

Implementation of Offset Policy in Defence Contracts: Indian Army Perspective

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The Offset Policy has been articulated in the DPP 2008. The Offset Clause would be applicable for all procurement proposals where indicative cost is above Rs. 300 crores and schemes are categorized as 'Buy Global' involving outright purchase from foreign/Indian vendors and 'Buy and Make with Transfer of Technology' i.e. purchase from foreign vendor followed by licensed production. There is an urgent need for us to act together so as to extract the maximum mileage from this new clause introduced in the procurement procedure for the modernization of the armed forces in general and Army in particular.

The provisions of offset policy will apply to all Capital Acquisition categorized as 'Buy (Global)' or 'Buy and Make' where indicative cost is Rs 300 crores or more. Initially, a uniform offset of 30 per cent of indicative cost in 'Buy Category' or 30 per cent of foreign exchange component in 'Buy and make category' will be minimum required value of offset.

The paper covers the following aspects:

- (a) Part I: Defence Offset Policy.
- (b) Part II: Offsets from Army's View Point.
- (c) Part III: Concerns.
- (d) Part IV: Recommendations.

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PART I: Defence Offset Policy

India is amongst top ten countries in terms of defence expenditure and third largest importer of defence hardware. Offsets in defence trade are a global phenomenon. More than 130 countries demand offsets in one form or the other. Percentages vary like 174 per cent in Austria, 118 per cent in Netherlands, 100 per cent in United Kingdom, 27 per cent in Thailand and 20 per cent in Taiwan.

In India offset policy was long overdue and implementation since DPP 2005 is a welcome step. Offsets are here to stay and thus need to be harmonised. Offset policy necessarily aims at acquisition and development of the state of the art technologies and create world class defence production industry which should be able to meet both domestic and export requirements of the country. *It is important to note that Offsets work best only when they result in a win – win situation for the buyer and the seller.*

Defence Offset Obligations: For the purpose of defence purchases made under the DPP 2008, offset obligations shall be discharged directly by any combination of the following methods:

- Direct purchase of, or executing export orders for, defence products and components manufactured by, or services provided by, Indian defence industries, i.e., Defence Public Sector Undertakings, the Ordnance Factory Board and private defence industry. For the purpose of defence offset, services will mean maintenance, overhaul, up gradation, life extension, engineering, design, testing of defence products, defence related software or quality assurance services.
- Direct Foreign Investment in Indian defence industries for industrial infrastructure for services, co-development, joint ventures and co-production of defence products and components.

- Direct foreign investment in Indian organisations engaged in defence R&D as certified by Defence Offset Facilitation Agency (DOFA). While certifying, DOFA shall not consider civil infrastructure and such technologies that are otherwise easily available in the open market.
- Foreign vendors could consider creation of offset programmes in anticipation of future obligations. Offset credits so acquired can be banked and discharged against future contracts. Banked offset credits would not be transferable except between the main contractor and his sub-contractors within the same acquisition programme. The main contractor would be required to submit a list of such sub-contractors at the time of signing the contract.

PART II: Offsets from Army's View Point

Since independence in August 1947, the country has been tackling a large number of security cases, both external and internal. Despite this, even today, it is saddled with a large number of security issues. There are many trends that will impinge on the security of India in the next decade or so. These include terrorism - global, regional as well as local. Unilateralism of the US, the rise of China both as economic and military power, continued instability in Indian neighbourhood, nuclear brinkmanship and continued proliferation in the region, internal conflicts of varying intensities, economic factor including globalization, the diminishing oil resources and volatility in prices of oil, impact of science and technology demographic changes and the interplay of important players at the global and regional levels. *Economic and military strengths are cornerstone of Indian power. Sustained, equitable and balanced economic growth is as much a necessity as removing the hollowness of military, with infusion of modern weapons and equipment.*

Key Technologies Expected: Focus is on military capabilities that

make use of technology to improve combat capabilities at modest cost. This philosophy termed as “system of system” approach to military modernization, places emphasis on what the weapon platforms carry and how they are networked. Some of the following technologies are significant to improve and enhance the combating qualities of the armed forces in general and army in particular. These capabilities are important from the point of view of modernisation of our armed forces as well.

