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IDSA Special Feature

A French Solution to India's Defence Acquisition Problem

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India has a lot to learn from France's robust procurement process which is characterised by a clear articulation of national security objectives, approved procurement and investment plans, and avoidance of wasteful and costly procurement. Unlike France, India does not produce a defence white paper nor does it have a CDS as an arbitrator of the military requirements of the nation as a whole. This has resulted in individual services articulating their own versions of threat perceptions and devising their own procurement plans without giving much attention to the other services' requirements. The lack of jointness among the plans has resulted in ad hoc procurement and at times duplication of capability creation. This is undesirable not only from the point of view defence preparedness but also from the perspective of managing scarce resources.

In a move to streamline defence procurement and push the Make in India initiative, the Ministry of Defence (MoD) has constituted a nine-member committee under the chairmanship of Vivek Rae, former Director General (Acquisition) – DG (Acq). The committee's Terms of Reference (ToR) require it to suggest a suitable organisational structure in light of international best practices. In this context, this Special Feature highlights the importance of studying the French procurement system.

India's Defence Acquisition Framework: The Problems

India's current acquisition framework consists, broadly, of a two-tiered structure, comprising the Defence Acquisition Council (DAC) and its subordinate bodies – the Defence Procurement Board, the Defence Research and Development Board and the Defence Production Board. This structure was created in 2001 in pursuance of the recommendations of the Group of Ministers (GoM), which was set up to review the "national security system in its entirety". The acquisition procedures, which are captured in a document known as Defence Procurement Procedures (DPP), predate the current structure and were first announced in 1992. The DPP has been revised several times, the latest revision being in June 2016.

Notwithstanding the establishment of structures and procedures, India's defence acquisition has not progressed as desired. Among the failures of India's defence acquisition framework has been its inability to ensure time-bound procurement thus forfeiting available budgetary resources, as well as vulnerability to import-centric pressures, corruption and controversies. In the last 10 years alone, the MoD has forfeited a cumulative total of Rs. 51,515 crore of the allocated budget (see Table 1). It is partly because of these unutilised funds that modernisation of the armed forces has been delayed inordinately.

In its 2007 audit report, the Comptroller and Auditor General of India (CAG) had noted that the basic problem of India's defence acquisition framework was its dispersed centres of responsibility and lack of professionalism in acquisition.¹ Earlier, the GoM had suggested the creation of a "separate and dedicated structure to undertake the entire gamut of procurement functions ... to facilitate a higher degree of professionalism and cost effectiveness in the process."² What has been created, however, is a decentralised system of procurement with little regard to professionalism, accountability and price discovery.³ There are too many independent actors responsible for various acquisition functions that include drafting of technical features, issuance of tender document, undertaking of trials and evaluation, providing quality assurance and making payment to vendors. These actors are neither trained for their assigned roles nor are they given adequate time to build institutional capacity.

¹ CAG, Union Government (Defence Services): Army and Ordnance Factories, Report No. 4 of 2007, pp. 1-25.

² Reforming the National Security System, Recommendations of the Group of Ministers, February 2001, p. 105.

³ The controversial procurement deal of 12 AgustaWestland helicopters is the latest illustration of the many perennial weaknesses of India's defence acquisition system. For a review of the deal, see CAG, *Acquisition of Helicopter for VVIPs*, Report No. 10 of 2013.

Year	Budget Estimate	Actual Expenditure	Under/Over Spending	Under/Over Spending (%)
2006-07	31722	27818	3905	12.3
2007-08	34515	30398	4117	11.9
2008-09	40163	32423	7739	19.3
2009-10	43816	42025	1791	4.1
2010-11	47528	50396	-2868	-6.0
2011-12	56743	55578	1165	2.1
2012-13	66549	59151	7398	11.1
2013-14	73855	67161	6694	9.1
2014-15	75695	66227	9468	12.5
2015-16	77848	65742	12106	15.6
Total	548433	496918	51515	9.4

Table 1. Utilisation of Capital Acquisition Budget (in Rs crore)

Notes: 1. Plus figures denote under-utilisation and minus figures over-utilisation.

