Vulnerabilities in the Capital Acquisition Processes

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From the stage of inception of a procurement proposal till the signing of the contract, the Ministry of Defence (MoD) diligently follows a fairly elaborate procurement procedure for capital acquisitions, as also for revenue procurements.[1] The purpose of laying down a procedure is to minimize discretion and bring in transparency at every stage to eliminate the possibility of undue influence on decision making. But this does not seem to have worked very well for the MoD as instances of corruption keep surfacing every now and then.

While human ingenuity can breach the best of the procedures, every transgression raises the question whether some lacuna in the procedure made it easy for the transgressors. Prima facie, there are no palpable lacunae in the procedure which the unscrupulous elements could take advantage of. The procedure for capital acquisitions is laid down in the Defence Procurement Procedure (DPP). The first DPP was promulgated by MoD in 2002. Since then, it has been reviewed six times in 2005, 2006, 2008, 2009, 2011 and, lastly, in 2013. It would be astounding if some procedural lacunae still persist after so many reviews. That, of course, begs the question as to why then the transgressions keep taking place.

It must be noted that most of the allegations of corruption since the promulgation of the DPP in 2002 do not relate to capital acquisitions made as per the procedure laid down in that DPP and its subsequent

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editions. But two recent cases, one involving the sourcing of Tatra trucks for the Indian Army from Bharat Earth Movers Limited (BEML) at an exorbitant price and the other concerning allegations of corruption in purchase of VVIP helicopters from AgustaWestland, have focused the attention on the susceptibility of the procedure to manipulation.

An erudite investigative report on corruption in defence deals shows that at the root of most of the scams are the middlemen.[2] Their modus operandi is to influence the decision making at various stages of the procurement procedure, and also provide to the vendors what could loosely be described as 'intelligence' about what is going on in the decision-making circles. The question is whether there is something in the procurement procedure which makes it possible.

The procedure begins with initiation of a procurement proposal and travels through various stages, such as formulation of Services Qualitative Requirements (SQRs), Acceptance of Necessity (AoN), solicitation of offers through Request for Proposal (RFP), technical evaluation, field evaluation, staff evaluation, commercial negotiation by the Contract Negotiation Committee (CNC), and approval of the competent financial authority before signing of the contract.[3] Whatever one may say about the procurement procedure being complex and cumbersome, none of these stages in the long-drawn-out procurement procedure appear dispensable.

The problem does not seem to be with the procedure per se, but with the processes associated with some of these stages. These processes need to be followed to cross over to the next stage. Some of these processes are well defined but there are a few stages in which the processes suffer from lack of clarity, rendering those stages vulnerable to manipulations.

The AoN stage falls in the former category. Every procurement proposal has to be initiated for obtaining the AoN using the standard format of the Statement of Case (SoC) prescribed in the DPP.[4] The process is so elaborate and involves examination by so many people from various departments that it cannot be easily manipulated. But not every stage is so secure.

A quick look at the past transgressions shows that there are three major stages in the procedure which are potentially vulnerable to undue influence and manipulation because of the infirmity of the processes associated with them. These stages are: formulation of the SQRs; field evaluation trials; and contract negotiation.

Formulation of The SQRs—The First Vulnerable Stage

Except for the cases under the 'Make' category, the acquisition process starts with the formulation of the SQRs.[5] According to the DPP 2013:

> 13. All Capital Acquisitions shall be based on Services Qualitative Requirements (SQRs). These SQRs should lay down the user's requirements in a comprehensive, structured and concrete manner. It should, however, be ensured that the SQRs are broad-based and realistic. As far as possible, SQRs should specify the requirements of military grade, ruggedized and Commercially Off the Shelf (COTS) items. The SQRs must express the user's requirements in terms of capability desired with minimum required verifiable functional characteristics and its formulation must not prejudice the technical choices by being narrow and tailor made.[6]

It is not easy to strike a balance between defining the requirement 'in terms of capability desired with minimum required verifiable functional characteristics' on the one hand, and specifying 'the user's requirements in a comprehensive, structured and concrete manner' on the other. It is equally, if not more, difficult to ensure that formulation of the SQRs does not 'prejudice the technical choices by being narrow and tailor made'. The contradiction between the need to define the requirement in terms of capability with minimum verifiable characteristics and specifying the requirement in a comprehensive manner is irreconcilable. Consequently, the tendency is to err on the side of caution and define the requirement in a very elaborate manner, sometimes going down to the component level of the equipment.

