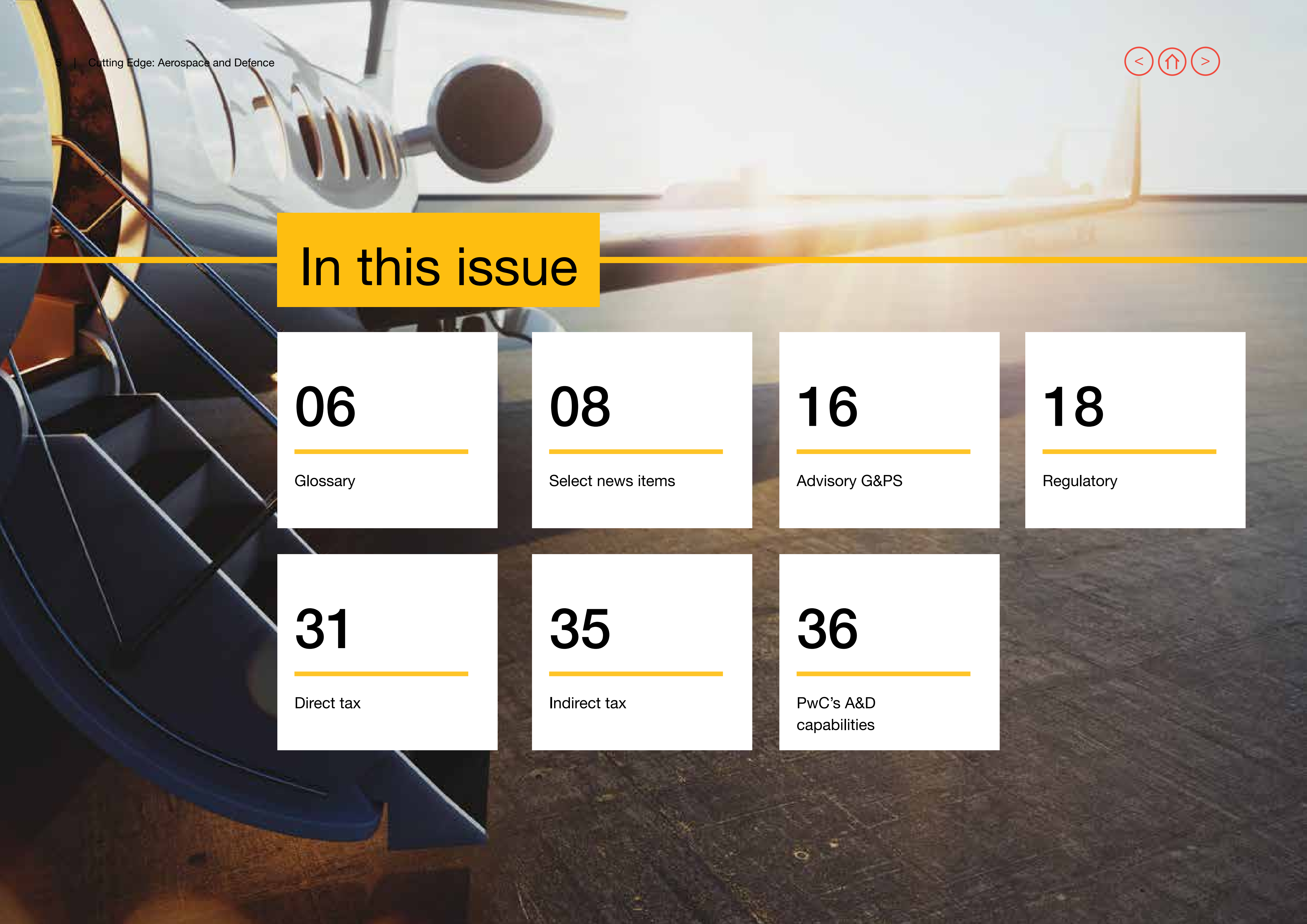
Lastly, all of us are going through a difficult phase due to the COVID-19 outbreak and its impact on our lives. I hope that all of you stay safe and healthy during this time of crisis. Our safety today will ensure that we emerge out of this crisis together and stronger.

Sincerely,

Shashank Tripathi

Partner and Leader, Aerospace and Defence

PwC India



In this issue

Glossary

A&D	Aerospace and defence
ADTL	Alpha Design Technologies Ltd
ADRDE	Ariel Delivery Research and Development Establishment
AFVs	Armoured fighting vehicles
GoI	Government of India
AAI	Airports Authority of India
AIM	Atal Innovation Mission
AoN	Acceptance of necessity
ASWC	Anti-Submarine Warfare Corvette
BECA	Basic Exchange and Cooperation Agreement
BDL	Bharat Dynamics Ltd
CDIIC	Codissia Defence Innovation and Atal Incubation Centre
CoDISSIA	Coimbatore District Small Scale Industries Association
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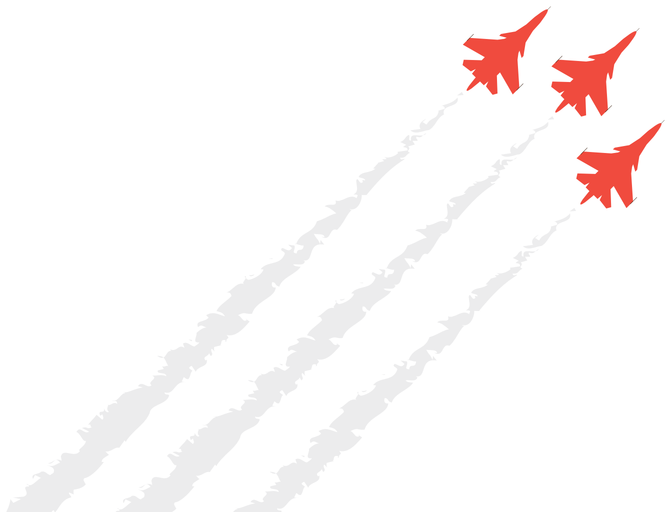
CoE	Centre of excellence
COTS	Commercial off-the-shelf
CSL	Cochin Shipyard Limited
DAP	Defence Acquisition Procedure

DGCA	Directorate General of Civil Aviation
DMA	Department of Military Affairs
DPIIT	Department for Promotion of Industry and Internal Trade (DPIIT)
DPSU	Defence Public Sector Undertaking
DRDO	Defence Research and Development Organisation
DRDL	Defence Research and Development Laboratory
EEL	Economic Explosive Ltd
FDI	Foreign direct investment
HAL	Hindustan Aeronautics Limited
HSTDV	Hypersonic Technology Demonstrator Vehicle
IAF	Indian Air Force
IDDM	Indigenously Designed, Developed and Manufactured
IFSC	International financial services centre
IGRUA	Indira Gandhi Rashtriya Uran Akademi
JV	Joint venture
LCA	Light combat aircraft
LD	Liquidated damages
LCHs	Light combat helicopters

MHA	Ministry of Home Affairs
MoCA	Ministry of Civil Aviation
MoCI	Ministry of Commerce and Industry
MoD	Ministry of Defence
MoU	Memorandum of understanding
MSME	Micro, small and medium enterprises
NSTL	Naval Science and Technological Laboratory
NSRY	Naval ship repair yard
OEM	Original equipment manufacturer
OFB	Ordnance Factory Board
PSU	Public sector unit
PMU	Project management unit
RCS	Radar cross section
RCI	Research Centre Imarat
SMART	Supersonic Missile Assisted Release of Torpedo
SOP	Standard operating procedure
SQRs	Services qualitative requirements
TBRL	Terminal Ballistic Research Laboratory

ToT	Transfer of technology
UAE	United Arab Emirates
UAV	Unmanned aerial vehicle
UDAN	Ude Desh ka Aam Nagrik



Select news items

BECA inked: India, US explore defence tie-up with 3rd nations

India signed key pacts with the US, including the Basic Exchange and Cooperation Agreement (BECA) for exploring capacity building and joint military cooperation. BECA is the third and final foundational agreement that the US signs with trusted partners for exchange of classified information and interoperability of forces. Areas of joint cooperation could include Africa and Central Asia. A combined capacity building approach in countries of interest would counter the expansion of Chinese footprint, powered by Beijing's supply of arms and creation of dual-use infrastructure. This also includes enhanced maritime domain awareness and information sharing between the navies, and affirmed their commitment to build on existing defence information-sharing at the joint-service and service-to-service levels and explore potential new areas of mutually beneficial cooperation.

While the countries with which India and the US plan to work together were not elaborated, the two sides vowed to increase ties with the US Central Command and Africa Command — the operational area of which extends right to India's western neighbourhood.

Source: https://www.newsmatters.in/beca-done-india-us-explore-defence-tie-up-with-3rd-nations/To boost defence exports, government to launch 'Open General Export License' scheme

More MSMEs to be involved in defence, aerospace sectors

The Union Government is looking at doubling the number of micro, small and medium enterprises (MSMEs) in the A&D sector in the next four–five years. The Government launched defence activities through the Codissia Defence Innovation and Atal Incubation Centre (CDIIC), and requested the industrial ecosystem and MSMEs in Coimbatore to get into the defence and aerospace sectors. With several initiatives by the Government to indigenise and encourage innovation in the sectors, there are huge opportunities for MSMEs. The units should look at not just producing for the Indian armed forces but also exploring export opportunities.

Source: https://pressboltnews.com/more-msmes-to-be-involved-in-defence-aerospace-sectors/

Naval Ship Repair Yard inks deal with CDIIC

Naval Ship Repair Yard (NSRY), Kochi, signed a memorandum of understanding (MoU) with the CDIIC to foster cohesive involvement of both parties and help in solving problems projected by the NSRY in harnessing the Union government's Atal Innovation Mission (AIM) to encourage innovation and technology development.