2. Under/over-utilisation is based on the difference between budget estimate and actual expenditure in a given year except for 2015-16, where the difference is between budget estimate and revised estimate.

3. The capital acquisition budget is inclusive of "medical equipment".

Source: Author's database.

Another major problem of India's defence acquisition framework has been its lip service to indigenisation/self-reliance, which is now being manifested in the current government's Make in India initiative. Although the DPPs of recent years have tried to buttress the self-reliance efforts through a host of measures,⁴ the acquisition system still harbours its step-motherly attitude towards indigenous industry, particularly private sector companies.⁵ The apathy towards domestic industry has been institutionalised by keeping the acquisition and production functions under two distinct power centres in the MoD. Though a mere brick wall separates the offices of the DG (Acq.) and Secretary

⁴ These measures include a prioritised procurement category favouring local industry over foreign companies; and a dedicated set of procedures to incentivise design, development and manufacture by the domestic industry.

⁵ Nearly two years after the announcement of the Make in India initiative, the Indian private sector is yet to get a single major defence contract. See Sushant Singh, "Defence procurement: The mystery of missing deals," *Indian Express*, 26 July 2016.

(Defence Production) – the latter is responsible for indigenous arms production by both state and private entities – their meeting grounds remain far apart. While the former is keen on awarding contracts (so as to utilise the allocated resources) irrespective of the source of supply, the latter is interested in obtaining some contracts for the domestic industry, particularly the state-owned/controlled Defence Public Sector Undertakings (DPSUs) and the Ordnance Factory Board (OFB). Since the basic objectives of these two high offices are not necessarily driven by indigenous-centric procurement, the focus on indigenisation has become subservient to acquisition. It is primarily because of the inherent conflict of interests between these two high offices that domestic industry has not received the necessary attention it deserves,⁶ and India continues to figure among the top arms importers in the world.

The French Acquisition System

In contrast to India's defence acquisition system, several countries such as the UK, France and Australia follow a more centralised system of procurement. France, in particular, has been highly successful in promoting a domestic-industry-driven procurement system. It is one of the few countries in the world to have developed an advanced defence manufacturing base that is capable of producing the full spectrum of military items, including nuclear weapons. Nearly 90 per cent of France's defence requirement is produced indigenously,⁷ and the French authorities openly boast that their system has "inspired other countries to copy".⁸ It is no surprise that the Kelkar Committee, appointed by the MoD to suggest measures to promote self-reliance, in its April 2005 report, *Towards Strengthening Self Reliance in Defence Preparedness*, suggested an examination of the feasibility of emulating the French system. The present Vivek Rae Committee might also follow suit.

DGA: The Linchpin

At the fulcrum of French defence procurement is the *Direction Générale de l'Armement* (DGA), one of the three pillars of the Ministry of Defence (Figure 1). The DGA is responsible for a vast array of defence acquisition functions relating to research, development, test evaluation, production and export of defence equipment. The DGA's predecessor, the Ministerial Delegation for Armament (DMA), was set up on 4 April 1961 by President Charles de Gaulle by merging service-specific armament directorates dealing with land, naval and air equipment and powder manufactures into one entity. The DMA was renamed as DGA in 1977.

Prior to the DMA's formation, the fragmentation of the industry and its nonsynchronisation with the genuine requirements of the defence forces was the main hurdle in France becoming a major armaments producer. France had earlier attempted

⁶ For a critical review of the Indian defence industry, see Laxman Kumar Behera, *Indian Defence Industry: An Agenda for Making in India*, Pentagon, New Delhi, 2016.

⁷ GlobalSecurity.org, "France: Military Industry", http://www.globalsecurity.org/military/world/europe/frindustry.htm.

