Chapter VI: Price Discovery Process for Procurement

6.1 Background

To achieve the best price in competitive tendering, open and competitive tendering is the *sine qua non*. Dependence on the limited tender, cartelization, lack of independent assessment of the reasonableness of pricing and very high delegation among different levels of officials in an environment which has little internal control have created a situation in the Ordnance Factories in which the possibility of a fair price through competitive bidding was remote. During audit, a large number of cases were seen where the prices have been manipulated and the officials had not taken any effective action to ameliorate the situation. This has emerged as the fundamental flaw in the system.

Paragraphs 6.18 and 6.18.1 of MMPM lay down the elaborate guidelines to determine the reasonableness of prices for procurement in case of competitive tendering where two or more suppliers are competing independently to secure a contract. The Manual envisages that the reasonability of price proposed has to be established by taking into account the competition observed from the responses from the trade, last purchase price, estimated value, database maintained on costs based on past contracts entered into, market price wherever available, changes in the indices of various raw materials, electricity, wholesale price index and statutory changes in the wage rates etc.

Para 6.18 (e) also required that the reasonability of price be examined by resorting to Cost analysis in situations where there is wide variance over the Last Purchase Price (LPR) not explained by corresponding changes in the indices.

Further, as per Paragraph 9.17 of MMPM, OFB was to make arrangement for data base on past contracts showing details of the items procured, their essential specifications, unit rate, quantity, total value, mode of tender enquiry, number of tenders received, number of tenders considered acceptable, reasons for exclusion of overlooked tenders, un-negotiated rates of L-1, and contract rates were to be maintained to help in ascertaining reasonability of price of future procurements. The data in respect of supply orders in excess of Rs 20 lakh was to be made available in

OFB website for information of all Factories. Further, as per the Manual, database maintained on costs based on concluded contracts, prices of products available through market should also be used to assess reasonableness of prices offered.

It was noticed during audit that neither the Factories nor OFB had maintained any database as per the Manual. The Factories do not have any database of the estimated cost of the stores procured or the prices of the product available through market. The various TPCs determined the reasonability of the rates with reference to the last paid rate (LPR) only.

In most of the Factories, LPR was the main index to assess price reasonableness. There was no cost expert either at the OFB level or at the factory level. In one or two Factories rudimentary efforts were made in a few cases to independently arrive at an estimate.

Ministry while noting the observations of Audit stated that OFB's procurement manual was under revision.

6.2 Proactive initiative by factory officials to help a particular supplier

Case 1

L1 Overlooked

Engine Factory Avadi issued a tender enquiry in May 2007 for supply of 1364 number of Connecting Rod for manufacture of engines for tanks. Echjay Forgings offered a unit rate of Rs 2269 for the full supply. The total cost would have come to Rs 37,13,108. Second lowest offer of T S Kissan was of unit rate of Rs 1999 for 450 Units and Rs 2450 for the remaining 914 Units with a total cost of Rs 37,65,819**.** The factory asked T.S. Kissan whether it could supply the entire quantity at the unit rate of Rs 1999. The firm accepted and the supply order was placed in August 2007. Echjay Forgings was not issued any counter offer. The firm's unilateral counter offer of Rs 1999 per unit for the full supply was treated as "unsolicited offer" and hence was not considered. Firms quoting a higher rate coupled with their readiness to lower the price significantly would indicate that the rates were inflated.

Ministry replied that disciplinary action would be initiated against the officers responsible for irregular acceptance of higher offers.

Case 2

Undue favour to a private firm

Ordnance Parachute Factory Kanpur issued a two bid open tender enquiry for 192 High Speed Single needle Lock Stitch Industrial Sewing machines. The last date for purchase of tender documents was 13 September 2005 and due date for opening of the technical bids was 6 October 2005

The factory received a letter dated 17 September 2005 from Star International Pvt Ltd. It enclosed a demand draft dated 21 September 2005 of Rs 200 and requested to issue tender forms to the firm. Obviously the letter was backdated and the factory officials did not take any notice of it. As a special case, GM on 22 September 2005 authorised issue of tender documents even though the last date for issuing tender documents had already expired.