Precision Guided Missions (PGMs): These include a host of weapons that range from missiles to individual war heads to defence against enemy smart weapons.

These include:

- *Cruise Missiles* – guided by GPS- which can reliably hit a target thousand miles away.
- *Tactical Missile System* which can destroy battalion sized formations of moving combat vehicles at ranges excess of 140 kilometres.
- *Combat Aircraft* using direct attack munitions from a stand of range of about 100 kilometres and hit targets by day and night under any weather conditions.
- *Sensor Fuzed* weapons and joint stand off weapons carrying sub munitions.

Stealth

- Technological advances are being made in many military platforms, increasing force-projection capabilities. Stealthy platforms can penetrate high threat areas and deliver PGMs.
- New armoured fighting vehicle are platforms incorporating the latest techniques.
- The focus is on low thermal and 'Acroscopic Signatures' than its predecessor. This characteristic was discussed in context of future

tank design for Indian Army during their International Seminar (AFV) in November 2007.

Battle Space Awareness:

- Sensors in satellites, manned aircraft or UAVs can now monitor virtually everything that is going on in a particular battle area, dramatically improving battle space awareness resulting in complete “situational awareness” of commanders at various levels.
- GPS satellite navigation Network and Air Borne Warning and Control System (AWACS) are examples of systems where this technology has been refined over a period of time.
- UAVs for strategic roles, medium altitude long endurance (MALG) and low altitude UAVs are the requirement today. Searcher, Heron and Nishant UAVs have been evaluated by Indian Army recently.
- Night vision devices to remove night blindness are a must for India Army.

Command and Control Architecture:

- Digital technology is being built into aircraft, tanks, artillery and individual soldier systems with the intention of providing commanders with “situational awareness” - an instantaneous and complete picture of battlefield.
- Each soldier and vehicle is to be equipped with a small computer that displays a map of battlefield overlaid with friendly and enemy position and aircraft flight paths.
- Battle space awareness together with Command and Control architecture to act on an information recently requires advanced command, control, communications, computers and intelligence processing (C&I) systems which have now been incrementally moved to (C4I2SR) (intelligence, interoperability, surveillance

and reconnaissance) in that manner.

- The Indian Army has been working on this by an ambitious project called CIDSS (Combined Information & Decision Support System) with ACCCS (Artillery Command, Control and Communication Support System), ADC&R (Air Defence Control and Reporting System), BSS (Battlefield Surveillance System), EWS (Electronic Warfare System) and BMS (Battlefield Management system). An international Defence Seminar on Battlefield Management System was recently conducted in April 2008 where the user perspective was deliberated in detail.

Technology and Infrastructure: A nation derives its power from a variety of factors – its geographical position, its economic strength, its administration or political system, its military and its people. While these are identified separately, they are closely interlinked. While we scale greater heights, our profile and strategy faces challenges on three fronts: *firstly*, globalization process in the new economic technological order; *secondly*, acquisition of strategic – technological strengths and *thirdly*, the vision of enhanced military powers. It is seen that technology is at the heart of above mentioned challenges. To enhance military powers, it entails acquisition, assumption, application and exploitation of technology and anti-technology in warfare of tomorrow. This does not figure in our offset procedure. The critical technologies in the strategic domain which we must leverage are:

- Area Missile Defence and Remote Warfare.
- Platform with stealth technology carbons composite and fibre.
- Sensors with good capability of image processing and diffusion.
- Precision munitions.
- Technologies to enhance survivability, awareness connectivity and war fighting capability of the soldier.
- Electronic warfare, direction finding and deception technologies.
- Space technology to exploit applications of real time meteorology,

navigation, communication surveillance, weapon guidance, cartography, synchronization and so on.