The problem with this extreme caution is that the SQRs may turn out to be too restrictive, limiting the competition and keeping a potential bidder out of the competition. On the other hand, if due caution is not exercised, the SQRs could turn out to be too generic, widening the competition to make a bidder eligible to compete, who would otherwise not have been able to bid had the SQRs been slightly different. Even a very small and seemingly insignificant feature of the SQRs could make this difference.

This has been highlighted by the Comptroller and Auditor General (C&AG) in its report on the acquisition of the VVIP helicopters. The report says:

> ....In the revised RFP of 2006, the mandatory SQR of altitude requirement was reduced to 4500 metre and a cabin height of at

> least 1.8 metre was introduced. While the mandatory requirement of minimum cabin height reduced the competition, the lowering of altitude requirement was against the inescapable operational requirement of 6000 metre. Even with the revision of the SQRs, the acquisition process again led to a resultant single vendor situation in 2010 and AW-101 AgustaWestland was selected.[7]

This observation tells a story different from what the MoD had to say in its press release of 14 February 2013.[8] According to this press release, since the earlier RFP had resulted in a virtual single-vendor situation, the operational requirement of 6,000 metres (m) was reduced to 4,500 m on the grounds that previously the Prime Minister and the President had rarely visited areas which required flying at an altitude beyond 4,500 m. This was pointed out by the principal secretary to the then Prime Minister in a meeting, in which the decision was taken to change the requirement of operational altitude to 4,500 m and to make the higher ceiling of 6,000 m as well as cabinet height of 1.8 m, desirable operational requirements. This was done because with these changes, several helicopters, which otherwise met all the requirements but had been rejected due to the altitude restrictions, were expected to become eligible for consideration.

The implication of the change in SQRs was that while with the former SQRs AgustaWestland did not qualify, with the revised SQRs it not only qualified to enter the competition but also went on to win the contract. This illustrates the quintessential point about the effect of SQRs on competition and eventual selection of the seller. The larger issue arising from this is whether the process of formulation and reformulation of SQRs is susceptible to outside influence?

There is a fairly long-drawn-out process for SQR formulation. The SQRs are put together by the users and brought before the standing Services Equipment Policy Committee (SEPC) of the service headquarters (SHQ) concerned. These committees, headed by three-star officers, have representatives of practically all the departments/organizations that matter: the Department of Defence Production; Defence Research and Development Organization; Director General of Quality Assurance/ Director General of Aeronautical Quality Assurance/Director General of Naval Armament Inspectorate; and the Directorate of Standardization. Representatives of other user directorates, Headquarters Integrated Defence Staff and the Capital Acquisition Wing, are also a part of this committee, which can also invite representative of any other department.[9]

Thus, a large number of personnel are involved in this multilayered process of SQR formulation. As in the case of the process related to AoN, it is inconceivable that they are collectively mesmerized into accepting SQRs formulated/reformulated under some outside influence. On the other hand, if despite this elaborate process, SQR formulation/reformulation continues to be susceptible to outside influence, as appears to be the case going by the VVIP helicopter saga, its efficacy needs to be reviewed.

Perhaps this problem has something to do with the task of SQR formulation being assigned to middle-level service officers, primarily trained in the art of warfare and other supporting tasks, being deployed on staff duties for short tenures. What makes the task more difficult for them is the absence of an established methodology for SQR formulation. No one knows what skills the personnel entrusted with the responsibility of SQR formulation must possess. Assuming that it is possible to develop a training module for the personnel involved in SQR formulation, their short tenures would negate any advantage accruing from training the personnel. To add to the problem, there is no dedicated organization to undertake this task and no continuity of the personnel involved in SQR formulation.

Quite often, the final SQRs are an amalgamation of the best features culled out from the responses to the request for information (RFI), glossy brochures and the Internet. This could result in formulation of highly ambitious SQRs with no existing product fitting the bill. This is perhaps also one of the reasons why, at times, all those who evince interest at the RFI stage do not respond to the RFP for the same equipment. This could also result in the best of the equipment being found to be technically non-compliant with the specified SQRs.