In the original tender enquiry, 8 brands of sewing machines were mentioned as "Make acceptable". In a meeting on 29 September 2005, a committee of senior officers constituted by Additional DG, OEF reviewed the aspect of introducing new brands. One of the brands introduced was "Golden Wheel".

When the bids were opened, it was seen that the tender submitted by Star International Pvt Ltd had quoted for the brand "Golden wheel" in its bid dated 28 September 2005. After opening the price bids, it was seen that the rate quoted by the firm was the lowest. Supply order was placed on Star International Pvt. Ltd. Kanpur at the cost of Rs. 65.76 lakh.

Obviously, the factory officials knew that the firm had quoted the brand Golden Wheel, which otherwise was supposed to be secret. The factory took elaborate measures like forming committees to consider post tender issues, but all decisions eventually helped the supplier. This is a clear case of tender process being manipulated to favour a particular supplier.

Ministry informed that disciplinary action would be initiated against those responsible for issuing tender forms after the last date and manipulating the tender process.

6.3 Assessment of reasonability of price absent

Case 1: Wide price variation under LTE and OTE by the same supplier

Ordnance Clothing factory Shahjahanpur issued an OTE in November 2008 and LTE in March 2009 for procurement of Shirting Angola. The OTE was a two bid tender whereas the LTE was a single bid one. In response to the OTE, eight firms responded. The LTE was issued to six firms and five responded. Three firms were common to both OTE and LTE.

Price bids of seven firms received under OTE were opened on 15 April 2009. The price bids of five firms received under LTE were opened on 28 April 2009. Under the OTE channel, Essma Woolen emerged as L1 at Rs 138.40 per metre whereas against the LTE channel, Bansal Spinning Mills emerged as L1 at Rs 159.80 per metre. The supply orders were placed on Essma Woolen on 23 April 2009 for 75036 metres at the rate of Rs 138.40 per metre and on Bansal Spinning Mills and OCM India Limited at the rate of Rs 152.50 for 2,23,586 metres. The difference in amount between the OTE and LTE rate was Rs 31.53 lakh for the volume ordered under LTE channel.

This case indicated:

(a) The number of suppliers responding to OTE was more than the number to whom LTE were issued;

(b) Three firms were common to both OTE and LTE;

(c) Same firms quoted lower rates for OTE than for LTE. For example, Bansal quoted Rs 144.45 per metre under OTE. Essma quoted Rs 138.40 per metre under LTE;

(d) The Tender Purchase Committees who considered both the cases and in which many members were common was aware of the most recent rate of Essma under OTE but did not consider the same for negotiations. It considered the Last Purchase rate of LTE which was one year old.

Ministry replied that the Factory resorted to OTE as there was only one established firm. Normally OTE takes long time to finalize as capacity verification was to be done for new firms. Before OTE case could be decided, further requirement arose and relevant TPC found that by that time capacity verification of 5 more firms have been completed and they were found to be complying with composite mill status.

Ministry's reply pointed towards the inherent weaknesses in the procurement system. It was not clear why the capacity verification could not be done earlier.

Case 2: Cartel among suppliers helped to manipulate prices across Factories

Containers with disc required for 81 mm bomb were being procured by Ammunition Factory Kirkee, Ordnance Factory Dehu Road and Ordnance Factory Chanda. The rates at which the Factories procured this item in different years are given below:

Table 2: Procurement of Container with Disc Different Price in Different Factories