⁸ DGA, *Activity Report 2011*, p. 3. DGA officials also boast that with a procurement budget similar to that of the UK, France buys a lot more defence capability than the UK. This point was mentioned to the author during his visit to DGA in November 2013.

to restructure procurement and armament production at various times but without any major success. In the 1940s, for example, the armament policy was centralised under one ministry. Thereafter, the responsibility was handed over to three different ministries, each dealing with the army, navy and the air force. This led to ad-hocism and duplication in research and production efforts, with the industrial entities often offering "dissimilar solutions for similar problems and demands". To arrest this trend, the post of Chief of Defence Staff (CDS) was created in 1948 and the services were tasked to report to him about their procurement plan. This did not improve matters as the industry "was not in synchronisation with the services". Even as late as in the 1950s, the situation was still "characterised by a multitude of projects and prototypes, and of inter-service rivalry as well as intra-services isolation."⁹ The French aerospace industry, which is now a major success story, was not internationally competitive way back in 1950.



Figure 1. Organisational Structure of the French Ministry of Defence

Note: CEMA is responsible for "capability related decisions (both in terms of requirements and deployment)" whereas the SGA is responsible for "matters relating to budget, legal affairs and other support functions".

Source: DGA; and Review of Acquisition for Secretary of State for Defense: An Independent Report by Bernard Gray, p. 222.

⁹ Martin Lundmark and Laurent Giovachini, *The Development of the French Defence Industry in the 20th Century*, Swedish Defence Research Agency, www.foi.se/ReportFiles/foir_1573.pdf, p. 16.

The formation of the DMA/DGA was not without its problem of turf wars. The services, resenting a dwindling of their importance vis-à-vis the new agency, made fictitious complaints about the poor performance of tanks, vessels and aeroplanes.¹⁰ But De Gaulle had made his intent clear to the recalcitrant elements by placing the new agency's head above any other civil or military officer in the hierarchy of the defence ministry.¹¹ His prime motivation in creating a centralised procurement agency was rooted in his political ambition of achieving what many analysts say was a "small-scale version of a superpower status", for which self-reliance in arms, particularly nuclear weapons, was the prime consideration.¹²

The merger of the various directorates into one agency required a "fundamental unification of the French Ministry of Defence and resulted in structures that have remained essentially the same to this day"¹³ even though the organisation has undergone several rounds of reforms over the years. Since the late 1990s, owing to budget pressure and privatisation and Europeanisation of many industrial entities, the DGA has moved from performing its traditional role as a "project architect" to that of a "project manager".¹⁴ It has shed many of its original roles of designing and manufacturing weapons on its own to assume a role of actively managing industry and technology through efficient methods of contracting. It has nonetheless retained a great deal of expertise in independently evaluating weapon systems through a nation-wide network of testing centres.

The DGA has three primary missions: (i) equipping the armed forces; (ii) preparing the industry to meet future requirements, and (iii) promoting arms exports. With regard to *equipping the armed forces*, the DGA is responsible for design, acquisition and evaluation of the systems while working on a principle of the "entire life of the programmes". For *preparing the industry to meet future requirements*, the DGA is responsible for assessing future threats and risks and setting the technological and industrial goals to meet those contingencies. In these efforts, the DGA identifies the key technologies and provides R&D funding to the industry/university/science and technology development amounted to €727 million in 2015. The mission of *promoting arms exports* has probably been the greatest symbol to the rest of the world of DGA's success story. Its export order amounting to over €16 billion in 2015 far exceeded the €11 billion that France spent in procuring weapons for its armed forces. The French defence industry earns anything between 25 and 40 per cent of its turnover from exports.¹⁵

The DGA's organisational strucure reflects the aforementined objectives with an arrangment that is divided into various directorates and enabling layers (see Figure 2

¹⁰ Ibid.

¹¹ Edward A. Kolodziej, *Making and Marketing Arms: The French Experience and its Implications for the International System*, Princeton University Press, Princeton, 1987, p. 241.

¹² DGA, Activity Report 2011, p. 04.

¹³ Ibid.

¹⁴ Nathalie Lazaric, Valérie Mérindol and Sylvie Rochhia, "Changes in the French defence innovation system: new roles and capabilities for the government agency for defence," *Industry and Innovation*, Vol. 18, No. 5, 2011, pp. 509-30.