This is not a new issue. One of the suggestions often made in the past to improve the system of SQR formulation was that a specialized entity should be created for this purpose and that the SQRs should be finalized with greater participation of the industry in the process. But this suggestion does not find favour with the services as they are apprehensive of losing the final say in SQR formulation. Such apprehensions are unfounded as what is envisaged is professionalization of the task and not elimination of the services from the process of SQR formulation. The industry, which has to deliver what the services want, must also be involved in the finalization of the SQRs. This assumes greater significance

in the context of 'Buy (Indian)' and its variants now being made the preferred modes of procurement.[10]

The process of SQR formulation must be improved not only to prevent allegations of the SQRs being too restrictive, vendor specific or customized to make a particular vendor eligible, but also to ensure that these are practical, achievable and cost efficient. Sometimes, there is a huge time gap between formulation of the SQRs and the issuing of RFPs for the equipment. Because of change in technology or reassessment of requirement in the meantime, some changes in the SQRs may become necessary. The system must recognize the need for such bonafide alteration in the SQRs.

Field Evaluation Trials (FETs)—The Second Vulnerable Stage

The FETs of the equipment is an important stage in the procurement procedure. The trials are carried out as per the 'trial methodology', which is a part of the RFP. At the appropriate time, the SHQ concerned is required to formulate the 'trial directive' in conformity with the 'trial methodology', and also constitute a trial team. The FET report is then subjected to staff evaluation and it is only after acceptance of the staff evaluation report that the contract negotiations commence.[11]

The most significant aspect of the field evaluation process is the involvement of the vendors in the trials. The relevant provision in the DPP states:

> 37. ...After each stage of the trials, a debriefing of all the vendors would be carried (*sic*) in a common meeting (wherever feasible) as regards the performance of their equipment. Compliance of otherwise, vis-à-vis the RFP parameters, would be specifically communicated to all the vendors at the trial location itself. It would also be ensured that all verbal communication with the vendors is confirmed in writing within a week and all such correspondences are placed on file for record...[12]

The involvement of vendors in the process should prevent transgressions at the trial stage but, evidently, this mechanism is not foolproof. Quite recently, the Central Bureau of Investigation (CBI) registered a case against a brigadier for offering to manipulate the results of the trial of the Light Utility Helicopters (LUHs) for a price.[13] Since the trial is carried out by a team of officers, it is puzzling as to how one officer could have possibly manipulated the results. The allegation is also yet to

be proved in a court of law but the Italian investigators looking into the VVIP helicopter case claim to have found a document which shows that the officer had allegedly demanded a bribe to swing the contract in favour of the vendor. This clearly suggests that the trial process is vulnerable to manipulation. It is not to say that transgressions at this stage are frequent. In fact, in most of the cases, the trials are free from manipulations. An illustrious example is the controversy-free trials of the Medium Multi-Role Combat Aircraft (MMRCA). But apparently, the possibility does exist.

However remote the possibility of transgression at the trial stage may be, it is worrisome because of the high stakes that the vendors have in crossing this stage. This could potentially result in irresistible temptations on both sides. In the case of the LUH, the figure being mentioned in the press reports is €5 million for swinging the trial results. It is, therefore, important to review the trial process in its entirety to plug the loopholes, which the officer in the LUH case might have thought of exploiting when he allegedly demanded the bribe to tweak the trial results.

One such potential loophole is the absence of standard guidelines as regards rectification of deficiencies noticed in the course of the trials. Sometimes, the deficiencies could be on account of some damage suffered by the equipment while being transported for field trials. Should the vendors be given an opportunity to rectify the deficiencies? If so, how much time should be given? If such an opportunity is given to a vendor, is it fair to other vendors whose equipment is found to have no deficiency? What kind of deficiencies could be permitted to be rectified? What if the equipment meets the operational requirement but some of its features are not as per the SQRs? This can happen because of the technological changes between the time the SQRs are formulated and the fielding of the equipment for trials. Sometimes, this gap may stretch to several years. Should a distinction be made between minor and major deficiencies? If so, what will constitute a minor deficiency and what will amount to a major one? These are some of the questions that need to be asked and clear guidelines evolved, addressing all such issues, with a view to eliminating the possibility of transgressions at the stage of field trials.

