

# geopolitics

DEFENCE ■ DIPLOMACY ■ SECURITY

WEDNESDAY 03, FEBRUARY 2021



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## SHOWCASE FOR ATMANIRBHAR BHARAT

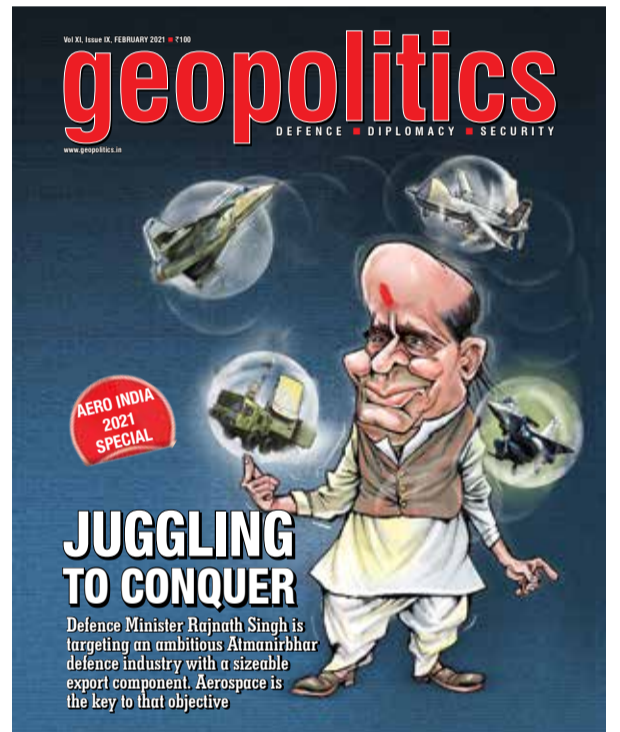
Focusing on Indian defence aspirations, Aero India 2021 highlights the government's *Atmanirbhar Bharat* initiative for growth of indigenous defence manufacturing

The first airshow of 2021 is now underway and also marks the beginning of a year in which the government's 'Atmanirbhar Bharat' (Self Reliant India) initiative for growth of indigenous defence manufacturing will fully take root. The ongoing edition of Aero India is the first international airshow of 2021 and is being conducted as a hybrid exhibition with strong virtual participation being encouraged on the account of travel restrictions due to the COVID-19 pandemic. Despite the reduced participation, the Indian Ocean Region Defence Ministers Conclave and the Chiefs of Air Staff (CAS) Conclave are being held as planned. The show organisers are putting on a brave face despite pandemic related measures resulting in limited participation especially from foreign exhibitors.

An immediate impact of the pandemic has been additional precautions for social distancing and crowd control restrictions on the number of participants with only 15,000 people allowed into the exhibition area and the Air Display Visual Area (ADVA) being limited to 3,000 people on each day of the show. COVID-19 protection measures are being taken seriously with a negative RT-PCR test required for entry into the show, strict no mask no entry policy and extensive sanitisation of the air show premises.

The flying displays at Aero India features 42 aircraft primarily from the armed forces, ICG and HAL. The highlight of the flying display is IAF Dassault Rafales making their maiden airshow appearance, as well its new Boeing AH-64E Apache and Boeing CH-47I helicopters.

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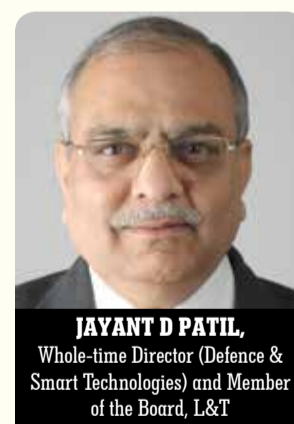


## WILL DAP 2020 CREATE A VIBRANT & CAPABLE DOMESTIC DEFENCE INDUSTRY?

Since opening of the defence sector to private industry through an act of parliament in the year 2001 by moving the sector from "Reserved for the State" to "licensed" category, and issuing of licenses since 2002, the sector has come a long way with the announcement of DAP 2020. Having taken off slowly after the opening up, the first DPP as a classified document was promulgated on 30<sup>th</sup> December 2002 covering only Buy process and enhanced in June 2003 to cover Buy & Make process. The DPP became

public in June 2005 covering all procurement processes paving way to RFPs to Private Sector Companies.

The Govt announced a series of bold reforms in the Defence sector recently. These have been well thought through and debated with series of interactions with the stakeholders including Industry, and well-structured to cover multiple facets of Defence Acquisition holistically. Thus the change of focus from Procurement to Acquisition in renaming the DPP 2020 to DAP 2020. DAP 2020 is certainly a major change in outlook over



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we have seen incremental changes in DPP in each subsequent version, this time there are structural changes brought in to develop a vibrant & capable defence industry to achieve self-reliance.