The MoU permits NSRY to utilise world-class facilities of Coimbatore-based MSMEs for material testing and hardware development, and their analysis and obsolescence mitigation programmes with respect to legacy equipment. The yard would be exposed to new manufacturing techniques, industrial safety and quality assurance that are being pursued by modern MSMEs. Codissia comprises of more than 2,000 MSMEs and was established with an objective to promote and protect small-scale industries in Coimbatore.

Source: https://www.thehindu.com/news/cities/Kochi/naval-ship-repair-yard-inks-deal-with-cdiic/article32965736.ece#:~:text=A%20memorandum%20of%20understanding%20(MoU,signed%20in%20Coimbatore%20on%20Wednesday

Finance Ministry gives the DGCA approval to set up a Drones Directorate

The Finance Ministry gave approval to the DGCA to set up a separate Drones Directorate. The directorate will be established with eight DGCA officials to begin with and the number of officials will be eventually increased. The directorate will solely focus on maintaining the drones ecosystem in the country. A per industry sources, the directorate will have its own budget that will help it in focusing more on the drones' ecosystem, given that both the DGCA and the Civil Aviation Ministry have traditionally prioritised civil aviation operations over drones.

Source: https://www.medianama.com/2020/11/223-drones-directorate-india/

India launches drone pilot training and recruitment at IGRUA

MoCA has launched a drive to recruit and train drone pilots as part of its efforts to make commercial UAVs a reality in the country. The Central Government operated flight training institute IGRUA signed an agreement with Drone Destination, a Delhi-based private firm, for the collaborative effort. The drone pilots would be trained at the institute's campus in Fursatganj, Amethi. IGRUA will provide its resources while Drone Destination will provide its expertise in drones to train aspirants.

Source: https://www.abpeducation.com/news/india-launches-drone-pilot-training-at-up-institute/cid/1205078#:~:text=The%20central%20government%2Drun%20autonomous,%2Dbased%20company%2C%20Drone%20Destination

DRDO successfully tests anti-tank guided missile Nag, ready for induction in Army

DRDO successfully carried out the final trial of anti-tank guided missile Nag at Pokhran in Rajasthan, and the same will be inducted into the Indian Army soon. The missile was launched from NAG Missile Carrier (NAMICA) with an actual warhead. The MoD approved procurement of 300 Nag missiles and 25 missile carriers for the Indian Army in 2008. The missile has 'fire and forget' and 'top attack' capabilities with passive homing guidance to defeat all main battle tanks equipped with composite and reactive armour, both in day and night conditions. NAMICA, the NAG missile carrier operates on an infantry combat vehicle BMP2 II based system with amphibious capability.

The missile will be produced by Bharat Dynamics Limited (BDL), whereas NAMICA will be produced by Ordnance Factory Medak.

Source: https://economictimes.indiatimes.com/news/defence/drdo-successfully-tests-anti-tank-guided-missile-nag-ready-for-induction-in-army/videoshow/78809477.cms?from=mdr

Indigenously built anti-submarine warfare corvette (ASWC) INS Kavaratti commissioned

Chief of Army Staff General M M Naravane commissioned the ASWC built by Garden Reach Shipbuilders and Engineers Limited (GRSE), a Kolkata-based shipbuilder, into the Indian Navy. INS Kavaratti is the last of the four indigenously built ASW stealth corvettes under Project 28 (Kamorta class). INS Kavaratti has a state-of-the-art weapons system and is equipped with a sensor that is capable of 'detecting and prosecuting' submarines. The ship has a credible self-defence capability and good endurance for long-range deployments in addition to its anti-submarine warfare capability. The ship has up to 90% indigenous content and has a carbon composite superstructure.

Source: https://economictimes.indiatimes.com/news/defence/indian-navys-indigenously-built-stealth-corvette-ins-kavaratti-commissioned/articleshow/78806203.cms?from=mdr

DRDO's Procurement Manual-2020 with focus on encouraging participation of Indian industries released

The GoI released the DRDO Procurement Manual 2020 (PM-2020) to encourage participation of Indian industries, including start-ups and MSMEs in defence research and development (R&D) for achieving the vision of an Aatmanirbhar Bharat. This will facilitate faster execution of R&D projects/programmes.

Bid security declaration option for earnest money deposit (EMD), placement of order on lowest bidder 2 (L2) in case L1 backs out and increase of advance payment threshold limit are some of the salient features of the new manual that will assist the industry for speedy execution of projects. Exemption of bid security and performance security up to INR 10 lakh (USD 13,531) and no negotiations for commercial off-the-shelf (COTS) items/services wherever price discovery is happening through market forces are some of the other salient features of PM-2020

Performance security for service contracts is linked to payment cycle instead of total contract value. Procuring stores from development partners and safeguarding free-issue material through insurance cover instead of bank guarantee (BG) are other measures adopted to support the industry.

In the new PM-2020, the liquidated damage (LD) rate for development contracts has been reduced. The delivery period (DP) extension process has been simplified for faster decision making. Many of the internal procedures have been further simplified for faster engagement with industry.

Source: http://www.businessworld.in/article/Rajnath-Singh-releases-DRDO-s-Procurement-Manual-2020-with-focus-on-encouraging-participation-of-Indian-industries/21-10-2020-333785/

India's domestic air passenger traffic reaches over half of pre-Covid levels

India's domestic air passenger traffic has reached more than half of the pre- pandemic level operations with the number of daily air travellers crossing more than 2 lakh November. As per MoCA, when flights resumed after a break of two months due to the lockdown, there were only 30,000 air passengers on the first day but the number reached over 2 lakh (0.2 million) in November. In addition, almost 100% of bookings and check-ins are now happening through the web.

Source: https://timesofindia.indiatimes.com/business/india-business/indias-domestic-air-passenger-traffic-reaches-over-half-of-pre-covid-levels-moca-secy/articleshow/79099640.cms

ADTL to build, run ₹753 cr. MiG-29 simulator centre for IAF

Alpha Design Technologies Ltd (ADTL) signed a contract with MoD and Russia's RAC MiG to build, own and maintain two types of simulators for upgraded MiG-29 fighters. This is first of two-phase defence contracts, worth INR 753 crore (USD 101.9 million) combined. Under this contract, worth INR 53 crore, Alpha Design will set up and run the MiG-29 simulator centre at the Adampur airfield near Jalandhar initially for two years, followed by a second 18-year contract that will be signed after two years.

Source: https://www.defencexp.com/adtl-to-build-run-%E2%82%B9753-cr-mig-29-simulator-centre-for-iaf/

India can have a complete hypersonic cruise missile system in the next four–five years

The DRDO test fired the Hypersonic Technology Demonstrator Vehicle (HSTDV) and it is expected to lay the foundation for development of a hypersonic cruise missile system.

In a major boost to India's missile-strike capabilities, DRDO has said that it can develop a complete hypersonic cruise missile system in the next four–five years which will have the capability to strike its targets at speeds at least double than that of BrahMos missile, the existing fastest supersonic cruise missile.

Source: https://economictimes.indiatimes.com/news/defence/india-can-have-complete-hypersonic-cruise-missile-system-in-4-5-years-drdo/articleshow/78657832.cms

101 items embargoed under MoD's Aatmanirbhar Bharat initiative

A bill in the Lok Sabha has been introduced to The DMA, MoD, revealed a list of 101 items on which there would be an import embargo beyond the timeline indicated against them. The list, which was prepared after several rounds of consultations with all stakeholders, including the Army, Air Force, Navy, DPSUs, DRDO, Ordnance Factory Board (OFB) and private sector to assess current and future capabilities of the domestic industry for manufacturing various platforms/equipment/ ammunition/ weapons within the country. The list also includes some high-technology weapon systems including artillery guns, assault rifles, corvettes, sonar systems, transport aircraft, light combat helicopters, radars and many other items to fulfil the needs of the Defence Services.

The list includes wheeled armoured fighting vehicles (AFVs) with an indicative import embargo date of December 2021, of which the Army is expected to contract almost 200 at an approximate cost of over INR 5,000 crore. Similarly, the Navy is likely to place demands for submarines with indicative import embargo date of December 2021, of which it expects to contract about six at an approximate cost of almost INR 42,000 crore. For the Air Force, the light combat aircraft (LCA) Mk.1A has an indicative embargo date of December 2020.

Source: https://www.businessinsider.in/defense/news/indias-defence-ministry-introduces-import-embargo-on-101-items-to-boost-atmanirbhar-bharat-abhiyan/articleshow/77442031.cms

UAE firm selected for carbines in talks with Indian defence majors to set up plant

Caracal International, the UAE Government owned entity that has been selected to supply close-quarter battle carbines to the army on a fast-track basis is in talks with major Indian defence players to set up manufacturing facilities from which it can source up to 60% of the components needed. The company is selected to supply 93,895 next-generation carbines and is willing to transfer technology and move production to India.

Source: https://economictimes.indiatimes.com/news/defence/uae-firm-selected-for-carbines-in-talks-with-indian-defence-majors-to-set-up-plant/articleshow/78621188.cms

India successfully test-fires first indigenous 'Rudram' Anti-Radiation Missile

India successfully test-fired its first indigenous 'Rudram' anti-radiation missile from a Sukhoi-30 fighter aircraft. The missile for the Indian Air Force has been developed by the DRDO and is integrated on Sukhoi Su-30MKI fighter aircraft as a launch platform. The missile can bring down a wide range of enemy communication networks, radar systems and air defence systems within a range of up to 250 kilometres.

Source: https://www.financialexpress.com/defence/india-successfully-test-fires-first-indigenous-rudram-anti-radiation-missile-from-sukhoi-30/2101752/

Indian defence forces considering 'Made in India' carbine for meeting urgent requirements

Indian defence forces plan to acquire 'Made in India' carbines for meeting their urgent requirement in view of the situation on the China border. The carbine produced by the OFB, Ishapore (West Bengal), has been offered to the armed forces who are now evaluating it for acquisition. The scope for consideration of buying indigenous carbines came up after it started emerging that the forces would not be acquiring the carbines from the foreign country which has exported it to only a few countries and that too in very small quantities.

