Centre for Land Warfare Studies (CLAWS)

Seminar

on

Defence Acquisition and Offsets: Partnership in Research, Development and Production

30 May 2013

A Seminar on Defence Acquisition and Offsets: Partnership in Research, Development and Production was conducted at CLAWS Seminar Hall on 30 May 2013, which was followed by the release of a book titled "Insurgencies in North East India" written by Col Gautam Das. The seminar was chaired by Mr. BimalSareen, Managing Director and CEO, AVAANA. The speaker panel consisted of Mr. DebaMohanty, CEO, Indicia Research & Advisory; Maj Gen BhupinderYadav, PhD (Retd), Managing Director, Q-Tech Synergy; and Ms. KaranpreetKaur, Research Assistant,CLAWS.

Opening Remarks: Maj Gen Dhruv C Katoch, SM, VSM, (Retd), Director, CLAWS

Many decades ago the policy of the Government of India aimed at achieving 70 per cent self-sufficiency for our defence requirements. We are still far from that goal and continue to import over 70 per cent of our defence requirements. Our policies with respect to defence acquisitions and offsets are still maturing and there is still a long way to go. As Indian Army's think tank, CLAWS will be focusing more on this aspect to build awareness so as to assist in the process of enhancing our capacities.

Chairperson's Remarks: Mr. BimalSareen

Having had the privilege of working on the policy side through the Chamber of Commerce, advisory side with Original Equipment Manufacturers (OEMs) and also in the industry as an Indian Offset Partner (IOP), I shall offer a combined perspective of stakeholders about offsets. Firstly, the Indian offset policy is very dynamic in nature which has just recently emerged from the kindergarten stage. The policy will continue to evolve and progress because of the country's dynamic rate of economic growth and extremely volatile political situation. Our government, industry and policy

are going through an evolutionary phase. However, there will always be agreat deal of complexity in the process. Some of the gaps in R&D and production which need to be highlighted are:

1. The electronics engineers who graduate from college do not have the capability to produce and give results immediately. They require at least one year of training before they can be absorbed by the industry.
2. Our research processes do not encourage taking risks.
3. The DRDO and DPSUs have the ability to translate research into development. However, there is a gap in the ability to do R&D and then move on to production/ manufacture.
4. The 26 per cent FDI in defence is a key limiting factor even after reprioritisation by Defence Minister when he gave the highest priority to Indian/indigenous production.

The biggest challenge that still remains is to implement the offset policy. After the CAG report that came out in 2012, there is going to be an increased level of scrutiny of the contracts. With the involvement of multiple stakeholders, there is a need to focus on the fundamental gaps and bridge them in a timely fashion.

Challenges of Defence Acquisition: Mr. DebaMohanty

A look at the Indian defence sector in terms of resources allocation, modernisation, procurement, R&D and capacity development in industrial sector in a ten year spectrum indicates that there has been very little change. There is implementation of new ideas and concepts without any substantive research. With respect to the evolution of management of defence sector, there are a few questions that need to be deliberated upon:

What are the objectives behind acquisitions – is it for modernisation or capability development? How can it be aligned with the allocations/ resources we are likely to get in future?Upon extrapolation of the trends in last decades in Indian economy, one gets an impression that the expenditure is likely to have a CAGR of at least 8-10 per cent for the next 20-25 years. While devising policies, the MoD and the government need to keep in mind that the modernisation programmes will be capital intensive and will require huge funds. The DPP is a very narrow document and only

deals with the technical and operational requirements of acquisition by the armed forces. Going by the internal security environment in India, the domain will require increased expenditure. The overall view of the complete modernisation drive can be seen by blending the two security domains, both internal and external. There could be a possibility that the acquisitions for both the security domains could be merged.

There has been a defence offset policy in India since 2005-06 which has been simplified and clarified several times. Deliberations are also going on for developing a national offset policy. How could the defence offset policy be amalgamated with the national offset policy? Will there be an autonomous policy or will it be integrated to the larger strategic universe of offsets? In terms of self reliance, the question arises as to how to implement the 70:30 ratio of indigenous production versus imports. How to emphasise more on local production because the technologies we don't have need to be imported through Buy (Global) category, which according to the latest DPP has been given least priority among five categories.

All institutions related to procurement are vertical structures but, the industry is yet to become one as it has not been fully integrated into the universe of national defence. The industry has not found an institutional role for itself. The participation of the industry is not proactive but reactive in nature. The involvement of the industryneeds to be deliberated more in order that a part of the self-reliance objectives are realised. India is the only country where there isdisconnect between all the institutions. The DPP has been revised nine times in the last ten years with two addendums and eight changes. However, nothing has changed substantially in the document except for the portion of offsets and ToT. There is a need to look at DPP and refine the language in order to make it more user friendly.

Acquiring Technologies through Offsets - Opportunities & Challenges: Maj Gen BhupinderYadav

Technology has various components out of which fundamental research and core technology was taken as one spectrum and given to DRDO. However, seeing the trends in the last six decades, it seems that our development organisation is only doing reverse engineering. In the 1970s, we did a wonderful job like developing the 7.62mm F-INSAS and the IFG which are still in service. The gun development team at Jabalpur which developed the IFG was disbanded in 1978 and since then, not a

single artillery piecehas been developed that is used by our troops. Till 1970s-80s, we had contemporary technologies availablewith us. According to one research by Dr. APJ Abdul Kalamthe study shows that we hardly have 10 per cent of our own designs. Till 2001, all R&D and production was under government control, as a result the defence organisations became complacent. Based on foreign designs, we have produced most of the equipment be it L-70, 130mm gun, T-72, T-90 etc. The state of the equipment is not keeping pace with time. Prototypes are well developed but the problem occurs during mass production. It is in the national interest of India that we get this right.