Year	Name of Ord. Factory	Name of Firm	Rate	Qty (Nos.)	Total Value (Rs. In lakh)
2005-06	AFK	Sheth & Co.	13.15	283200	37.24
		Vee Kay Enterprises	13.15	283200	37.24
		Sai Industries, Pune	13.15	283200	37.24
		Shree Polymers	13.15	283200	37.24
		Mac. Polymers	13.15	283200	37.24
	OFDR	Sheth & Co.	15.90	52850	8.40
		Vee Kay Enterprises	15.90	52850	8.40
		Sai Industries, Pune	15.90	52850	8.40
		Shree Polymers	15.90	52850	8.40
		Miltech Industries Pvt. Ltd.	15.90	52850	8.40
		Nityanand Udyog Pvt. Ltd.	15.90	52850	8.40
	OFCH	Sheth & Co.	14.57	97500	14.21
		Vee Kay Enterprises	14.57	97500	14.21
		Shree Polymers	15.90	294775	46.87
2006-07	AFK	Sai Enterprises	16.55	637317	105.47
		Sai Industries Pune	16.55	355798	58.88
		Sheth & Co.	16.55	481285	79.65
	OFDR	Sai Industries Pune	16.55	281520	46.59
	OFCH	Nityanand Udyog	16.55	671646	111.15
		Miltech Industries	16.55	646646	107.02
		Sheth & Co.	16.55	195040	32.27
		Vee Kay Enterprises	16.55	796646	131.84
2007-08	AFK	-	-	-	-
	OFDR	-	-	-	-
	OFCH	Sai Industries	6.24	1067512	66.61
		Shree Polymers	6.24	640507	39.97
		Sai Enterprises	6.24	427004	26.64
2008-09	AFK	Shree Polymers	6.24	203000	12.66
	OFDR	Sai Industries	6.24	140086	8.74
		Sai Enterprises	6.24	420261	26.22
		Narendra Explosive Ltd.	6.24	70380	4.39
	OFCH	Sai Trading	14.75	530538	78.25
2009-10	OF CH	Sai Industries	9.50	404111	38.39
		Shree polymer	9.50	242466	23.03
		Sai Enterprises	9.50	161644	15.36

As would be seen from the above table, the item was being procured by the three Factories at the rate of Rs 16.55 per item. It was seen in audit that in January 2008, three firms namely Sai Industries Pune, Shree Polymers Pune and Sai Enterprises Pune quoted all inclusive rates ranging from Rs 6.24 to Rs 6.60 in OFCH. The supply orders were finally placed by the factory on all the three at a rate of Rs 6.24 all inclusive. All the three firms were reported to be sister concerns. Eventually all the firms also completed the supply order. In the same month, in Ammunition Factory Kirkee, Shree Polymers quoted Rs 15.91 per piece. Co-ordination among the

Factories helped to discover the wide variation and most of the suppliers supplied at the reduced rate.

Against a limited tender enquiry issued by Ordnance Factory Chanda in September 2008, none of the above mentioned companies responded. The lowest quotation was that of Seth and Co, Mumbai at Rs 24.50. After price negotiations, the firm reduced the rate to Rs 15.75, a reduction of 35 *per cent*. The factory decided to re tender. Against retendering, three firms Nityanand Udyog, Seth & Co and Sai Trading Thane quoted the same rate of Rs 14.95 (all inclusive). After "prolonged" negotiations, the rates were reduced to Rs 14.75 (all inclusive) by Sai Trading, Thane.

Next year in 2009-10, the three firms namely Sai Industries, Shree Polymers and Sai Enterprises came back and quoted Rs 14.74 per item. It however came to light that these firms were supplying the same items to Ordnance Factory Dehu Road at Rs 9.50 per item. Against counter offer, the three firms accepted the rate and supply orders were placed on them.

The case illustrates the complete lack of transparency in pricing and the unwillingness of the factory officials in dealing with this in the absence of any mechanism of independently arriving at the reasonability of prices. Cartel among the suppliers also helped them to manipulate the prices of the item.

Case 3

Cartel formation in supply of magazine assembly

In Small Arms Factory Kanpur, a limited tender enquiry for Magazine Assembly (30 rounds) was issued in January 2007 to four firms namely Militech Industries, Nityanand Udyog, Sheth & Co and Ajit Chemicals. All the firms quoted the same rate of Rs 115.50 per Unit. The Last Purchase Rate for the item was Rs 115.50 in June 2006. The parties quoted exactly at the last Purchase Rate. The factory called all four firms for negotiations and all of them reduced prices by Re 1. Supply orders were placed on all four.

This case illustrates how in a system of limited tendering, a cartel can defeat the spirit of competition.