The armed forces require almost 3.5 lakh (0.4 million) carbines but they wanted to acquire around 94,000 of these weapons through import route under fast-track procedures. The OFB carbines will undergo rigorous testing if selected and will be inducted in limited numbers initially.

Source: https://economictimes.indiatimes.com/news/defence/indian-defence-forces-considering-made-in-india-carbine-for-meeting-urgent-requirements/articleshow/78531504.cms?from=mdr

Flight test of supersonic missile-assisted torpedo release conducted successfully

The DRDO conducted successful flight test of the Supersonic Missile Assisted Release of Torpedo (SMART). The development of the system has been crucial in capacity building of naval platforms to strike beyond the torpedo range and the system will be a significant addition to India's anti-submarine warfare capabilities.

Various laboratories, including the Defence Research and Development Laboratory (DRDL) and the Research Centre Imarat (RCI), both located in Hyderabad, and the Ariel Delivery Research and Development Establishment (ADRDE), Agra, and the Naval Science and Technology Laboratory (NSTL), Visakhapatnam, have developed the technologies required for SMART.

Source: https://www.livemint.com/news/india/drdo-successfully-flight-tests-supersonic-missile-assisted-release-of-torpedo-11601885137752.html

MoD inks INR 409 crore (USD 55.3 million) contract with Indian company for 10 lakh (one million) grenades

The MoD and M/s Economic Explosive Ltd (EEL) or the Solar Group of Nagpur signed an INR 409 crore (USD 55.3 million) contract for the supply of 10 lakh (one million) 'multi-mode' hand grenades. The hand grenades are designed by the Terminal Ballistic Research Laboratories (TBRL) of the DRDO. The contract will be executed in two years and is the first such contract inked with a domestic private company.

The new grenades will replace the existing grenades that have a vintage World War-II design used by the army. The new grenades have a distinctive design as they can be used in both stun and fragmentation modes. This is a flagship project showcasing public-private partnership and enabling the Government's Aatmanirbharta initiative in cutting-edge ammunition technologies and 100% indigenous content.

Source: https://timesofindia.indiatimes.com/india/mod-inks-rs-409-crore-contract-with-indian-company-for-10-lakh-grenades/articleshow/78429268.cms

Nagpur's EEL tests enhanced rocket, to become only private company to bid for Pinaka ammo

Economic Explosives Limited (EEL), a Nagpur-based defence manufacturer, has cleared the first step to become the first private-sector company to take part in the bids to supply the weapon systems to the army. The Pinaka rockets, having a range of 47.5 kms, were designed 20 years ago by the DRDO. Being a limited tender, EEL is slated to be the only private-sector company to compete along with the OFB for supplying the rockets. The company will qualify to take part in the requests for proposal (RFPs) once EEL's rockets clear further tests.

Source: https://timesofindia.indiatimes.com/city/nagpur/nagpurs-eel-tests-enhanced-rocket-to-become-only-pvt-co-to-bid-for-pinaka-ammo/articleshow/79047169.cms#:~:text=Nagpur%3A%20After%20a%20successful%20test,weapon%20systems%20to%20the%20Army

Malabar naval exercise 2020

India, the US, Japan and Australia began their largest joint naval exercises in over a decade, considered as a part of efforts to counter China's military and economic reach in the region. This is the first time that all four partners of the Quadrilateral alliance or Quad – India, the US, Australia and Japan – are participating together in a naval exercise of this scale.

The fact that Australia is participating in the Malabar naval exercise after 13 years is a serious reflection of the growing consensus among India, the US, Japan and Australia in matters of strategic interests, particularly aimed at containing Chinese expansionism. Being undertaken during the COVID-19 crisis, this year's Malabar exercise is a 'non-contact, at-sea only' drill to showcase the high-levels of synergy and coordination among the navies of India, the US, Japan and Australia.

Source: https://www.timesnownews.com/india/article/malabar-naval-exercise-2020-gets-underway-in-bay-of-bengal-today-all-you-need-to-know/676470

India gifts submarine to Myanmar

India gifted a submarine to Myanmar to take its bilateral defence cooperation with its eastern neighbour to new heights. The Soviet-manufactured Kilo class submarine was refurbished by Hindustan Shipyard Limited before being handed over to Myanmar. The move was in line with India's vision of growth and security for all in the region.

Source: https://www.voanews.com/south-central-asia/india-gives-submarine-myanmar-amid-growing-chinese-footprint-indian-ocean

India test fires air-launched version of BrahMos supersonic cruise missile

An air-launched version of the BrahMos supersonic cruise missile was successfully test fired from a Sukhoi fighter aircraft by the Indian Air Force. The air-launched version has a range of 300 kms. It provides the Indian Air Force with a much-desired capability to strike from large stand-off ranges on any target at sea or on land with pinpoint accuracy in day or night and in all weather conditions. The Indian Air Force is integrating the BrahMos supersonic cruise missile on around 40 Sukhoi fighter jets, aimed at bolstering overall combat capability.

Source: https://economictimes.indiatimes.com/news/defence/india-test-fires-air-launched-version-of-brahmos-supersonic-cruise-missile/articleshow/78958115.cms?from=mdr

India-UAE agree to further defence co-operation through joint production and mutual trade

A webinar between India and the UAE was held on the theme of 'Indian Defence Industry Global Outreach for Collaborative Partnership: Webinar and Expo India – UAE Defence Cooperation' to boost defence exports. Senior officials from both sides participated and spoke about deep-rooted relations between the two countries. Both sides agreed to take up cooperation in defence further through joint production and mutual trade which could be a win-win proposition for both. In order to boost defence exports and to achieve the USD 5 billion defence export target in the next five years, the webinar, which was a part of a series of webinars, was organised with friendly foreign countries. The webinar was attended by more than 180 participants and more than 100 virtual exhibition stalls were set up in the Expo.

Source: https://www.indiainfoline.com/article/news-sector-cap-goods-eng-infra/india-uae-agree-to-further-defence-co-operation-through-joint-production-and-mutual-trade-120102900897_1.html

India can now get long-range armed drones from the US, but cost will be a factor

India and the US inked two foundational pacts, COMCASA and BECA, which has paved the way for India to acquire armed drones like Reapers or Predators for long-range precision strikes. The Indian armed forces have been pushing for the acquisition of 30 'hunter-killer' weaponised Sea Guardian or MQ-9 Reaper drones, which would cost around USD 3 billion, with fast-track procurement of six of them amidst the ongoing military confrontation with China. With the legal technology enabling pacts in place with the US, procedural hurdles for acquisition of these high-altitude, long-endurance armed drones have been cleared.

Source: https://timesofindia.indiatimes.com/india/india-can-now-get-long-range-armed-drones-from-the-us-but-cost-will-be-a-factor/articleshow/78902384.cms

Advisory G&PS

Aspirational qualitative requirements

The Chief of Defence Staff has highlighted the necessity of making our qualitative requirements (QRs) in the three services more functional and operational rather than aspirational. Whilst seeking QRs for futuristic weapons and sensors is desirable, they need to be matched with operational needs. Capability and capacity of the industry also play an important part in ascertaining the viability of meeting demand created by qualitative requirements.

The ask for any equipment can range for what is existing in the market as on date or near future to what is expected in the long term. For example, rail guns using electromagnetic energy, jet-powered suits for soldiers and hypersonic missiles, etc., are going to dominate the future warfare spectrum. However, a QR for such procurement is aspirational and beyond the functional needs for today or in the near future. Many acquisition programmes have stalled due to near fictional QRs for platforms or equipment. This invariably leads to delays in procurements and is a setback for the force not having the right platform or equipment for combat.

At the same time, it is important to acquire new and advanced technologies for weapons and sensors. We need niche and cutting-edge equipment to enhance situational awareness and deliver effective ordnance on the desired target. Hence, the question to answer is how do we define the line between aspirational and operational requirements? This implores us to look at understanding the capability and capacity of the defence industry. Which technology is being manufactured and which is currently under design and development? Of the technology that would have maximum impact in improving our sensors and weapons, what is being researched and what is the success of the programmes? We may not have all the answers on a global scale. However, at a domestic level, we would perhaps have all necessary insights. Mapping answers would help us identify gaps and fill voids. As long as our QRs are not aspiring for these gaps, we would be able to strike a balance between operational and futuristic requirements. Hence, there is an urgent need for powers that are involved in procurement to create platforms and processes with adequate knowledge banks on the current and future capabilities of the domestic and global defence industry.

2 https://www.civilaviation.gov.in/sites/default/files/Counter_rogue_drone_guidelnes_NSCS.pdf

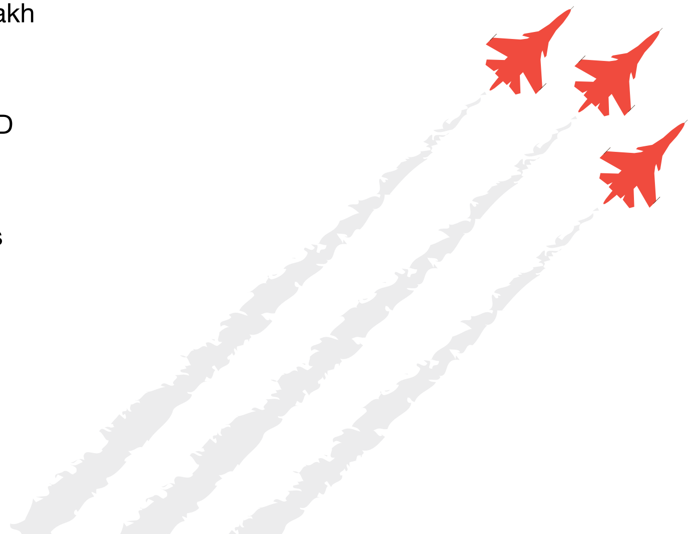
Currently, when the country is moving towards empowering the domestic defence industry, it becomes imperative that we dive deeper into understanding the industry’s capability and identify its strengths and weaknesses. These gaps, when compared to the requirements of the military for future combat worthiness, would help us in realising pragmatic as well as futuristic QRs, without being aspirational about figments of our imagination.