¹⁵ French White Paper on Defence and Security, 2013, p. 118.

and Annexure). The Operations Directorate is the largest and deals with delivery of weapons. The Directorate for International Development is responsible for international colloboration and exports. The Directorate for Modernisation and Quality is principally responsible for test evaluation of equipment before their induction. In 2015, it conducted about 6.5 million hours of test evaluations.



Figure 2. Organisation Chart of DGA

Source: DGA.

What Makes the French System Special

DGA has several distinctive features that make it special. Foremost is its unique standing in the French governmental system. The DGA chief reports directly to the defence minister. This makes DGA loyal to the defence minister, and, in turn, to the prime minister and the president.¹⁶ Within the defence ministry, the DGA chief, who since 1977 is though technically in the same rank as the top military leadership, enjoys more powers in so far as the weapons programme is concerned. DGA's direct reporting to

¹⁶ Kolodziej, *Making and Marketing Arms*, Note 11, pp. 240-41.

the higher political authority and its supremacy over the military in the weapons programme is a rare phenomenon. This gives the agency a "tremendous prestige within the French Government",¹⁷ which in turn helps it attract the "nation's best and brightest scientific engineering talent".¹⁸ As discussed later, it is this talent base that enables DGA to perform exceptionally well.

A second notable feature of the DGA is the highly professional character of its 9,800 staff, over 51 per cent of whom are managers and professionals.¹⁹ This character has been inbuilt both in recruitment and professional satisfaction. At the top of the DGA hierarchy is the corps of Armament Engineers (a title bestowed upon project managers). They are all drawn from "one of the Grandes Écoles, preferably the most desirable of them all, the École Polytechnique".²⁰ The École Polytechnique, set up in 1794, is functioning under the Ministry of Defence since 1970.²¹ It has no precise comparable institution anywhere else in the world. It may be noted in this context that the US, which has the largest number of procurement officials (more than 150,000²²) in the world, is struggling to attract the best talent. As one analyst puts it by way of a caution to the US government, the recruitment from the best Grandes Écoles is something "comparable to restricting recruitment of procurement officials to the graduates of a handful of engineering schools such as MIT and Caltech",23 two of the finest American technical universities in the world. For France, however, recruiting the best talent is not an end by itself. The DGA develops their "expertise through assignments in Industry and by appointing them to the same programme for many years."²⁴ On an average, a programme manager, who rises to that post after having 15 to 20 years of experience, is usually given a four-year tenure on a particular assignment.

It is the technical and professional competency of the corps of Armament Engineers that has played the most significant role by way of formulating a "coherent administrative system" that paved the way for what analysts term the "golden age of the French military-industrial complex".²⁵ It took only 20 years for them to set the foundation for France to establish a strong and internationally competitive defence industry. More creditably, the establishment of a vibrant industry took place under "little public

¹⁷ Ethan B. Kapstein and Jean-Michel Oudot, "Reforming defence procurement: lesson from France," *Business and Politics*, Vol. 11, Issue 2, 2009, p. 10.

¹⁸ U.S. Congress, Office of Technology Assessment, Lessons in Restructuring Defense Industry: The French Experience – Background Paper, OTA-BP-ISC-96, June 1992, p. 11.

¹⁹ DGA, "The DGA Missions," http://www.defense.gouv.fr/dga/la-dga2/missions/presentation-de-la-direction-generale-de-l-armement.

²⁰ Kapstein and Oudot, "Reforming defence procurement: lesson from France", Note 17.

²¹ École Polytechnique, "Key Dates," https://www.polytechnique.edu/en/1958totoday. In addition to École Polytechnique, the DGA also supervises three other engineering schools: ENSTA Paritech, ISAE and ENSTA Bretagne. See DGA Activity Report 2011, p. 19.

²² Defence Acquisition University, "Fast Facts," http://www.dau.mil/aboutdau/pages/fastfacts.aspx

²³ Ethan B. Kapstein, "Smart defence acquisition: learning from French procurement reform", Center for a New American Security, Policy Brief, December 2009.

²⁴ Ibid.