### Vision and roadmap

The Draft Defence Production & Export Promotion Policy 2020 (DPEPP) put up for comments in public domain is slated to be the apex policy document which has clearly defined the goals and high-level Strategies for Indigenous

the previous versions of the Procurement procedure i.e. DPP 2016. While in the past

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# THE CURIOUS CASE OF INDIAN DEFENCE OFFSET POLICY

The Defence Offset policy was introduced in 2005 as a “game changer for the private sector” and the first offset contract was signed in 2007. The policy of leveraging defence offsets had gained momentum in the 1980s and when India introduced the same, about 130 nations worldwide were following it. At that time the Indian Ministry of Defence was criticised for being a late starter. The idea was that, since India buys a lot of defence equipment from foreign countries, we could leverage our buying power by making them discharge offset obligations, which is the norm the world over. Some of the countries had an offset threshold level as low as ₹20 crores and percentage of offsets to be carried out as high as 70 percent of the equipment procured. However, India went ahead and introduced the offset policy with a threshold level of ₹300 crores, which was relatively higher than the global average.

The objectives for introducing the defence offset policy, were stated later on August 1, 2012 as follows: “The key objective of the Defence Offset Policy is to leverage capital acquisitions to develop Indian defence industry by (i) fostering development of internationally competitive enterprises, (ii) augmenting capacity for research, design and development related

to defence products and services and (iii) encouraging development of synergistic sectors like civil aerospace, and internal security.”

India was the largest defence importer in the world at that time and its defence expenditure was expected to rise further with economic growth. Even with the requirement of 30 percent offsets, the policy was expected to yield benefits of around ₹47,000 crore in the 11th Five-Year Plan (2007-2012). Though these benefits were not straightway visible, from the year 2010 onward, a large number of foreign companies like Axon Cables SAS, Thales Group Rafaut Group, Amphenol Group, Lockheed Martin, formed manufacturing joint ventures in India, with the aim of not only addressing the domestic market but the offset market as well. In other words, these JVs aimed at becoming Indian offset partners. The formation of 23 JVs post introduction of offset clause, indicates that it has definitely played a role in persuading foreign OEMs to invest in India. Half of these JVs were created from 2016 onwards, after the FDI (Foreign Direct Investment) Policy was revised in 2016 to allow 49 percent share for foreign holding. These entities have played an important role in bringing in technology, providing local employment and also gave considerable global A&D exposure to Indian SMEs, in

the decade gone by.

Exports due to offsets have been largely MSME-oriented with a considerable share taken by IT and engineering services in the initial years. Further most of the offset discharge was related to component/sub assembly level exports by Indian offset partners IOPs not requiring an industrial license. The policy served its purpose of forcing global OEMs to look at Indian companies and a large number of them like Titan Company, Samtel Avionics, Taneja Aerospace, Godrej Aerospace became a part of global supply chains. It is difficult to digest statements, that offsets have generated low technology work when one sees a Dynamic Technologies Ltd exporting A320 flap track assemblies, Maini Aerospace exporting LP turbine of Leap Engines, or TAL Manufacturing Solution exporting composite floor beams for the Dreamliner B787. An interaction with Indian offset partners brings out the fact that there has been a knowledge transfer, improvement in processes, skilling and quality control, through offset orders. This gives credence to the fact that, tangible growth in A&D sector due to offsets takes time and cannot be measured easily. Moreover, exports of complete platforms should not be expected immediately as there will be a gradual movement up the value chain.

However, we are witnessing a dilution of the offset policy with successive DPPs/DAPs. The offset threshold was raised from ₹300 Cr to ₹2000 crore, in DPP 2016, which is highest amongst the present 130-odd weapon importing countries. That also implied that henceforth offsets will only be on big ticket deals which are normally FMS or inter-governmental agreement-based procurements. Now the new DAP 2020 states that the FMS and inter-governmental agreements will not have offset obligations. It is evident that this move will reduce offset inflows into India to a negligible amount. To add fuel to the fire, the DAP allows offsets to be removed even in Buy and Make cases where 30 percent overall indigenisation is going to be achieved. Moreover, with the power of waiver of offsets by DAC being explicitly stated, we are showing to the world that such obligations are not a priority anymore.

What would be the consequences of this move? Due to continuing support of defence public sector units on nomination basis, offset related orders had played a major role in sustaining the middle rung private Indian industries. In fact these export orders had become not only a key source of revenue but also a vehicle for capacity and capability augmentation. A large number of OEMs had

given priority to SMEs, as they were possibly looking for efficiency and agility in their supply chains. Going ahead, would the major OEMs still have an interest in the 80 odd IOPs selected by each one of them over a three-year selection process, remains to be seen.