Import embargo on 101 defence items to boost indigenisation

A negative import list for defence equipment has been published. The move is aimed towards boosting indigenous development of defence equipment and platforms. The DMA, MoD, has prepared a list of 101 items on which an import embargo would be placed beyond the timeline indicated against them. The list includes not just simple weapon parts, but also some high-technology weapon systems like artillery guns, assault rifles, corvettes, sonar systems, transport aircrafts, light combat helicopters (LCHs), radars and many other items. Wheeled armoured fighting vehicles (AFVs) for the army and submarines for the navy are also a part of the list, with an indicative import embargo date of December 2020. This is expected to result in a loss of 200 wheeled AFVs and almost INR 5,000 crore for the army. The navy is expected to lose out on six submarines, resulting in a loss of approximately INR 42,000 crore. Similarly, the Air Force has decided to enlist the LCA Tejas MK 1A, with an indicative of which 123 are anticipated to contract at an approximate cost of more than INR 85,000 crore. The embargo on import is to be rolled out in a phased manner from 2020–2024. This will provide much-needed impetus to the private sector, especially MSMEs that are building capability and capacity in defence manufacturing. A second negative import list expected by the end of the current year or early next year.

PwC’s point of view

1. The negative import list is estimated to result in domestic defence procurement worth INR 1.4 lakh crore (approximately USD 20 billion).
2. It emphasises the GoI’s and the Indian Army’s confidence in India’s domestic defence and R&D capabilities.
3. While import would be stopped for several products, OEMs can partner with Indian players for manufacturing such products in India.
4. It is a step towards realising the GoI’s vision of both Make in India and Make for the World.



Regulatory

Defence Acquisition Procedure 2020 (DAP 2020)

The amended DAP 2020 was released in September 2020 and came into effect from 1 October 2020. The DAP 2020 has been aligned with GoI's vision of building an Aatmanirbhar Bharat (self-reliant India) by empowering the Indian domestic industry through the Make in India initiative. The DAP 2020 makes policy reforms in the defence sector more prominent and is focused towards enhancing self-reliance in defence production, indigenising spares, overhauling trial and testing procedures based on realistic services qualitative requirements (SQRs), ensuring requisite monitoring by a project management unit (PMU) for time-bound procurement and empowering the Indian domestic defence manufacturing industry. With the announcement of the new FDI policy in September 2020, the DAP 2020 has adequately included provisions that encourage FDI to establish manufacturing hubs for both import substitution and exports, while protecting the interests of the Indian domestic defence manufacturers.

The DAP 2020 has incorporated certain specific reforms enunciated in the Aatmanirbhar Bharat Abhiyan:[3]

a. Notification of a list of weapons/platforms for ban on import: Relevant incorporation has been done in the DAP 2020 to ensure that no equipment as mentioned in the list is procured via import post the timelines notified. These equipment may, therefore, be procured under the Buy (Indian – Indigenously Designed, Developed and Manufactured [IDDM]), Buy (Indian), Buy and Make (Indian) (only if Buy quantities are zero) and Buy (Global - Manufacture in India) (only if Buy quantities are zero) categories of acquisition.

b. Indigenisation of imported spares: The request for information (RFI) stage will explore willingness of the prospective foreign vendors to progressively undertake manufacturing and set up an indigenous ecosystem at the spares/subcomponent level. A new category of Buy (Global – Manufacture in India) has been incorporated to enable manufacturing of either the entire/part of an equipment or spares/assemblies/subassemblies/maintenance, repair and overhaul (MRO) facility for an equipment through its subsidiary in India. Coproduction through intergovernmental agreements (IGA) has also been proposed to achieve import substitution and reduce life cycle cost. The inclusion of contractual enablement provides the buyer's right to optimise life cycle support costs and system enhancements through an indigenous ecosystem.

c. FDI in defence manufacturing: With the announcement of a new FDI policy, suitable provisions have been incorporated in the DAP 2020 like introduction of the new category 'Buy (Global – Manufacture in India)' to encourage foreign OEMs to setup manufacturing/maintenance entities through their subsidiary in India, while enabling requisite protections for the domestic industry.

d. Time-bound defence procurement process and faster decision making: It has become a mandate for setting up of a PMU to support the contract

3 https://pib.gov.in/PressReleasePage.aspx?PRID=1659746

management process. The PMU will facilitate obtaining advisory and consultancy support in specified areas to streamline the acquisition process. Apart from establishing a PMU, the process of formulating SQRs has also been further refined by analysing the 'comparative' equipment available in the global and domestic markets. The DAP 2020 also emphasises on simplification of trial procedures to promote competition based on the principles of transparency, fairness and equal opportunities to all and not as a process of elimination.

The key policy changes that have been notified in the DAP 2020 are highlighted below:[4]

Capital acquisition schemes in the DAP 2020 are now broadly classified as Buy, Buy and Make, Leasing, Design and Development (D&D), and Strategic Partnership Model (SPM). Under the Buy scheme, procurements are categorised as Buy (Indian – IDDM), Buy (Indian), and Buy (Global). Under the Buy and Make scheme, the procurements are categorised as Buy and Make (Indian) and Buy (Global – Manufacture in India). The categories, in decreasing order of priority, are:

a. Buy (Indian – Indigenously Designed Developed and Manufactured), i.e. Buy (Indian-IDDM).

b. Buy (Indian)

c. Buy and Make (Indian)

d. Buy (Global – Manufacture in India)

e. Buy (Global)

Introduction of new procurement categories: The DAP 2020 has proposed the introduction of four new categories of procurement – Leasing, D&D, Strategic Partnership Model (SPM) and Buy (Global – Manufacture in India).

a. **Leasing:** The new procurement category 'Leasing' has been introduced as a new category for acquisition in addition to existing Buy and Make categories to substitute huge initial capital outlays with periodical rental payments. It would be permitted in two sub-categories, i.e. Lease (Indian), where the lessor is an Indian entity and is the owner of the asset, and Lease (Global). Cases where lease of equipment may be preferred are:

    i. where procurement is not feasible due to time constraint

    ii. where the asset/capability is needed for a specific time or would be underutilised if procured

    iii. where smaller numbers of assets are needed, and administrative /maintenance infrastructure expenditure would be high

    iv. when service life lease rentals are a better option compared to a one-time acquisition cost

    v. to gain experience for operational exploitation of equipment

    vi. due to operational necessity.

PwC's point of view

The innovative concept of leasing military equipment will reduce the financial burden for budget-constrained defence capital procurements. It will also facilitate shorter procurement cycles and induction of advanced technologies in minimal lead time. A similar model has been followed for the induction of INS Chakra, a nuclear-powered attack submarine leased from Russia.

Leasing will provide foreign OEMs a new avenue to sell their products faster.

4 https://www.mod.gov.in/sites/default/files/Amend270720_0.pdf

b. **Design and Development (D&D):** Acquisitions covered under the D&D/Innovation category refer to equipment/system/ subsystem/ assembly/sub-assembly, major components, or upgrades thereof, to be designed, developed and manufactured by an Indian vendor/similar D&D projects by the Defence Research Development Organisation (DRDO)/ processed by the services through their internal organisations, such as base workshop/ dockyards/ base repair depots etc., with or without participation of private industry. The DAP 2020 has consolidated the existing Make Technology Development Fund (TDF) and Innovations for Defence Excellence (iDEX) schemes under this umbrella. Chapter III of the DAP 2020 provides further details on this category which is sub-categorised as:

   i. **Make schemes:** Make I, Make II and Make III

   ii. **Innovations:** iDEX and Open Competition approach.

c. **Strategic Partnership Model (SPM):** The existing SPM has been incorporated as a new procurement category in the DAP, 2020. Detailed norms and procedures of the same have been provided in chapter VII 'Revitalising Defence Industrial Ecosystem through Strategic Partnerships' of the DAP, 2020.

PwC's point of view

Adding SPM to the procurement categories removes confusion about its status as a procurement category. It provides details about the procedure for selecting the strategic partner, finalising a bid and the role of OEMs and the MoD. D&D and SPM categories will provide a boost to the Make in India initiative in the defence sector. Foreign OEMs can participate by entering into joint ventures (JVs) or technology partnerships for the Indian domestic defence manufacturing industry to participate in programmes under these categories.

d. **Buy (Global – Manufacture in India):** This category defines an outright purchase of equipment from foreign vendors with a minimum of 50% indigenous content (IC) on cost basis of the total contract value which can be achieved in the manufacturing of either the entire equipment or spares/assemblies/ subassemblies/MRO facility for the entire life cycle support of the equipment, through its subsidiary in India. This category has been introduced to encourage foreign OEMs to shift their manufacturing/services base to India.

PwC's point of view

India has been an alternative attractive manufacturing destination due to the lower cost of resources and availability of cheap labour. This category provides an additional incentive to foreign OEMs for setting up their subsidiaries, manufacturing non-licensable defence goods or providing MRO services. They can also benefit from investing in the sector, especially in the proposed defence corridors in Uttar Pradesh and Tamil Nadu.

It should be noted that the DAP 2020 also allows vendors eligible for participating in a higher category to be permitted to participate in a lower category, provided they meet the requirements for the same.

Increased IC across categories: The MoD has proposed to increase IC stipulated in various procurement categories to support the Make in India initiative.

Procurement category	Proposed IC
Buy (Indian – IDDM)	Indigenous design and ≥ 50%
Buy (Indian)	In case of indigenous design ≥ 50% otherwise ≥ 60%
Buy and Make (Indian)	≥ 50% of the Make portion
Buy (Global – Manufacture in India)	≥ 50%
Buy (Global)	Foreign vendor – nil; Indian vendor ≥ 30%

In case of niche, technology-based equipment, like in aerospace – with no availability of desired material in the country – the MoD may recommend lower IC than that stipulated in the category. In such cases, if IC becomes less than 30% of the base contract price, discharge of offsets will be applicable.