²⁵ Lundmark and Giovachini, "The development of the French defence industry in the 20th Century", Note 9.

opposition",²⁶ indicating public acknowledgement of the DGA's integrity in handling a sector like the defence industry, which is generally riddled with many controversies. It is also to the credit of these engineers that the French government was largely successful in containing the weapons programme in the post-Cold War era of dwindling defence spending. The DGA's spectacular success in managing the weapons programme within the stipulated budget in the aftermath of the Cold War is something that deserves special mention.

At the height of the Cold War, the defence departments of many countries such as the US and France had moved away from Fixed Price (FP) contracting to Cost-Plus (C+) contracting. In an FP contract, the vendor agrees to supply specified goods in certain quantity and quality at a predetermined price. In a C+ contract, in contrast, the vendors' profit margins are directly proportional to the production-related costs. Despite its many advertised "benefits", in the C+ system the vendors have little incentive to control the production cost or have the incentive to inflate it so as to maximise profit. In the French experience, this led to cost overruns of many a weapons programme, seriously cutting into the overall procurement budget. The problem of cost overruns was compounded in the aftermath of the Cold War by a sharp reduction in defence expenditure.

Between 1990 and 1997, the French procurement budget fell by more than 20 per cent, with the government halting several programmes and reducing the budget of some others.²⁷ Faced with the tightening budgetary situation, DGA officials devised an innovative solution to arrest cost overruns in many high-profile programmes. Instead of C+ contracts, the DGA returned to FP contracting but with a "distinct Gallic twist".²⁸ The new method of contracting came to be defined as "Responsibility Principle".²⁹ In essence, it "means that those who are responsible for failing to meet contractual obligations, whether government or industry, must generally pay the costs."³⁰ This required a great deal of investment on understanding the complexities of the projects and mitigating the risk factors *ex-ante*. The new model was a great success in limiting cost overruns. As clearly brought out by Kapstein and Oudot, in 48 contracts³¹ signed during 1994-2005 by the DGA with 18 firms, the average cost overrun was a mere 4.5 per cent. The significance of this cost overrun is gauged by the authors by contrasting it with an average cost overrun of 26 per cent as reported in several weapons programmes undertaken by the US Department of Defense.³²

The DGA's success in limiting cost overruns can be attributed to the project managers' technical capability in anticipating the risks ex-ante and devising the contract suitably. The robustness of the contracts can be seen from the very few changes made to them

32 Ibid

²⁶ Ibid.

²⁷ Kapstein and Oudot, "Reforming defence procurement: lesson from France", Note 17.

²⁸ Ibid

²⁹ Ibid

³⁰ Ibid

³¹ Ibid. These 48 contracts were for 47 major weapons programmes (two contracts pertained to one programme), costing, on an average, €134.7 million each. The contracts varied from development of new hardware to upgrades of existing platforms.

after they were signed. In total, 133 deviations were reported in 48 contracts, representing, on an average, 2.5 deviations per contract.³³

A third feature of the French system is its mature and robust procurement process. The procurement process gets its direction and overall guidance from the national security objectives as enunciated in the defence white paper, which has been periodically announced since 1972. The fourth of the series was announced in 2013 by the administration of President Hollande. The latest white paper sets out the three clear strategic priorities (protection, deterrence and response) besides laying down the force structure and quantum of resources that would be available.³⁴

From the defence white paper follows the *Projet de Loi de Programmation Militaire* (LPM), the six-year military expenditure plan. The LPM is approved by the National Assembly and Senate and therefore enjoys a degree of legislative sanctity. The latest LPM for the years 2014 to 2019, announced in August 2013, envisages a total expenditure of \notin 190 billion, of which \notin 102.7 billion is earmarked for the French defence industry.³⁵ The LPM also covers new programmes to be launched and the priorities for the defence procurement authorities.³⁶

The procurement projects included in the LPM are selected through a rigorous process undertaken under the supervision of the Chief of Defence Staff (CDS). The projects are selected keeping in view the country's budgetary constraints and defence requirements as a whole. The individual services are nevertheless invited to articulate their requirements, but the final decision rests with the CDS. For instance, in a recent development, the air force's projected requirement of 20 multi-role tanker aircraft was reduced to 14 by the CDS through a scientific calibration that took into account the threat scenario and the superior capability of the new platform over the ones being replaced.³⁷ In its assessment of final requirements, the CDS was amply supported by the designated DGA-owned laboratories which are used for simulation purposes.