Contract Negotiation—The Third Vulnerable Stage

The contract negotiation, which subsumes price negotiation, is carried out with reference to the benchmark price arrived at before opening of

the commercial offers. Determining the benchmark is never an easy task. One of the issues raised by the C&AG in the report on acquisition of helicopters for VVIPs concerns benchmarking. According to the report: '...The benchmarked cost adopted by CNC was unreasonably high compared to the offered cost. Hence it provided no realistic basis for obtaining an assurance about the reasonableness of cost of procurement of AW-101 helicopters.'[14]

While it is easy to dismiss the observation about unreasonableness of the benchmark price as a result of hindsight, the fact that the kickback in the VVIP helicopter deal allegedly involves 10 per cent of the contracted price indicates that something went wrong in the process of benchmarking, because it is perplexing how the vendor was able to include such a substantial cushion in the offered price in a competitive environment and get away with it despite all the benchmarking.

This is not a one-off problem. Even if there are no specific allegations, there is a lingering feeling that MoD always ends up paying high prices in almost all the cases. This feeling has grown because of the institutional weakness in the MoD with regard to costing. The initial costing of every procurement proposal is done by the SHQ concerned and a brief mention of the estimated cost is made in the SoC based on which the proposal meanders through various committees till the stage of AoN. There are no standard guidelines for working out the estimated cost and no common databases are maintained by anyone. The personnel responsible for costing are not specialists trained for the purpose. Consequently, there is no methodological uniformity in estimating the cost of acquisition proposals.

The estimated cost is required to be vetted by the Finance Division, which suffers from the same handicap. There is an Advisor (Cost) with the Financial Advisor (Acquisition) in the Capital Acquisition Wing. The Advisor (Cost) is normally an officer from the Indian Cost Accounts Service. But a single cost accountant cannot cope with the multiple tasks, ranging from vetting of the estimated costs to attending the CNCs. Moreover, costing of defence equipment is very different from costing of other products. Even a cost accountant needs to specialize in costing of defence equipment.

This exercise is repeated before opening of the commercial offer to work out a reasonable price as the benchmark for negotiation with the vendor. The same systemic problems arise at this stage also. It is for this

reason that the quoted prices are often quite different from both the price estimated at the initial stage and the reasonable price worked out as a benchmark. According to the C&AG's report, the initial estimation for procurement, the reasonable price worked out by the CNC and the quoted price were INR 793 crore, INR 4,877.50 crore and INR 3,966.00 crore, respectively.[15] The reasonable price and the quoted price were thus more than six times and almost five times respectively of the initial estimate of acquisition.

The passing references in the DPP regarding benchmarking are of little help. Here is a sample of the provisions in the DPP:

> 51. ...In all cases, CNC should establish a benchmark and reasonableness of price in an internal meeting before opening the commercial offer.
>
> 53. ...For certain category of items, where orders have been placed in the past or involves invoking of the Option Clause, there could be downtrend of process since the last contract. It would thus be necessary for the CNC to verify that there has been no downward trend since the last purchase and this would have to be kept in mind while arriving at the prices.[16]

The DPP does not tell you how exactly these tasks are to be performed. The estimated price could be based on the last purchase price (LPP), but if the LPP is several years old, it has to be adjusted for inflation. What rate of inflation is to be applied and which indices are to be used? From which source is the data to be obtained? If there is no LPP, the reasonable price is arrived at through the process of Professional Officers' Valuation (POV), but its methodology is not prescribed. There is also lack of clarity as regards life-cycle costing. These are very basic issues. Without addressing these questions, it is highly ambitious to think about introducing life-cycle costing, which presents a totally different set of methodological problems. Costing is a complex and specialized task. Presently, it is one of the weakest links and a highly vulnerable stage in the entire procurement procedure as it introduces an element of uncertainty at the contract negotiation stage.

When the Capital Acquisition Wing was set up in MoD in 2002, it was envisaged that it would have a Directorate of Management Information System, a Cost Accounting Cell and provision for obtaining legal advice.[17] None of this has materialized, except for posting of a lone Advisor (Cost). No wonder costing, whether at the initial stage or at the

time of establishing the benchmark price, continues to be one of the most vulnerable links in the chain.