PwC's point of view

a. **IC verification:** On an average, there is a 10% increase in IC across all categories. Evidently, there a strong push towards indigenisation. The DAP 2020 stipulates a simple and practical verification process to compute, declare and validate IC content in each contract.

b. **IC calculation:** According to the DAP 2020 IC will now be calculated on base contract price, i.e. total contract price without taxes and duties.

c. **Focus on indigenous military material:** The DAP 2020 promotes the usage of indigenous military material with provisions for examination of platforms and other equipment/systems at the RFI stage and has formulated incentives for vendors for using indigenous raw material.

d. **Focus on indigenous software:** In order to leverage the highly developed indigenous software expertise existing in the country, the DAP 2020 provides options for operating base applications for critical components (such as fire control systems, radars, encryption, communications, etc.) on indigenous software in Buy (Indian- IDDM) and Buy (Indian) cases.

Offset guidelines:

a. Offset banking has been taken off.

b. Avenues of offset discharge through "investment in 'kind' (provision of equipment) through the non-equity route" have been omitted.

c. Offset discharge by other entities is permitted.

d. Offset discharge through ToT to Indian enterprises is to be on valuation basis. Where technology is proposed to be transferred for investment in ToT to Indian enterprises for manufacturing eligible products, a third-party valuation from the recognised/certified valuation firms duly accepted by the Indian offset partner (IOP) must be submitted. The chapter on Defence Offset guidelines clearly specifies that the valuation of offset credits for investments in ToT will be supported and justified through the cost approach and market approach.

e. Multipliers:

Avenues for offset discharge	Category	Multipliers
Direct purchase or exports	Eligible products	1.0
	Components of eligible products	0.5 (this is the reduction)
	Where IOP is an MSME	1.5
Investment in defence manufacturing	Indian enterprise	1.5
	Indian enterprise in a defence industrial corridor	2.0
Investment in ToT to Indian enterprises	Eligible products	2.0
ToT to Government institutions and establishments	ToT to Government institutions	3.0
Technology acquisition by the DRDO in areas of critical technology	Technology acquisition by the DRDO	4.0

f. Other noticeable changes to the offset policy:

i. Inland/coastal security and civil aerospace products and all services have been omitted from the list of eligible products for offsets.

ii. Removal of the clauses of ownership by resident Indian citizens and control is a welcome change towards encouraging partnerships between Indian players and foreign OEMs.

iii. Exemption of offsets to foreign vendors in the ab-initio single vendor case, including procurements based on intergovernmental agreements (IGAs)/ Foreign Military Sales (FMS)

iv. A new annexure (appendix VII to E) has been added with the list of technologies that may be transferred to Government establishments to discharge offset.

v. The Defence Offset Management Wing (DOMW) will review the yearly progress reports of OEMs.

g. Eligible products

The following products have been deleted from the list of products eligible for discharge of offset obligations:

i. Ammunition, including fuses for small arms, mortars, cannons, guns, howitzers, anti-tank weapons

ii. Other explosive devices and charges in ammunition and explosives category

iii. Armoured or protective equipment

iv. Facilities and equipment required for testing, certification, qualification and calibration of hull forms, platform, propulsion and machinery control systems, weapons sensors and related equipment including enhancement of stealth features and EMI/EMC studies for warships, submarines and auxiliaries

v. Software products

vi. Setting up of maintenance and repair facility for equipment/weapons and sensors and other marine systems including related technical civil works

vii. Aircraft equipment, related equipment specially designed or modified for military use, parachutes and related equipment

viii. Specialised equipment for military training or for simulating military scenarios, specially designed simulators for use of armaments and trainers and training aids viz. simulators, associated equipment, software and computer-based training modules

ix. Miscellaneous equipment and materials designed for military applications, specially designed environmental test facilities and equipment for the certification, qualification, testing or production of the above products

x. Software specially designed or modified for the development, production or use of above items, including software specially designed for modelling, simulation or evaluation of military weapon systems, modelling or simulating military operation scenarios and command, communications, control, computer and intelligence (C4I) applications

xi. High-velocity kinetic energy weapon systems and related equipment

xii. Accessories and components under all product categories

xiii. All products for inland/coastal security

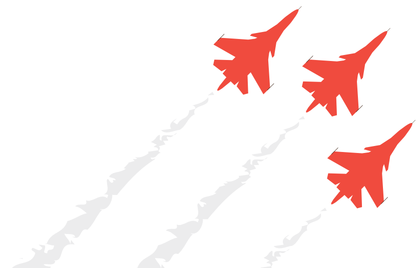
xiv. All civil aerospace products

xv. All services

PwC's point of view

The offset banking provision has been discontinued in the DAP, 2020. This was an industry-friendly provision in the previous version of the policy. Moreover, it was an important component of the Make in India strategy as it kick-started local production to build supply chains in anticipation of contracts that often take over ten years to award. The discontinuation of the offset banking provision will be a big disappointment for both OEMs and local manufacturers.

Offset discharge by other entities is permitted, which is a welcome change. The industry's long-awaited demand has been partially fulfilled. Offset discharge can now be permitted by entities other than the prime vendor/tier-1 sub-vendor on a case-to-case basis, for all avenues except direct purchase and ToT to Indian enterprises. However, further clarity is required from the MoD about the definition of other entities. The rationale for excluding direct purchase and ToT to Indian enterprise is not clear. For offset discharge through ToT to Indian enterprises, a third-party



valuation from the recognised/certified valuation firms will be submitted for claiming the offset credits. This is a welcome move as it resolves a significant concern of the industry and addresses the issue of giving impetus to ToT for high-value manufacturing in India.

The DAP 2020 introduced a new concept where preferences will be given to complete defence products over components. This will be implemented by reducing the offset credits by half (0.5 times) for offset discharge through components of eligible products, whereas any offset discharge through complete eligible products/systems will be multiplied by one times. The disincentive may be a step back for the Make in India campaign's offset policy and a disappointment for the Indian domestic defence manufacturing industry and OEMs. It must be recognised that component manufacture is the building block of any supply chain. It is not possible to leapfrog local component manufacturing in a cost-effective manner as it would significantly increase costs, though the MoD's focus on assembly and final integration is well placed.

The MoD has clarified that for contracts under the DAP 2020, OEMs cannot claim banking credits for excess offset discharges over and above what has been mentioned in the proposal. Any new transaction would not be eligible for offset banking from the day the DAP 2020 comes into effect. The MoD still needs to clarify how existing banking applications would be taken forward.

The list of products eligible for discharge of offset obligations has been pruned significantly, which would reduce the means for offset discharge by OEMs. From a national manufacturing perspective, removing civilian aerospace is counterintuitive to the Make in India objective. It is well established that a strong civil aerospace industry is an essential prerequisite for building a military aerospace industry. The two are connected, with the civil sector providing the scale and order volume to support investments in R&D and manufacturing. Almost every global military aerospace OEM has a civilian arm.

Additionally, all testing and software services have been removed. Any new product design requires both high-value extensive software development as well as testing. Moreover, even though there is a push for inclusion of indigenous software as part of the equipment to be procured through mandatory technical requirement or Enhanced Performance Parameters (EPP), as mentioned in chapter II, it gets no offset credit.

D&D or Make and Innovation category: The DAP 2020 has proposed the following key changes:

a. Make

i. Make-I (Government funded): The Government's funding support has been reduced from 90% to 70% of prototype development cost or maximum INR 250 crore (USD 33.8 million) per development agency (DA).

ii. Make-II (Industry funded): To boost innovation, the MoD has proposed that where innovative solutions have been offered even by a single individual or a firm, the cases would be progressed as a resultant single vendor.

iii. Make-III (Indigenously manufactured [IM]): These would encompasssubsystems/subassembly/assemblies/components/materials/ammunition, etc., which although not designed/developed indigenously, are being manufactured in India as import substitution for product support of weapon systems/equipment held in the inventory of the services. Indian firms may manufacture these either in collaboration or with ToT from foreign OEMs. Schemes under Make III (IM) will be procured under the Buy Indian route with a minimum IC of 60%.

PwC's point of view

This is a welcome move that will encourage innovation and initiative by the industry to undertake R&D. Make III would give impetus to the indigenisation of spares/ inventory and address obsolescence management issues. OEMs can partner with the Indian industry as technology partners. Also, Make processes are simplified for MSMEs, as they provide relaxed trials and procedure, and encourage the industry to produce prototypes.

b. Innovation

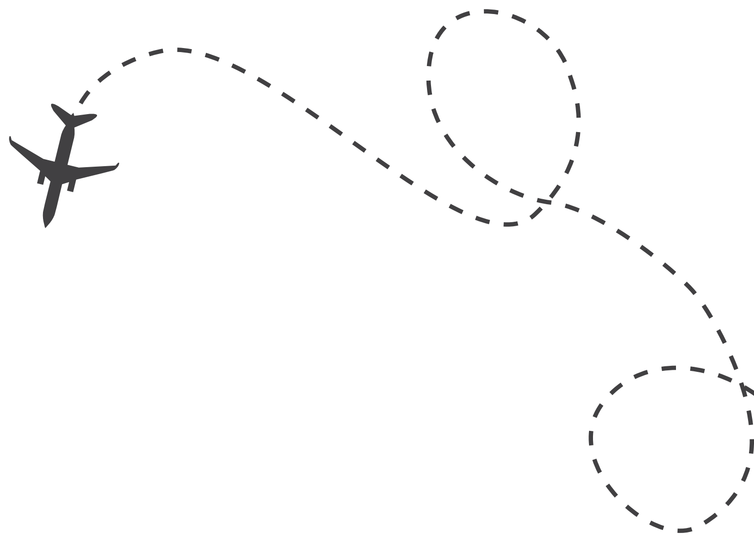
i. **iDEX:** The scheme has now been made part of the DPP. Projects launched by start-ups, MSMEs, etc., with low-capital investments and high innovation would be supported through grants and pursued under the iDEX category. The procurement of the final product will be processed under the Buy (Indian – IDDM) route.

ii. **Open competition:** To support out-of-the-box thinking and encourage wider participation of innovators/entrepreneurs, an open-competition approach has been introduced to promote innovation. The process will be user led and focus on known problems impacting the services. Projects which develop prototypes within two years and in which the cost of prototype development of each unit does not exceed the enhanced powers of the Vice-Chief of the Defence Staff (VCDS)/Vice Chiefs/head of the organisation under the R&D schedule of the Delegation of Financial Powers to Defence Services (DFPDS) will be pursued under this category.

iii. **TDF:** The DRDO's TDF schemes have now been made part of the DPP, which aim at creating an ecosystem for enhancing cutting-edge technology capability by leveraging the domestic capabilities available with Indian industries, especially MSMEs. It also includes start-ups and provides them funding through grants for the development of defence capabilities and dual-use technologies that are currently not available with the Indian defence industry or have not been developed so far. For cases in which prototypes have been developed under the TDF schemes, procurement will be made under the Buy (Indian – IDDM) category, with assurance of orders and no dilution of quantities. This is a welcome step to ensure orders for MSMEs and start-ups who invest in TDF Schemes.

c. The industry can also forward suo moto proposals under Make-II, Make-III, as well as open-competition categories.

