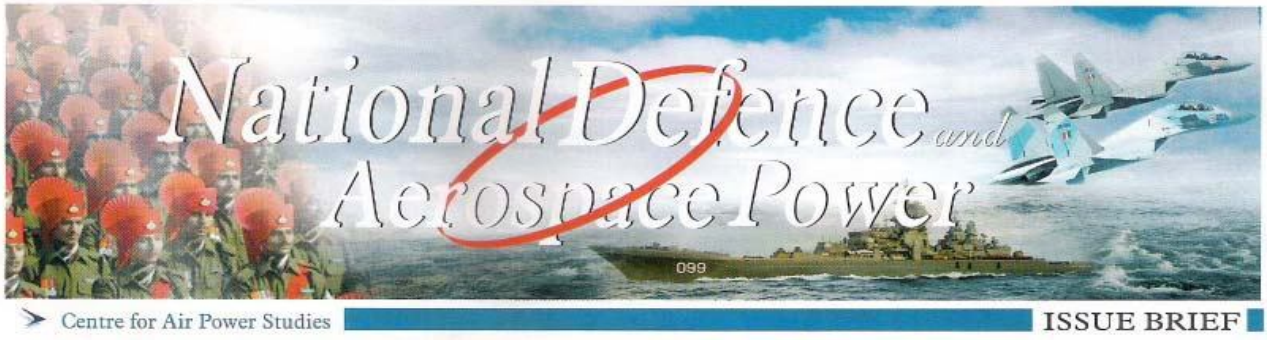

Centre for Air Power Studies ISSUE BRIEF

114 / 16 **12 February 2016**

Restructuring Indian Defence Industry: Enhancing the Role of the Private Sector

Prakash Panneerselvam

Post-Doctoral Associate, International Strategic and Security Studies Programme
National Institute of Advanced Studies - Bangalore

Indian defence manufacturing sector has come of age as the government has taken the decision to award major combat systems and upgradation programme of existing weapon platforms/ systems to the Indian industry under the "Make" category. The new policy outline on defence procurement has brought out a more dynamic approach to address the issue of self-reliance and indigenisation in the defence sector. The new induction in procurement policy such as increase in the offset contract threshold from Rs 300 crore to 2,000 crore, and new category - Indigenously Designed, Developed and Manufactured (IDDM), clearly marks a shift towards indigenisation. The new policy guidelines have also envisaged a greater participation of the private sector in design and development of weapon systems. Therefore, one can expect that the new Defence Production Procedure (DPP-2016) and offset policy will be significantly different from the previous versions and will attempt to facilitate a smoother transaction of procurement, that had become cumbersome over the years directly affecting the operational readiness of the Indian Armed Forces.

One can expect that the new Defence Production Procedure (DPP-2016) and offset policy will be significantly different from the previous versions and will attempt to facilitate a smoother transaction of procurement, that had become cumbersome over the years directly affecting the operational readiness of the Indian Armed Forces.

Defence manufacturing capability is imperative to address the issue of self-reliance and indigenisation. The new policy addresses crucial challenges in defence procurement policy and creates a level playing ground for the private sector. However, experts opine that much more is required to improve manufacturing capacity and capability in the country. Manufacturing sector was riddled with multiple challenges which deprived India from achieving eminence in the manufacturing sector, particularly in the defence sector. Firstly, India missed out industrial revolution under the British Raj and was reduced to a raw material supplier. Secondly, India's non-aligned policy antagonized the west and high-tech weapon systems were denied to India. Further, technological denial regime (Nuclear Suppliers Group, Wassenaar Arrangement, Australia Group and Missile Technology Control Regime) clamped a ban on "dual-use" technology export to India. Thirdly, defence technology and scientific research have received lesser attention. These factors have been primarily responsible for India's lack of self-sufficiency in defence production and its enhanced dependency on

foreign Original Equipment Manufacturers (OEMs) for niche technology.

To improve upon defence production, the Ordnance Factory (OF) & Defence Public Sector Undertakings (DPSU) have been created after India's independence. However, the gap in technology has forced India to rely upon licensed production to cater to the needs of the Indian Armed Forces. Temporarily, the license production boosted India's ability to attain self-sufficiency in developing weapon systems. However, in the long run, this has not led to any significant changes in the country's defence production capacity. Defence Public Sector has not utilised the defence infrastructure to its fullest potential, and therefore, it benefited less from licensed production. In fact, DPSUs and OFs never had any formal technology absorption centers to receive technologies from the OEMs.[1] Henceforth, the transfer of technology (ToT) hasn't enabled DPSUs and OFs to innovate and come out with upgraded versions or reduced the import content.