In the French scheme of things, the operational requirements are expressed by the CDS. Once those requirements are expressed, the DGA constitutes an Integrated Programme Team (IPT), which then becomes responsible for the acquisition tasks that include defining technical specifications and managing contracts with the industry for realisation and eventual deployment into active service. In its acquisition task, however, the DGA/IPT is assisted by the Ministry Investment Board (MIB), a high-level decision-making body chaired by the Defence Minister. In discharging its functions, the MIB is assisted by two sub-committees, one consisting of members from the armed forces and the other specialists from the DGA. The former is "charged with advising on capability needs", whereas the DGA committee is responsible for "commenting upon whether

³³ Ibid

³⁴ French White Paper on Defence and National Security 2013.

³⁵ The spending plan has further been revised upward by an addition €3.8 billion. See Guy Anderson, "French Senate Committee clears revised Plan," *Jane's Defence Industry*, 24 June 2015.

³⁶ Nicholas de Larrinaga, "France outlines Eur190 billion in defence spending," Jane's Defence Industry, 2 August 2013.

³⁷ Interview with a French defence official who had earlier worked in DGA, New Delhi, August 2016.

programmes can be delivered in the timescales and the budget available".³⁸ This arrangement makes the minister-led MIB responsible for "trading off aspirational objectives against practical concerns".³⁹

A typical equipment acquisition process goes through six distinct stages, as shown in Figure 3. The MIB is responsible for taking decisions at five different stages, beginning with a decision to select from among various alternatives to meet a particular capability gap. Post vetting of Orientation (in which a feasibility study is undertaken to identity the right solution to a particular capability gap), the IPT assumes full responsibility for project delivery. It is the IPT which is at the heart of the DGA's success in effective project management. Being a multi-disciplinary body, the IPT draws its technical, contractual and management experts from the vast pool of expertise both from DGA and the armed forces. For military personnel, entry into the IPT is not an ordinary posting to be determined by the services themselves. Every entry is based on merit and through a rigorous competitive process. Although uniformed personnel do not stay longer, unlike the DGA's own staff, they are nonetheless encouraged to stay and even granted in-situ promotion while remaining in the DGA. The whole approach is to manage the weapons programmes with upmost professionalism, the hallmark and secret of the French defence acquisition system.

What Can India Learn from the French System?

France's success in devising a sound domestic-industry-driven procurement system has much to offer to a country like India, which has been struggling for long to achieve the same objectives. Some of the lessons that India can borrow from the French system are elaborated below.

The biggest lesson that India can borrow is France's integrated and centralised procurement structure, which has the dual responsibility of arms acquisition and defence industrial development. The French understood the crucial linkage between these two functions and combined them by creating the DMA/DGA in 1961, which proved its mettle by establishing a robust procurement structure and an internationally competitive arms industry.

³⁸ Review of Acquisition for the Secretary of State for Defence: An independent Report by Bernard Gray, p. 222

³⁹ Ibid, p. 223.



Figure 3. French Defence Acquisition Process

Source: Review of Acquisition for the Secretary of State for Defence: An Independent Report by Bernard Gray, p. 222.

Creating a DGA-like structure in India would mean combining several functions currently undertaken by different agencies such as the service headquarters (responsible for defining the technical features of weapon systems and undertaking trial evaluation), Director General Quality Assurance (quality assurance), the office of DG (Acq) (contract negotiation) and Department of Defence Production (industrial development) and DRDO (sponsoring research on futuristic technology) under one administrative head. Creating such an agency is, however, likely to face stiff resistance, as happened in France. Overcoming such resistance, however tough, is necessary for the long-term benefit of expeditious acquisition while promoting defence industrial development holistically.