The result of bringing down the offset obligations to near zero will also not be immediate or tangible in the near future. However realisation will slowly dawn as relationships break. It is also quite likely that a number of lower tier foreign firms that were about to enter into joint ventures, with the aim of becoming Indian offset partners for respective OEMs, will now have second thoughts. The effect on exports will be seen post 2025, when the present offset obligations exhaust themselves. Exports of components anyway have a negative multiplier in the present DAP 2020, which reduces their export benefit by half, not realising that defence is a multi-tiered industry and lower tier companies play as important a role as an OEM.

In the interim, the Indian private industry is left wondering as to how the new offset policy is a ‘game changer’ for them!

— Rajiv Chib  
Founder

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## Axon' Cable: Exploring new horizons at Aero India

VISIT AT HALL A6.4

### Mil-STD-1553 transmission systems

Axon' Cable specialises in the design and manufacture of all components used in data transmission systems in compliance with the MIL-STD-1553 standard. This is the protocol of dialogue for strategic onboard systems for aeronautics, space and military applications. These reliable transmission networks offer high security of data, signal integrity, weight and space saving, as well as rapid diagnostics of all equipment connected to the bus.

### MicroMach®, high data rate links

Axon' has developed MicroMach®, a new optimized high data rate connector. Drawing on the twin heritages of Axon's blisteringly fast AxoMach® range and the tried and tested Micro-D with its high-reliability, Twist Pin contact system, this connector:

- ▶ Is very close in size to the 9-way Micro-D, so little additional footprint required on equipment.
- ▶ Has matched 100 ohm impedance pairs, so provides excellent continuity of signal.



- ▶ Enjoys a robust EMC design, providing protection for both the cable and the equipment.
- ▶ Is capable of data rates well in excess of typical SpaceWire performance – up to 3Gb/s.

### Microwave assemblies

Axon' Cable designs and manufactures RF coaxial assemblies and microwave coaxial assemblies with very low losses. For example, microwave coaxial assemblies working at a frequency of 50 GHz are characterised by optimised insertion losses at 2.45 dB/m and by shielding efficiency greater than 100 dB. Insulated with a FEP or PU jacket and terminated with coaxial connectors, the RF coaxial and microwave assemblies are easy to install. They are mainly used for measurement, radar, antennae and surveillance systems. Lightweight, semi-rigid and extra flexible versions for dynamic applications are also offered.

### D-click® fast-latching system

In addition to its range of micro-D connectors, Axon' Cable has developed miniature connectors equipped with a user-friendly latching system which gives greater flexibility to customers. A new range of Micro-D products equipped with the D-Click® fast latching system allows customers to use the Micro-D technology in space-constrained systems where access to the connectors is difficult.



### Axon' Interconnectors and Wires Pvt.Ltd: Close to the Indian market

From one-off demand to mass production, Axon' Interconnectors & Wires PVT



LTD designs and manufactures state-of-the-art wires and cable assemblies terminated with any type of connectors available in the world. The company is able to provide EMI/EMC solutions and customer specific requirements for flexible handling and routing. The company is involved in the manufacture of standard Micro-D connectors and assemblies, RF cables and cable assemblies especially designed for challenging markets including defence, aeronautics and space. Equipped with an ISO 7 Clean Room, Axon' Interconnectors & Wires PVT. Ltd strategy is to build a perennial company by providing its customers hightech and innovative products with onsite facilities, highly trained operators and technicians offering a co-engineering approach. It also caters to the offset programmes through its joint venture company named Dhruv Axon'

Interconnect Pvt. Ltd.

### Dhruv Axon', your offset partner

Dhruv Axon' Interconnect Pvt.Ltd, a joint venture company between the Axon' group and an Indian Investor Consortium, is your safe and secure Indian Offset Partner (IOP). From the manufacture of cable assemblies and harnesses to the related supply chain, Dhruv Axon' will offer you the very products and services you need. Dhruv Axon' which is AS9100 certified can offer interconnect solutions for the most severe challenges of defence. Our manufacturing harness capability consists of highly skilled and experienced operators trained by Axon' Cable SAS France and certified by IPC WHMA-620B. DHRUV has been approved by the Indian Central Board of Indirect Taxes & Customs as an authorised economic operator – T1 (AEO-Tier 1). The range of products is very large cable assemblies including single and multi-branched harnesses terminated with D-Sub, Micro-D or Nano-D connectors, EMI harnesses with over braided branches, RF and microwave coaxial assemblies and cabinet integration.