Lack of competition and monopoly of defence equipment market has in a way led to complacency, which left little room for product innovation, technology upgradation, quality control, export promotion, finance and human resource management.

Lack of competition and monopoly of defence equipment market has in a way led to complacency, which left little room for product innovation, technology upgradation, quality control, export promotion, finance and human resource management.[2] This has not only delayed the procurement cycle, but has also held back defence-manufacturing sector from any major transformation. Moreover, with the lack of investment in scientific research, defence R&D has not progressed to address the issue of indigenisation of defence equipment.

India's spending on defence R&D is minimal as compared to global standards. Speaking at a conference in New Delhi, Director General, Defence Research and Development Organisation (DRDO), S Christopher, pointed out the need for enhanced budget and augmentation of scientific manpower. A mere 5-6 per cent of defence budget for R&D is inadequate to meet the aspirations of India's defence needs.[3]

DRDO's expenditure stands around 31.6 percent of the total R&D budget. Apart from DRDO, Hindustan Aeronautics Limited (HAL) and Bharat Electronics Limited (BEL) are the two major entities spending 6 to 8 percent of their turnover on defence R&D. Other DPSUs and OFs have no dedicated R&D establishment and they rely on DRDO or foreign OEMs for technological assistance.

At the same time, one cannot underrate the role of the public sector and DRDO in achieving self-sufficiency in defence equipment. The public sector and DRDO have vast experience in high-end technology and infrastructure over a period of time to benefit the Indian armed forces. But rapidly changing security environment demands robust defence manufacturing capacity and proactive R&D labs to counter emerging security threats in the region. Present defence manufacturing is inadequate to meet the requirements of rapidly modernizing armed forces. Therefore, government has proposed a new defence procurement policy to create additional capacity in private sector and encourage defence innovation and research.

Role of the Private Sector in Defence Manufacturing

In the post-liberalisation period, Indian private sector has shown great resilience, particularly in skill-intensive sectors such as automobiles, engineering goods and pharmaceutical sector, etc. To accommodate private sector, defence procurement structures and procedures were established in the Ministry of Defence in 2001, in pursuance of the recommendations of the Group of Ministers to reform the National Security System. The procedures for defence procurement laid down in 1992 were comprehensively reviewed and a revised Defence Procurement Procedure was introduced in December 2002. Initially, defence manufacturing never interested the private sector due to multiple entry barriers. Only few major and small-scale industries have limited exposure working in tandem with DRDO, DPSUs and OFs. In order to increase the private sector participation in defence sector, DPP "Make" category was introduced to involve Indian manufacturers from the initial stage of

development. Integrated Material Management Online System (IMMOLS), Integrated Air Defence Command and Control System (IACCS) Tactical Communication System (TCS), Battlefield Management System (BMS) and Futuristic Infantry Combat Vehicles (FICV), are a few major "Make" projects where private players have been involved from the initial stage of production.[4]

The small and medium scale industry played a crucial role in the area of defence manufacturing. OFs are procuring a significant amount of input material from MSMEs (about 50%). Similarly, the large Public Sector Undertakings in Defence production are outsourcing to the extent of 20-40% of their input requirements, part of which is from MSMEs. According to statistics shared by the Minister of State for Defence, Rao Inderjit Singh, the recent policy decided to increase defence export to Rs 441 crore in the first quarter of the previous financial year, 2015. Out of this, private sector export accounted for 63 percent of total defence export against 13 percent in 2013-14.[5] The private sector export of military stores clearly indicates its capability to play an important role in Indian defence production.

Government has proposed a new defence procurement policy to create additional capacity in private sector and encourage defence innovation and research.

Defence procurement in the next decade is going to increase to approximately US$ 100 billion. It is estimated that the resulting offsets will touch nearly US$ 20 billion, providing a huge play for the Indian industry in terms of domestic manufacturing. Therefore, government has embarked on major policy reforms to enhance private sector participation in the defence sector. Defence Minister, Manohar Parrikar, has been keen to expand the defence infrastructure in the country. He has urged to bring dynamic changes in new DPP, based on the Dhirander Singh Committee recommendations on "Strategic Partnership" (SP) model under 'Make in India' initiative in six areas, which include submarines, aircraft and missiles. The SP model will be created in addition to the existing capacity and infrastructure in the public sector.