Ministry replied that the procedures and rules were followed in both letter and spirit.

Case 4: Lack of coordination in procurement of Nylon cord

Cord nylon OG 1785 N was procured by both Ordnance Equipment Factory, Kanpur and Ordnance Clothing Factory, Shahjahanpur. The OCFS have been procuring the item at rates of Rs 1.01 to Rs 1.30 per meter since 2004. However OEFC procured the item at rates from Rs 1.20 in 2004 to Rs 1.80 in 2008-09. Even the same supplier e.g. Viraj Sintex was supplying the same item to both Factories but at widely different rates.

Ministry stated in June 2010 that there was enough competition and the relevant TPC found the L1 price reasonable.

Case 5 Wide difference between the budgetary quote and tender quote against single tender

Larsen & Toubro Ltd Lucknow vide letter dated 20 June 2006 to Ordnance Factory Kanpur quoted price of Copper Welding Wire (Cupromig conforming to Mil-E-45829 A (MU) size 2.4 mm) at Rs. 975.00 per Kg. In July 2006, just after a month, against a single tender to the company, the same firm quoted the rate of Rs.1925 for the same item. The increase in the rates within one month worked to 97 *per cent*. The supply order for 210 Kg was placed on the firm in August 2006 at Rs 1925 totaling Rs 4.81 lakh. Subsequently OFC placed supply orders on single tender basis on Innovative Marketing Agencies (stockist of L&T) during the period between August 2006 and February 2008 at the rates given in the table. In comparison to the original price indicated in June 2006, the difference was Rs. 84.65 lakh as detailed in Table 3:-

Table 3: Different Rates for Copper Welding Wire

Sl. No.	SO NO.& Date	Qty (in Kg)	Rate in Rs. Per Kg	Rate quoted by the firm in 06/06 (in Rs)	Difference w.r.t rate in 06/06 (in Rs.)
1.	487 dt. 08-08-06	210	1925	975	950
2.	0168 dt. 24-05-07	360	2271	975	1296
3.	0456 dt. 22-08-07	1800	2292.34	975	1317.34
4.	0856 dt. 02-12-07	1800	2292.34	975	1317.34
5.	1195 dt. 22-02-08	450	2292.34	975	1317.34
6.	5128 dt. 06-02-08	1872	2292.34	975	1317.34

During the same period, the price of copper in international market fluctuated only by 10 *per cent*. The factory did not take any notice of the international price nor undertook any cost analysis before going for procurement of these items on single tender basis.

Ministry stated in June 2010 that the vendor had apologized for quoting inadvertently. Ministry also stated that it would be incorrect to state that the factory did not take any notice of the international price and the audit contention that international prices fluctuated by only 10 *per cent* was incorrect.

Ministry's replies are not borne by facts. Table 4 indicates the facts:

Table 4 Comparison of the rate quoted with LME rate of Copper in the same month:

SO No & Date	Rate quoted per Kg in Indian Rupees	LME Rate per tonne of Copper in US $ in the month of the SO	Exchange rate for Indian Rupee
487 dated 08 August 2006	1925	7695	46.95
168 dated 24 May 2007	2271	7682	41.08
456 dated 22 August 2007	2292.34	7513	40.79
856 dated 02 December 2007	2292.34	6587	39.60
1195 dated 22 February 2008	2292.34	7887	39.51
5128 dated 06 February 2008	2292.34	7887	39.51

The fact that the wide variation between the budgetary quote and the actual quotation was not even recognized by the factory till it was pointed out in audit is enough indication of the casualness with which the matter was dealt with. It also should be apparent that the prices quoted and paid had no relationship with the LME price. For example, the LME rate and exchange rate came down sharply between August 2007 and December 2007, but the prices paid by the factory remained the same.

Case 6: Transportation cost 70 *per cent* of consignment value and Loss of Rs. 56.91 lakh due to error of judgment

Ordnance Factory Khamaria issued in March 2007, a limited tender enquiry for procurement of 59,000 Kg of Propellant powder 5/7 for production of 23 mm Schilka APIT/HEIT ammunition. The quantity was calculated based on the requirement for OFK at 53924 Kg and for Ordnance factory Bolangir at 15,000 Kg with 25 *per cent* additional provision. Dues in and supply from another OF were calculated at 27,196 Kg. The Last Purchase Rate as per the Supply order dated 02 May 2005 was US $ 13.90 CIF.