- High speed data processing.
- Nano technology.
- Cryptography and crypto analysis.
- Artificial Intelligence and Robotics.

PART III: Concerns

All successful offset programmes have certain common well defined characteristics, purposeful selection in consonance with well defined objectives, hard negotiations, detailed planning and close oversight. It is being deduced that Offset Policy aims at defence industrial development of country.

Equipment Acquisition in Jeopardy: In their enthusiasm to obtain order, many vendors fail to grasp the full implications of offset liabilities. They tend to take obligation lightly and do not make adequate budgetary provisions.

This will result in following:

- *Time Delays:* During critical stages of acquisition – the trial stage or CNC stage, the vendor will be disqualified. This leads to unjustified delays and waste of time and effort. Critical operational voids continue to remain due to the induced delays. The inability to fulfil offset obligations makes them liable to substantial penalties and may render main contract economically not viable.
- *Implementation:* The policy of 5 per cent penalty on vendor is not major penalty. The vendor may have no qualms about not following contractual obligations with confidence that buyer would prefer to renegotiate offset contract rather than imperil main contract.

Offset as Incidental Considerations: *Offset will work best when aspirations of both the vendor and buyer country are fulfilled and resulting in a win-win situation for both seller and buyer.* An analysis of buyers' perspective on offsets to gain maximum advantages and vendors' reluctance to give away too much may lead to the impression that offsets aspirations of buyer and possible approach towards same by vendor are dichotomous. However, offsets work only if it is win-win situation for all. Mere dependence on offsets would only lead to granting subsidies to state run enterprises and may lead to inefficiencies of the buyer.

Receipt of Extraneous Offset Programmes: India neither indicates areas in which offset should be offered nor prioritizes them. A vendor can hypothetically, therefore, discharge his offset obligations simply by purchasing mundane items or they may outsource defence related software solutions to India and have them counted against offset liabilities. Since our Defence Offset policy is in its infancy, we may need to give it time to mature and stabilise. Post offset studies in some other countries programmes have revealed that:

- Technology received was outdated and did not improve competitions of indigenous industry.
- Business generated in routine commercial trade was often counted against offsets.
- Offsets did not create new markets for local produce. Existing markets were exploited for short term gains.
- Offset requirements outsourced to in experienced entities which lacked commitments.

PART IV: Recommendations

There is reason to expect that new offset policy can be used constructively to benefit the Indian defence industry, both public and private. But for this, lessons must be learnt from international experience and indeed our past

knowledge in the field. Our own approach must be well conceived and implemented with clearly defined quantifiable benchmarks.

Setting of Priorities: The priorities to a great extent should be guided by the strategic and economic objectives laid down by DAC for each programme, ideally within a larger policy framework for the national defence industry. The illustrative lists of priorities are:

- Acquire state-of-the-art technologies.
- Provide opportunities of manufacturing and exporting components and parts of acquired equipment.
- Acquire depot maintenance technology, facilities, equipment, tools for service.
- Receive upgraded system of weapons.
- Export defence industrial products.
- Acquire foreign maintenance works.

Recommendations

The following is accordingly recommended:

- Offset should not delay main acquisition nor should it drive acquisition of equipment and technology.
- Industry should gear itself to absorb the benefits of offsets.
- Wherever feasible, we should resort to direct offsets.
- Technology being obtained through offsets should be both relevant and contemporary.

Conclusion

The very fact that number of countries seeking offset benefits has gone up manifold within a couple of decades is an indication that offsets do result in positive out comes. India's initiative in introducing offsets policy comes at right time when acquisition budgets have been reflecting impressive

growth levels, as a result of buoyant economic progress made by our country. What is now required is a careful steering of the policy from here onwards, with carefully chosen objectives and a clear roadmap to convert policy intentions into reality. Offsets should be leveraged to establish a vibrant defence industrial base in the country, thereby promoting self-reliance and boosting our economic and military prowess. Offsets should be seen as a fringe benefit accruing from procurement of the main weapon system and not vice-versa. 