Commercial terms – price variation clause (PVC): As clearly stated in the DAP 2020 in case of participation by only Indian vendors, the provision of a PVC may be incorporated in the RFP, where the period of deliverables commencing post contract is more than 36 months. The PVC will be applicable for 18 months after the last date of bid submission till the date of bid opening and thereafter, from the effective date of contract. Detailed guidelines to the PVC can be found in annexure VIII of the DAP, 2020.



SQRs:

a. **Essential parameters: These have been further defined and categorised as:**

   i. Operational parameters: Unambiguous, non-negotiable, essential functional requirements laid down by the services, which clearly define the basic profile of an equipment/system, specifying minimum acceptable performance requirements, thereby defining core capabilities of the equipment/system would be termed as operational parameters.

   ii. Technical parameters: Based on the operational parameters, scientific and technical characteristics required in the system to achieve these operational capabilities would be drawn out after due analysis of contemporary and developing technology in the field.

   iii. Maintainability and ergonomic parameters: These parameters will primarily relate to aspects like maintenance, crew comfort, storage of equipment and packing material.

b. The timelines for preparation of the SQRs and approval of the acceptance of necessity (AoN) have been specified to six months each (or cumulatively one year) to minimise procurement delays. Steps taken towards reducing the timelines for preparing the SQRs and approval of the AoN to one year would expedite the acquisition process.

c. SQRs are now permitted to be amended after the AoN is accorded and before issuance of the RFP. This is a welcome step as it would help in reframing the SQRs with evolving technologies and market capability towards acquiring the best equipment.

Long-term product support: The DAP 2020 has proposed a long-awaited concept of long-term product support, which has been made mandatory for capital procurements for at least three–five years beyond the warranty period. This includes the following, which will ensure maintainability, performance and reliability throughout the operational life of the equipment:

a. Engineering Support Package (ESP)

b. Annual Maintenance Contract (AMC)

c. Comprehensive Maintenance Contract (CMC)

d. Life Cycle Support Contract (LCSC)

e. Performance Based Logistics (PBL)

New chapters: The following new chapters have been added to the DAP, 2020.

a. Post Contract Management: The chapter stipulates the procedures to be adhered for managing the post-contract activities. Post Contract Management involves ensuring compliance with the terms and conditions of a contract, managing contractual amendments, quality assurance, timely payment and deliveries, and resolving claims and disputes. A welcome step like Post Contract Management procedures would help in laying down the key performance indicators (KPIs) for the industry to ensure effective delivery and address a plethora of issues that vendors face during the execution stage. It will help in formalising procedures post signing of a contract with respect to inspections, levying of liquidity damages, contract amendments, etc.

b. Information and Communication Technology (ICT): The chapter comprises policy and procedures for procurement and management of system products and ICT systems. This chapter was already present in the DPP, 2016, and has been added as a separate chapter under the DAP, 2020. This is a welcome step as it resolves the peculiar issues related to the procurement of ICT-intensive equipment, especially those equipped with interoperability and built-in upgradability, and enhanced security requirements. It will also harness expertise in the Indian software industry.

c. Procedure for acquisition of systems designed and developed by the DRDO/DPSUs/OFB: To enable acquisition and induction of equipment/systems developed by the DRDO/DPSU/OFB into the services, a separate chapter has been introduced in the DAP, 2020. This chapter describes the procedure for the design and development of equipment/systems by the DRDO/DPSU/OFB in detail, which will lead to subsequent induction. The procedure highlighted in this chapter will enable the acquisition and induction of equipment/system developed by the DRDO/DPSU/OFB into the services. This will help in translating the existing indigenous technological capability into systems, and thus promoting the implementation of the Make in India initiative with indigenous technology.

PwC's point of view on other notable changes

a. The DAP 2020 has revised the definition of the Indian vendor. The DAP 2020 states that for defence products requiring industrial licence, an Indian entity can only be classified as an Indian vendor if it's an incorporation/ownership as per the Companies Act, a partnership firm, proprietorship and or any other type of ownership model as per the relevant laws, and complying with guidelines/licensing requirements as stipulated by the DPIIT. On the other hand, for defence products not requiring an industrial licence, an Indian entity registered under the relevant Indian laws and complying with all the regulations in force applicable to that industry will be classified as an Indian vendor. The following two additional conditions will apply to the definition for Buy (Indian – IDDM), Make I, Make II, development cum production partner (DcPP) in D&D acquisitions through the DRDO/DPSUs/OFB and strategic partnership (SP) model categories:

i. Ownership by resident Indian citizen(s): Further, a company is considered as owned by resident Indian citizens if more than 50% of its capital is directly or beneficially owned by resident Indian citizens and/or Indian companies that are ultimately owned and controlled by resident Indian citizens. This implies that the maximum permitted FDI shall be 49%. Pyramiding of FDI in Indian holding companies or in Indian entities subscribing to shares or securities of the applicant company or the strategic partner shall not be permitted. Indirect foreign investment shall be accounted for in calculating the 49% FDI.

ii. Control by resident Indian citizens(s) (as defined in the Companies Act, 2013): Control shall include the right to appoint the majority of directors or to control the management or its policy decisions, including by virtue of their shareholding or management rights, or shareholders' agreements or voting agreements.

b. Rationalisation of trial and testing procedures: The methodology and timelines for Field Evaluation Trials (FET) have been stipulated.[5]

i. Testing equipment, based on its application and condition, can obtain appropriate certifications.

ii. Scope of trials will be restricted to physical evaluation of core operational parameters. Other parameters may be evaluated based on vendor certification, certification by accredited laboratories, computer simulations of parameters.

iii. Avoid duplication of trials and waiver will be granted based on Certificates of Conformance. Ensure simultaneity of various trials and wherever feasible, entire trials should be conducted by a Combine Trial Team in order to save time.

iv. Requisite opportunity will be afforded to participating vendors to rectify shortcomings/ faults during the Trials with permission to carry out repairs.

v. Request for Proposal will apprise vendors to submit the draft Acceptance Test Procedure (ATP), to be finalised by the QA agency during Technical Trials. Sample size for destructive tests, including the aspect of cost to be borne by seller will be stated upfront in the RFP for vendor.

vi. No repetition of inspections will be done especially during acceptance of equipment. Third Party Inspections will also be carried out.

This is a positive step as invariably the FETs were extending way beyond the stipulated timelines, thereby resulting in the OEMs incurring unforeseen expenses.

c. For repeat orders, the AoN will be accorded in a single stage and no FET will be conducted. This is another welcome step, as it would give leeway to the SHQ to reorder specified equipment without the mandatory requirement of another FET.

d. Commercial bids will now be inclusive of all taxes and duties. On the one hand, it will give the buyer an apple-to-apple comparison of bids on landed cost basis but on the other hand, this may eliminate the level-playing field between Indian and foreign vendors due to the differences in taxation.

e. Buy (Indian – IDDM), Make I, Make II, the production agency in D&D, OFB/DPSU and the SP model will be exclusively reserved for Indian vendors meeting the criteria of ownership and control by resident Indian citizens with FDI of not more than 49%. This is a welcome move as it will provide exclusivity to all those looking to succeed in the domestic Indian defence manufacturing industry.

5 https://pib.gov.in/PressReleasePage.aspx?PRID=1659746

Liberalisation of foreign investment limit in defence sector

In furtherance to the Aatmanirbhar Bharat (self-reliant India) announcements to transform India into a self-reliant global defence manufacturing hub, the DPPIT, the Ministry of Commerce and Industry (MoCI) and the GoI have notified changes to the FDI policy in the defence sector and proposed changes in September 2020.

Amendments in the FDI policy in the defence sector

As per the earlier FDI policy, foreign investment up to 49% was permitted in defence manufacturing under the automatic route. Foreign investment beyond 49% was permitted, subject to approval of the DPIIT in consultation with the MoD, Ministry of Home Affairs (MHA) and Ministry of External Affairs (MEA).

Key highlights

The limit of foreign investment in the defence industry, subject to industrial licence under the Industries (Development and Regulation) Act, 1951, and manufacturing of small arms and ammunition under the Arms Act, 1959, increased from 49% to 74%,[7] subject to the following conditions:

1. For companies seeking fresh industrial licenses, FDI up to 74% under the automatic route shall be permitted.
2. For companies not seeking industrial licence or that already have Government approval for foreign investment, the following shall apply:

- Infusion of fresh foreign investment up to 49% or change in equity/shareholding pattern/foreign investor would require an intimation to the MoD, vide submission of a declaration with the Ministry within 30 days of such change.
- Proposals for raising FDI beyond 49% from such companies will require prior Government approval.
- Foreign investment in the defence sector beyond 74% is allowed subject to Government approval, wherever such investment is likely to result in access to modern technology or for other reasons.
- Other conditions remain the same.
- The changes will be effective from the date of notification under the Foreign Exchange Management Act, 1999 (FEMA).