An equally important lesson is about the professionalism of the acquisition cadre. Unlike France, India does not have any dedicated engineering colleges under the control of the MoD nor does it have a system of hiring outside experts to deal with acquisition. Functionaries are drawn from the civil bureaucracy and from the armed forces. More often than not, they lack experience in acquisition matters, let alone an opportunity to develop an in-depth understanding of the complex legal, contractual and technical matters because of their short tenure in office. Such lack of professionalism may prove a big hurdle in spearheading the Make in India initiative, under which the MoD intends to award big contracts to the local industry under preferential terms and under the crucial "Make" procedures. Unlike the direct purchase contracts (which was the norm till recently), the contracts on preferential terms and of "Make" nature would involve a lot more risk assessment ex-ante, which can only be undertaken if the functionaries involved are real professionals. Keeping this in view, the government may consider the creation of a dedicated acquisition cadre in the various acquisition disciplines.

Last but not least, India has a lot to learn from France's robust procurement process which is characterised by a clear articulation of national security objectives, approved procurement and investment plans, and avoidance of wasteful and costly procurement. Unlike France, India does not produce a defence white paper nor does it have a CDS as an arbitrator of the military requirements of the nation as a whole. This has resulted in individual services articulating their own versions of threat perceptions and devising their own procurement plans without giving much attention to the other services' requirements. The lack of jointness among the plans has resulted in ad hoc procurement and at times duplication of capability creation. This is undesirable not only from the point of view defence preparedness but also from the perspective of managing scarce resources.

In the light of the foregoing discussion, the following need to be considered:

- Integrate the procurement and acquisition functions under one administrative head.
- Create a dedicated professional acquisition cadre to bridge the knowledge asymmetry between government and industry.
- Create the post of CDS as the focal point for drawing up a consolidated procurement plan for the defence and security forces.

Annexure

Functions of Directorates and Other Organs of DGA

Inspection

- Leads administrative enquiries and audits linked with DGA operations
- Participates in the collective and individual management of executives
- Advises on pyrotechnical and munitions security
- Acts as nuclear security as well as biological and chemical security inspector

Operations Directorate

- Leads science and technology projects, armament equipment programmes
- Elaborates acquisition strategies and implements them within industry
- Sets up initial maintenance of armament programmes

Strategy Directorate

- Prepares for the future and ensures the overall consistency of the armament operations and defence system
- Contributes to the launching of new armament operations; steers, plans and assesses R&D activities
- Maintains and develops the defence industrial and technological base, leads the implementation of the SME defence pact
- Exercises control over ONERA, CNES, Saint-Louis Institute, coordinates strategy and actions related to space and security

International Development Directorate

- Strengthens bilateral defence armament relationship
- Promotes defence equipment exports
- Leads international cooperation for armament and coordinates government support in this area, in close relationship with defence and diplomatic staffs
- Manages control procedures for exportation

Plans, Programmes and Budget Directorate

- DGA-led programmes budget
- Verifies the consistency of the budget with the physical contents of operations
- Implements general, analytical and management accounting procedures

Human Resources Directorate

- Responsible for the DGA's personnel and payroll, pilot trades and professional careers, provides training and monitoring of the senior management actions
- Pilots and implements social support devices, animates and coordinates labourmanagement dialogue

• Carries on the administrative supervision of the engineers' schools under the supervision of the Ministry of Defence

Modernisation and Quality

- Leads the DGA's modernisation within the framework of reforms led by the Ministry of Defence
- Coordinates the management of the sites and the actions of general operating support
- Coordinates the process of approach of improvement, internal quality and process control
- Defines the strategic orientations for administration and management information systems
- Is responsible for the quality of systems and equipment delivered to the Armed Forces

Defence and Information Security

- Develops, implements and controls the application of the rules related to the protection of classified and sensitive information and IT system security within DGA and defence industries
- Provides trainings about defence security and IT security

Communications

- Supports change management process within DGA and with its partners
- Manages all communication projects, in cooperation with the Ministry of Defence communications team

Armament Gendarmerie

• Provides protection and security of DGA installations and personnel as well as protection of defence secrets

About the Authors



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