There is a need to focus on core military technologies in order to gain advantage over our adversaries. Battlefield transparency, precision guidance, communication, electronic warfare/ information warfare, protective systems, artificial intelligence and robotics and logistic systems are the key thrust areas in whichIndia has limited state of art capabilitiesand need to be productionised in the short term. From 2017-22, the key requirements of the defence forces will be aerostats, UAVs, future MBTs, FICVs, infantry weapon systems, military satellites, network centric capabilities, nanotechnology/biotechnology, combat modeling and simulation. The thrust areas that we need to lay emphasis on to achieve self reliance include space applications, ballistic missile defence, direct energy weapons, technology upgrades, weather warfare and other non lethal weapons.

Offsets are a provision to assist the buyer country in its procurement expenditure as also to generate benefits for the economy of the buyer country in the form of technology transfer. The objectives of offsets were stated for the first time in 2012 which relate to the following:

- Social development (transfer of skills, job creation).
- Economic development (setting up new industries, import substitution and IP commercialisation).
- Self supporting capabilities for weapon systems.

The four provisions to discharge offsets along with their multiplier values have clearly been stated in the MoD guidelines. It is a good concept but it has been introduced very late in India. About $ 4.48 billion worth of offset orders have been placed till

date and the number is increasing steadily. It is hoped that the benefits of offsets will fructify soon for all to witness.

Hurdles in Offsets Implementation: Ms. KaranpreetKaur

The first offset contract was signed in 2007 for procurement of Medium Power Radars and so far about twenty contracts have been signed and a couple of them will be signed shortly.The Air force has taken the lead by signing the maximum number of offset contracts since most of their programmes are big ticket deals. However, so far none of the contracts have been executed completely. The Navy has also been doing well as far as offsets are concerned. Infact, the Indian Navy is the leading service in successfully encouraging and implementing indigenisation, which is the heart of offsets, in its ship building and submarine programmes.The Army has been lagging behind in offsets because most of the contracts have been below the value of INR 300 crore. The ball has started rolling for the Army with the first offset contract signed on 15 March 2013.

In 2012, CAG examined 16 offset contracts signed till February 2012 to ascertain that the DPP provisions were adhered to and that a proper mechanism was in place to monitor the implementation of offset contracts. The major observations pointed out by CAG in its November 2012 report are as follows:

- Non adherence to DPP guidelines
- Waivers to OEMs
- Direct Foreign Investment
- Invalid IOPs
- Non-recovery of penalty charges

The pace of indigenisation through offsets has not been achieved as per the expectations. The major impediments in offsets relate to government policy, bureaucracy, inefficient managing body, execution hassles and vested interests of the industry.The participation of the Indian private industry in the defence sector is thwarted by several roadblocks like licensing and tax related issues. Taxes like customs duty, VAT, service tax, foreign exchange variations and the delays in obtaining the industrial license are major impediments discouraging the private companies to invest capital and resources in an uncertain environment.

Offsets is a complex subject and it takes time to understand its intricacies. Most of the decision makers do not understand the complexities associated with offsets nor do they have adequate experience in managing offsets. So they have a lackadaisical attitude towards offsets and do not show much interest in its execution.. There is a lack of coordination among stakeholders which results in varied interpretations of the same clauses of the contracts. Most of the defence projects have problems of time and cost overruns associated with them. The working of DOMW is thwarted by problems relating to lack of experienced staff, lack of understanding of offsets, vested interests of officials, short tenures of officers and no knowledge transfer. The need of the hour therefore, is for all the stakeholders to interact and cooperate with each other, coordinate their actions and synchronise their efforts to utilise offsets for achieving the ultimate aim of establishing a robust and credible defence industrial base in India.

Q&A

The problem of disconnect between the end users and the design/developing organisation was discussed and the need to create an Indian version of DARPA was suggested. The cultural disposition to lack of accountability was touched upon and the fact that the greatest minds in India are not ready to do ‘directive research’ was mentioned. There are gaps relating to insufficient investment towards R&D, inefficiency of DOMW, the rigidity and complacency of DRDO were discussed and suitable suggestions were provided. The flexibility to permit single vendor system in case of critical equipment should exist. There is a requirement for greater involvement of the armed forces in development and production organisations. It is essential to reenergise and strengthen the capability of the industry and to follow a pragmatic and flexible approach in order to gain benefits from offsets. DOMW needs restructuring and re-strengthening to manage offset contracts worth billions of dollars. India should develop strategic partnerships with countries and build trust so that they are willing to part with their technologies via the offset route. The FDI limit of 26 per cent in defence is a key limiting factor, which needs to be technology centric and be made flexible on case to case basis. At a multiplier value of maximum three, the OEMs cannot be persuaded to part with core technology. There is a need for increasing the multiplier values to encourage the foreign vendors to share state of art technologies. The environment in India needs to be more welcoming and flexible

for the foreign industry to invest in India and bring their expertise and technologies. The institutional mechanisms need to be reformed and a culture of greater interaction between all the stakeholders needs to be created.

Chairperson's Remarks: Mr. BimalSareen

- One of the key gaps that has emerged is the system of NCNC which needs to be addressed.
- There needs to be a broader understanding of export control.
- There is a requirement of greater flexibility and funding to the Armed Forces to carry out their own R&D in Base Workshops.
- There needs to be a motivation for the forces to promote R&D and production technologies.
- A culture of taking risks under official guidance needs to be developed.

Rapporteur:- Ms Karanpreet Kaur, Research Assistant, CLAWS