PwC's point of view

Liberalising the foreign investment norms for the defence industry is a welcome move. The amendments will encourage foreign investments in this strategic sector and would provide an impetus to India's defence manufacturing ecosystem. The provisions under the Arms Act, 1959, and the Arms Rules, 2016, to grant licences for manufacturing several defence items still require majority ownership and control with Indian residents, thereby limiting FDI up to 49% for companies seeking industrial licence for such products. The Government is required to bring harmonisation across the Arms Rules and the FDI policy to realise the intent of this amendment. For greenfield investments requiring new industrial licences, FDI up to 74% will be allowed under the automatic route.

7 https://dipp.gov.in/sites/default/files/pn4-2020_0.PDF

Aircraft and component leasing is included under the IFSC Authority Act, 2019

In furtherance to the Aatmanirbhar Bharat (self-reliant India), the country is the world's third-largest domestic civil aviation market and this growth has been largely fuelled in last decade by low-cost airlines entering sale and lease back (SLB) transactions with foreign lessors to procure aircraft. Approximately 70% of aircraft operated by airlines in India are on lease as compared to the global average of 41%. The MoCA-headed Project Rupee Raftar is focused on developing a local aircraft leasing and financing ecosystem within the country. A key component of this initiative was the setting up of the International Financial Services Centres (IFSC) Authority. The IFSC Authority discussed the inclusion of aircraft financing and leasing as a financial product. On 16 October 2020, the Union Government notified aircraft lease as a financial product to be provided by financial institutions in IFSCs.

Key highlights

A financial institution, a unit set up by IFSC, is engaged in rendering financial services in respect of a financial product pertaining to aircraft lease (which includes operating and financial leases, hybrids of operating and financial leases of aircraft or helicopters and engines of aircraft and helicopter or any part thereof) and has now been given official recognition under the IFSC Authority Act, 2019.

Some of the services which an institution dealing with aircraft leases in the IFSC may now undertake include:

1. buying or selling aircraft leases
2. safeguarding and administering aircraft, helicopters or parts thereof on operating, financial or hybrid leases – belonging to other persons
3. offering, managing or agreeing to manage assets such as aircraft, helicopters or parts thereof on operating, financial or hybrid leases – belonging to other persons
4. exercising any right associated with assets (aircraft, helicopters or parts thereof) on operating, financial or hybrid leases
5. arranging to carry out any of the above services.

Role of the IFSC Authority in relation to aircraft leases as financial products

The Union Government has established the IFSC Authority with its head office at Gandhinagar, Gujarat. The Authority will develop and regulate financial products (now including aircraft leases) and financial institutions (persons engaged in the provision of financial services, viz. aircraft leases).

PwC's point of view

Notifying aircraft leases as a financial product is a welcome move and it will pave the way for development of the civil aviation sector in India. Additionally, it will promote aircraft leasing and financing activities from Indian entities. It will also support onshore aircraft leasing and financing, which is the most profitable segment of the aviation value chain, and will support local carriers, who have placed orders for more than 1,000 aircraft.

Direct tax

Direct tax updates

Beneficial DTAA rate on dividends prevails over DDT rate prescribed under the Income-tax Act, 1961[8]

Facts

- Giesecke & Devrient (India) Pvt Ltd (G&D India) is an Indian company and is a wholly owned subsidiary of Giesecke & Devrient, GmbH (G&D Germany). G&D India primarily deals in trading of currency verification and processing systems.
- G&D India declared dividend to its shareholders and paid dividend distribution tax (DDT) at the rate prescribed under Section 115-O of the Income-tax Act, 1961 (the Act).
- During the course of appellate proceedings before the Delhi bench of the Income Tax Appellate Tribunal (ITAT) in relation to certain transfer pricing and corporate tax adjustments by the assessing officer (AO), G&D India filed an application to admit an additional ground to restrict the DDT rate prescribed under the Act to the rates prescribed under Article 10(2) of the India-Germany tax treaty.

Issue before the ITAT

- Whether the DDT rates prescribed under the Act as applicable to dividends paid to German shareholders by an Indian company could be restricted to the rates prescribed under Article 10(2) of the India-Germany tax treaty?

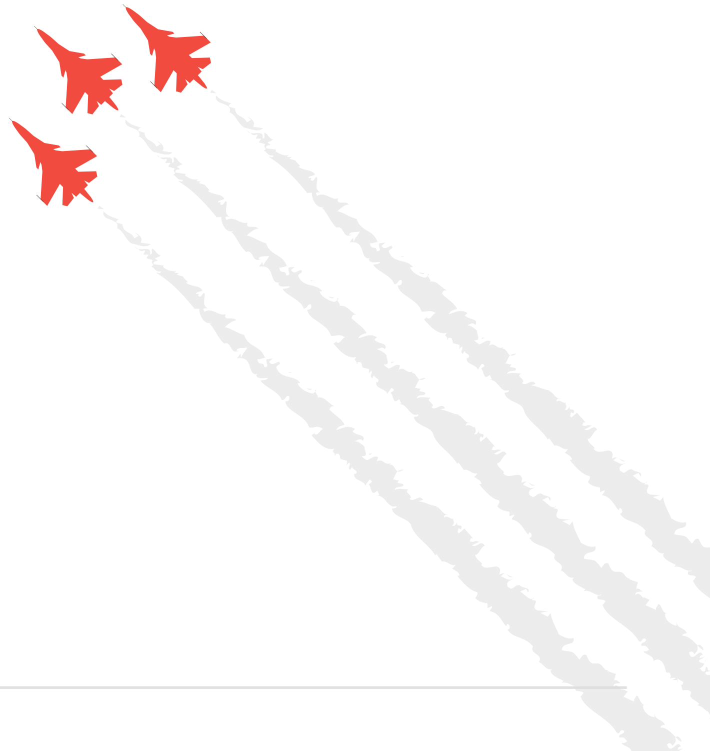
ITAT's ruling

- Whether the DDT rates prescribed under the o The genesis of charge for levy of additional income tax under Section 115-O of the Income-tax Act, 1961, on the profits declared/distributed and paid by a corporate assessee by way of dividend can be traced to the charging provisions of Section 4 of the Act which provides for charge of tax, including additional income tax on total income of every person.
- The definition of the term income under Section 2(24) of the Act includes income from dividends and the definition of the term tax under Section 2(43) of the Act covers additional income tax levied under Section 115-O of the Act.
- A very high weightage was given by the ITAT to the intent behind the introduction of the concept of DDT. As per the Memorandum to Finance Bill, 1997, and 2003, DDT was introduced for the purpose of administrative convenience and not as a legal necessity. The memorandum clearly emphasises that DDT is a charge on dividends.
- The Memorandum to Finance Bill, 2020, has specifically mentioned that the incidence of tax is on the payer company and not on the recipient where it should normally be, as the dividend is

8 Giesecke & Devrient [India] Pvt Ltd. vs. ACIT, Special Range-4, New Delhi [2020] 120 taxmann.com 338 (Delhi - Trib.)

income in the hands of the shareholders and not in the hands of the company. The incidence of tax should, therefore, be on the recipient.

- Based on the aforesaid interplay, the ITAT held that DDT is a levy on the dividend distributed by the payer company. Being an additional tax, it is covered by the definition of tax as defined under Section 2(43) of the Act which is covered by the charging Section 4 of the Act.
- The provisions of Sections 4 and 5 of the Act are expressly made 'subject to the provisions of this Act' which would include section 90(2) of the Act, basis which the beneficial tax treaty rates can be applied over the Act.
- The liability to DDT under the Act which falls on the company may not be relevant when considering applicability of rates of dividend tax set out in tax treaties. The generally accepted principles relating to interpretation of treaties in light of object of eliminating double taxation does not bar the application of tax treaties to DDT.
- The India-Germany tax treaty was notified on 29 November 1996 and Section 115-O was inserted vide the Finance Bill, 1997 (after the notification of the India-Germany tax treaty).
- Article 10(2) of the India-Germany tax treaty allows dividends to be taxed in the contracting state on which the company paying the dividend is a resident (India in this case) and where the resident is a beneficial owner of the dividend at a tax rate of 10% on the gross amount of dividend.
- The ITAT relied on the decision of Delhi High Court[9] in the case of New Skies Satellites (2016) [TS-5188-HC-2016(DELHI)-O] (Del) wherein it was held that no amendment to the Act, whether retrospective or prospective, can be read in a manner so as to extend its operation to the provisions of the tax treaty. Further, the Delhi High Court held that the amendments to domestic law cannot be read into treaty provisions without amending the treaty itself.
- Such an act of unilateral amendment is a disregard to the general rule under Article 39 of the Vienna Convention on the Law of Treaties, 1969 (VCLT), regarding the amendment of treaties, which provides that a treaty may be amended by agreement between the parties.
- Based on the above, the Delhi ITAT held that tax rates specified under the India-Germany tax treaty with respect to dividend must prevail over the rate of DDT under Section 115-O of the Act.
- While the ITAT allowed the claim of the taxpayer, the matter has been remanded to the tax officer (TO) to verify the beneficial ownership condition, supporting documents, etc.



9 Giesecke & Devrient [India] Pvt Ltd. vs. ACIT, Special Range-4, New Delhi [2020] 120 taxmann.com 338 (Delhi - Trib.)

Payment made to a UK Company for consultancy services which does not satisfy the make available test, could not be taxed under Article 13(4) of the India-UK tax treaty as payment made to non-resident employees rendering services outside India is not liable to tax in India.[10]

Facts

- Giesecke & Devrient (India) Pvt Ltd (G&D India) o The assessee is a company incorporated in India. During the year under consideration, the assessee made the following payments to non-residents without deducting any tax:
  - salary paid to two employees rendering services outside India
  - payment to a UK-based company for consultancy services.