The SP model would elevate private sector capacity at par with the public sector. Meshing public and private sector resources and capability will reduce production cost and speed up delivery of weapon platforms. Many of the large private sectors have no specific capability in defence manufacturing sector and it can take up to a decade to actually see a significant progress in defence manufacturing. Therefore, new policy guidelines emphasizing on Indigenously Designed, Developed and Manufactured Platforms cannot be achieved until the private sector has been provided adequate hand-holding support by the Public-Undertaking, DRDO and various other scientific labs.

Enhancing the Private Sector Through DPSUs/ OFs

Despite the technological denial to India, DRDO labs, DPSU's, and the private sector have succeeded in achieving self-reliance in defence manufacturing. The lessons learnt from these successes have to be implemented across the aspiring defence entrants in India. In Defence, the R&D focus has remained largely in the public domain with government institutions like Hindustan Aeronautical Limited (HAL), National Aerospace Laboratories (NAL), DRDO, Indian Space Research Organisation (ISRO) and Council of Scientific and Industrial Research (CSIR). Government run R&D labs should work in tandem with the private sector while developing major combat systems. Private sector can easily identify major component, maintenance and subsystems needed for the combat systems. This also serves private industry's purpose to widen their technology base to undertake their research in a specialised field. This will help in aggregation of the defence technology capability of the country, thereby avoiding the purchase of items from abroad.

Moreover, the Public Private Partnership (PPP) could be another viable model to build the partnership between the public and the private sectors. Globally, PPP was a successful model which has been widely replicated both in civil and defence sectors. The trend of having an agreement in place between government entities and private companies to utilise the resources needs to be encouraged for real growth in the

aerospace and defence sectors. This would also help improve financial viability of indigenous projects. The success of BRAHMOS Missile is a classical example, which can be replicated, in other major "Make" category.[6] It contributed in national development by providing opportunities in domestic industries. As a strategy at the country level for technology development, it is imperative for DRDO and DPSUs to support private sector in design, development and production. The PPP model could be an ideal solution to enhance private sector capacity.

Conclusion

In a nation with rich experience in defence and aerospace sector spanning many decades, it is pertinent to utilise and further boost the existing capability by enhancement of the role of the private sector. Present procurement policy suggests a greater role for the private sector. Defence and aerospace sectors are technological and capital intensive sectors which require a much better approach to enhance the capacity in the private sector. The public sector should act as a catalyst in developing the capabilities in the private sector and they should be seen (and treated) as a partner rather than a competitor in the field of defence to achieve the common goal of indigenisation and self-reliance in weapon manufacturing.

Notes

[1] For details, see "The Twenty-First Meeting of the Scientific Advisory Committee to the Cabinet (SAC-C)", November 10, 2010, http://.psa.gov.in/sites/default/files/SACC_21meeting.pdf. Accessed on January 21, 2016

[2] Laxman K Behera, "Private Sector Participation in Indian Defence Industry", *IDSA Comment*, January 08, 2008, http://www.idsa.in/idsa strategic comments/ Private Sector Participation in Indian Defence Industry_ LK Behera _080108. Accessed on January 23, 2016

[3] "DRDO Seeks Enhanced Budget, Says China Spending More on R&D", *Deccan Herald*, September 23, 2015, http://www.deccanherald.com/content/502436/drdo-seeks-enhanced-budget-says.html. Accessed on January 22, 2016

[4] "India: Make in India – An Overview of Defence Manufacturing in India", *Indian Defence News*, December 12, 2015, http://www. indian defense news. in/2015/12/india-make-in-india-overview-of-defence.html. Accessed on February 11, 2016

[5] "Defence Export by Private Sector Increase Six-Fold After Policy Change", *The Economic Times*, December 12, 2015, http://economic times.india times.com/article show/50145759.cms?utm_s ource=content of interest & utm_medium=text & utm_ campaign=cppst. Accessed on January 12, 2016.

[6] "Untold Tales of Brahmos Cruise Missile Captured", *The Asian Age*, August 20, 2014, http://www. asian age.com/book-reviews/untold-tales-brahmos-cruise-missile-captured-513. Accessed on February 11, 2016.

Centre for Air Power Studies

The Centre for Air Power Studies (CAPS) is an independent, non-profit think tank that undertakes and promotes policy related research, study and discussion on defence and military issues, trends, and development in air power and space for civil and military purposes, as also related issues of national security. The Centre is headed by Air Marshal Vinod Patney, SYSM PVSM AVSM VrC (Retd).

Centre for Air Power Studies
P-284, Arjan Path, Subroto Park, New Delhi 110010
Tel: +91 11 25699130/32, Fax: +91 11 25682533

Editor: Dr Shalini Chawla e-mail: shaluchawla@yahoo.com