Summing Up

The focus of all DPP reviews so far has been primarily on simplification of procedure and making it impermeable to transgressions. The need now is to focus on the processes associated with each stage and to make them impermeable also.

This is necessary because experience shows that processes associated with at least three stages in the procurement procedure are potentially vulnerable to transgressions. These stages are: SQR formulation stage; the field evaluation stage; and the commercial negotiation stage. The vulnerabilities discussed in this article may not be the only ones. It is also possible that the processes associated with some other stages have similar vulnerabilities. These need to be discovered through an empirical study.

The problems associated with the process of SQR formulation have been examined in the past and suggestions have been made to improve the process by creating a professional organization to do the job and a closer association with the industry. The process of conducting field trials could be refined by laying down detailed guidelines to cover the issues, mentioned earlier in this article, on which there is lack of clarity. For improving the processes related to commercial negotiation, the MoD needs to implement the decision taken in 2002 to set up the Directorate of Management Information System and a Cost Accounting Cell. The need for imparting training in the art of negotiation needs to be considered seriously. There could be many other possible solutions, which will emerge once the MoD decides to look into these issues. In fact, there is a need to re-activate the proposal to set up a Defence Acquisition Institute so that the whole business of acquisitions is conducted more professionally.

But none of this is likely to work unless the MoD makes the entire procedure more transparent and the vendors do not have to depend on the middlemen to get the information they should be able to get legitimately directly from MoD. This may not render the middlemen completely jobless, but it will go a long way in reducing their influence on decision making and their utility as peddlers of the 'inside' information.

Notes

1. This article is only about capital acquisitions as per the Defence Procurement Procedure (DPP).
2. Deshpande, Toral Varia, 'Boomtown: Can Anything Put India's Defence Middlemen Out of Business?', *The Caravan*, 1 September 2013, available at http://caravanmagazine.in/reportage/boomtown, accessed on 15 February 2014.
3. MoD, *Defence Procurement Procedure 2013*, chapter 1, para 12, available at https://mod.nic.in/writereaddata/DPP2013.pdf/, accessed on 15 February 2014.
4. Ibid., chapter I, paras 18–20.
5. The SQR is a generic term. The specific terms used by the Army, Navy, Air Force and Joint Staff are General Staff Qualitative Requirement (GSQR), Naval Staff Qualitative Requirement (NSQR), Air Staff Qualitative Requirement (ASQR) and Joint Staff Qualitative Requirement (JSQR) respectively.
6. Ibid., chapter I, para 13.
7. *Report of the Comptroller and Auditor General of India on Acquisition of Helicopters for VVIP*s, No. 10, point 15, 2013, available at http://saiindia.gov.in/english/home/Our_Products/Audit_Report/Government_Wise/union_audit/recent_reports/union_compliance/2013/Defence/10of2013.pdf, accessed on 15 February 2014.
8. MoD's Press release, 14 February 2013, available at http://pib.nic.in/newsite/erelease.aspx?relid=92237, last accessed on 15 April 2014.
9. MoD, *Defence Procurement Procedure 2013*, chapter I, para 14.
10. *Defence Procurement Procedure 2013* has laid down a hierarchy of procurement categories, starting with 'Buy (Indian)' as the most preferred category, followed by 'Buy and Make (Indian)', 'Make (Indian)', 'Buy and Make' and 'Buy (Global)' in descending order of preference. Under 'Buy (Indian)' category and its variants, only Indian companies can participate in the acquisition.
11. For a detailed account of the procedure, see ibid., chapter I, paras 37–44.
12. Ibid., chapter I, para 37.
13. 'Helicopter Purchase: CBI Registers Case against Brigadier for Fudging Trial Records', *The Indian Express*, 5 January 2014, available at http://indianexpress.com/article/news-archive/web/helicopter-purchase-cbi-registers-case-against-brigadier-for-fudging-trial-records/, accessed on 15 February 2014.
14. *Report of the Comptroller and Auditor General of India on Acquisition of Helicopters for VVIP*s, point 15.

15. Ibid., point 9.
16. MoD, *Defence Procurement Procedure 2013*, chapter I, paras 51, 53.
17. MoD Order No. A-11015/2/2001-D (Est./Gp.I), 7 August 2002.