Assessee's contention

- With respect to the amounts paid to the non-resident employees, the assessee contended that these payments were on account of salaries and, in terms of Article 16 (Dependent Personnel Services) of the related tax treaty, i.e. the India-Egypt tax treaty and the India-Philippines tax treaty, these payments did not have any tax liability in India.
- Further, with regard to the payment made to the UK Company, the assessee believed that in the absence of the company's permanent establishment in India, there was no requirement to deduct any tax at source.

Revenue's contention

- The TO contended that there was no evidence on record to suggest that the non-residents were employees of the assessee.
- Further, the payment made to the UK Company was taxable as 'fees for technical services' under Article 13 of the India-UK tax treaty.
- On the above grounds, the AO disallowed the payments made to non-residents under Section 40(a)(i) of the Act.

CIT(A)'s view

- CIT(A) agreed with the assessee's view that the services rendered by O&O MDC Ltd are simply in the nature of consultancy services, which do not make available any technical knowledge, skill or knowhow – as is the condition precedent for invoking taxability under Article 13 of the India-UK tax treaty and deleted the disallowance made by the AO.
- Regarding the payment of salaries to the non-resident employees, CIT(A) again accepted the contentions of the assessee and, concluding that these amounts were not taxable in India, related disallowances under Section 40(a)(i) were deleted.

ITAT's ruling

Consultancy services

- The ITAT noted that there is no dispute that the payments made were in nature of payments for consultancy services. As the consultancy agreement stipulates, the O&O's obligation is "to provide technical advices on phone/fax/email as and when required" and to provide for consultancy services in the specified areas.
- The ITAT referred to the case of CESC Ltd v. Dy. CIT,[11,12] wherein the members of ITAT had deliberated on the definition of fees for technical services as provided under the India-UK tax treaty and the expression 'make available. It was held that:
- "……..in order to be covered by the provisions of Article 13(4)(c) of India UK DTAA, not only the services should be of technical in nature but such

10 Bio Tech Vision Care (P.) Ltd. vs. DCIT [(2018) 93 taxmann.com Ahmedabad - ITAT]

11 CESC Ltd v. Dy. CIT [(2003) 87 ITD 653 (Kol)]

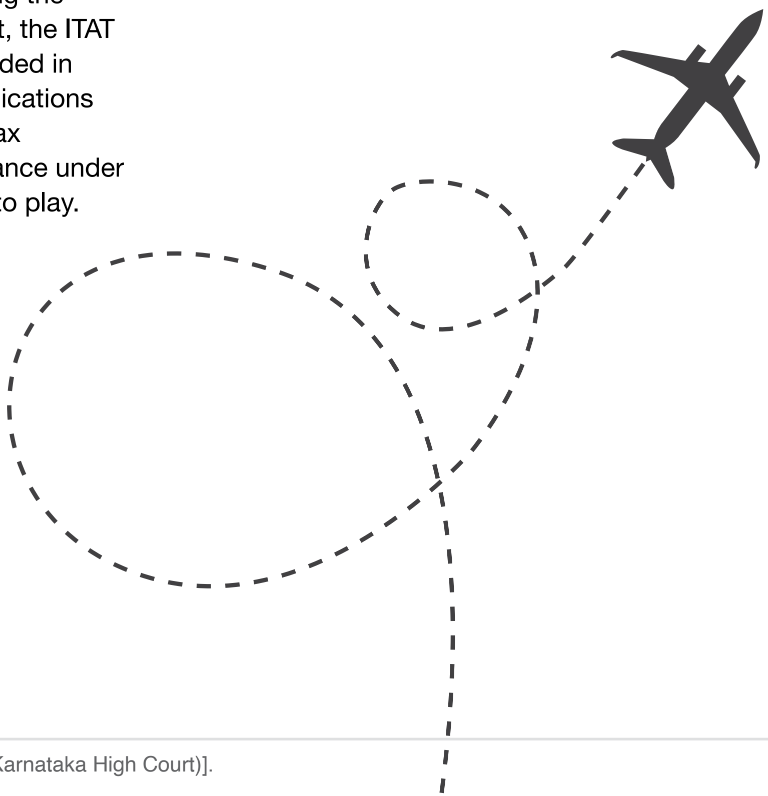
12 https://www.taxmann.com/

as to result in making the technology available to the person receiving the technical services. We also agree that merely because the provision of the service may require technical input by the person providing the service, it cannot be said that technical knowledge, skills, etc., are made available to the person purchasing the service…….”

- The ITAT also referred to the decisions of non-jurisdictional high courts in the case of, namely DIT v Guy Carpenter and Co Ltd.[13]
- The ITAT further noted that merely because consultancy services have technical inputs, they do not become technical services and simply because the recipient of technical consultancy services learns something with each consultancy, there is no transfer of technology in the sense that the recipient of service is enabled to provide the same service without recourse to the service provider.
- Accordingly, the ITAT upheld the relief granted by the CIT(A) with respect to payments made to the UK company.

Payment made to employees

- The ITAT noted that there was no dispute that the services are rendered in the related jurisdictions, and that, in terms of the then applicable India-Egypt tax treaty (Article 16) and the India-Philippines tax treaty (Article 16), the services rendered by them did not lead to any tax implications in India. While upholding the relief granted by the CIT(A) on this point, the ITAT observed that when the income embedded in the payments did not have any tax implications in India, there was no question of any tax withholdings and accordingly, disallowance under Section 40(a)(i) could not have come into play.



13 [(2012) 20 taxmann.com 807 (Delhi High Court)] and De Beers India Minerals (P.) Ltd vs CIT [(2012) 21 taxmann.com 214 (Karnataka High Court)].

Indirect tax

Indirect tax updates

GST

Press release dated 24 October 2020

- The Government has extended the due date for filing of annual return (Form GSTR-9) and reconciliation statement (Form GSTR-9C) for FY18–19 from 31 October 2020 to 31 December 2020.[14]
- Notification No. 88/2020 – Central Tax, dated 10 November 2020, seeks to implement e-invoicing from 1 January 2021 for taxpayers having an aggregate turnover exceeding INR 100 crore.[15]

Notification No. 71/2020 – Central Tax, dated 30 September 2020

- The above notification stated that where such registered person makes a Dynamic Quick Response (QR) code available to the recipient through a digital display, such B2C invoice issued by such registered person containing cross-reference of the payment using a Dynamic Quick Response (QR) code, shall be deemed to be having a Quick Response (QR) code. The notification extended the date of implementation of the Dynamic QR Code for B2C invoices till 1 December 2020.[16]

Others

- The Customs Excise and Service Tax Appellate Tribunal (CESTAT), New Delhi, concluded that the absence of mention of integrated tax and compensation cess in column (3) under serial number (2) of the exemption notification would mean that only the basic customs duty on the fair cost of repair charges, freight and insurance charges are payable, and integrated tax and compensation cess are wholly exempted. The CESTAT laid out the landmark judgement in the case of Interglobe Aviation Limited vs Commissioner of Customs vide Final Order No. 51226-51571/2020, dated 2 November 2020.

14 https://economictimes.indiatimes.com/news/economy/policy/due-date-for-2018-19-annual-return-reconciliation-statement-extended-to-31st-dec/articleshow/78843874.cms?from=mdr

15 https://www.cbic.gov.in/resources//htdocs-cbec/gst/notfctn-88-central-tax-english-2020.pdf

16 https://www.cbic.gov.in/resources//htdocs-cbec/gst/notfctn-71-central-tax-english-2020.pdf

- Structuring advice – joint ventures (JVs), acquisitions, greenfield projects
- Setup assistance – incorporation, documentation, flyer
- Regulatory assistance – foreign direct investment (FDI), exchange control, licensing
- Ongoing compliance support under various regulatory policies

- Fit for mission
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- Battlespace and new platform integration
- UAVs and counter-UAV system implementation

- Enterprise transformation
- BI and analytics
- Technology-led consulting
- Business process reengineering
- Homeland security
- Counter drone solution
- Privatisation of military MRO

- Permanent establishment exposure
- Tax exemption
- Representation to tax authorities

- Implications of offset policy
- Offset documentation and review
- Structuring proposals (offset, banking, technical and commercial)
- Offset partner search
- Bid advisory

- JV partner search
- M&A advisory
- Valuation of target companies
- Due diligence
- Sell-side diligence
- Shareholder agreements

- Market entry strategy
- Growth strategy
- Competition mapping
- Product strategy
- Differentiation strategy
- Business plan

- Supply chain analysis
- Creating a supply chain to integrate offset with main contract
- Operating model assessment
- Defence corridors
- Industry 4.0
- Digital transformation
- MRO transformation

Contact us

Shashank Tripathi
Partner and Leader, Aerospace and Defence
PwC India
+91 22 6669 1002
shashank.tripathi@pwc.com

Akash Gupt
Partner and Leader, Regulatory Services
PwC India
+91 9811331613
akash.gupt@pwc.com

Rajat Chowdhary
Partner, Government & Public Sector
PwC India
+91 9811262633
Rajat.Chowdhary@pwc.com

Ajay Rastogi
Partner, Corporate and International Tax
PwC India
+91 98102 58102
ajay.rastogi@in.pwc.com

Capt. Vishal Kanwar (Retd.)
Director, Aerospace and Defence
PwC India
Mobile: + 91 91677 45719
vishal.kanwar@pwc.com

Maj. Ranjeet Sinha (Retd)
Associate Director, Aerospace and Defence
PwC India
Mobile: +91 99535 12222
ranjeet.sinha@pwc.com

Nipun Aggarwal
Associate Director, Aerospace and Defence
PwC India
+91 98184 71772
nipun.a.aggarwal@pwc.com

Sandipan Maiti
Manager, Aerospace and Defence
PwC India
+ 91 9007501596
sandipan.maiti@pwc.com

Lokesh Kumar Sharma
Assistant Manager, Aerospace and Defence
PwC India
Mobile: + 91 88301 93523
lokesh.kumar.sharma@pwc.com

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