On the day of opening of the tender on 15 June 2007, quotations from two firms namely Tasco Export Ukraine and Russian Tech Centre, Delhi were received. On the same date, one more sealed quotation of Kintex Bulgaria was available at the time of opening of the tender. The envelop of this quotation had two seals i.e. one received at GM's Secretariat from the firm at 1020 hrs on 15 June 2007 and another received at Gate No 1 of the factory on the same date at 1400 hrs. The tender was marked late and not opened.

A note was put up to GM for advice on whether to include the Kintex quotation in the present tender enquiry. In the noting it was stated that the fax quotation of Kintex Bulgaria was received in the factory well before the scheduled date and time of opening of tenders. The GM constituted a team of two officers to examine and submit the report by 18 June 2007.

The team submitted report on 18 June 2007 recommending to process the fax quotation in normal manner as regular tender received in time and suggested remedial measures for future.

Again, on the next tender opening day on 19 June 2007, it was noticed that one envelop from BBT Poland containing quotation for the same tender was there in the tender opening box. On this envelop, there was a stamp of receipt dated 9 June 2007. Hence it appeared that the tender was received well before the tender opening date and time. The General Manager constituted another team which recommended that this tender also should also be treated as a valid one. The quotation of BBT Poland was opened on 26 June 2007 and was included in the present tender enquiry.

Four firms quoted the unit rates of the item as under:

Table 5: Rates for Propellant powder 5/7

1	Kintex Bulgaria	US $ 12.10FOB; US $ 13.70 CIF
2	Tasko Export Ukraine	US $ 13.00 FOB; US $ 14.00 CIF
3	RTC New Delhi	1020.00 per kg. CIF Basis
4	B.B.T. Poland	US $ 22.27 FOB

The first meeting of the Tender Purchase Committee of the factory took place on 26 June 2007. It was decided that Supply Order be placed on FOB basis only and the transportation of the propellant could be arranged by SCI in normal manner. It was also decided that Ordnance Factory Bhandara should be consulted once again regarding the exact quantity that they would be able to supply. Ordnance Factory Bhandara informed that their production target has been revised and they would be able to supply 20000 Kg by February 2008, in addition to 13000 Kg already supplied. It further informed that another 27000 Kg of proof passed materials would be supplied by December 2007. Thus, the total requirement of the propellant as projected in the LTE would have been supplied by February 2008.

The TPC in its meeting on 24 August 2007 reduced the requirement to 20000 Kg and decided to place the order on Kintex Bulgaria on FOB basis. OFK placed the supply order for 20000 Kg of the item @ Rs.12.10 US $ on FOB basis on Kintex Bulgaria at the total contract value of US $ 2,42,000. The factory also had to spend Euro 1,08.000 for shipment of the item through Shipping Corporation of India. The firm was to supply the full quantity by December 2007. However, the propellant could reach the factory only in July 2008.

The case would indicate the factory was extremely casual about receiving and properly registering the tenders from the suppliers. The tenders were opened on three different dates, thus vitiating the process. The TPC despite knowing the fact that the LPR of May 2005 included the CIF rates and required quantity was drastically reduced due to increased intra factory supply by OF Bhandara, recommended FOB rates without verifying the cost of shipping. As later events would prove, the shipping cost that the factory had to bear was 70 *per cent* of the total cost of procurement.

Case 7: Similar case in OF Chanda

Similarly while importing 40000 sets of combustible cartridge cases filled for 125mm ammunition from Ukraine, Ordnance Factory Chanda suffered a loss of Rs 1.06 crore due to opting for FOB rate rather than the CIF rate.

Ministry stated in June 2010 that clause 7.5 of the MMPM stated that with a view to ensuring that the cargo was carried by Indian Shipping lines, import contracts should as a rule be made on FOB basis. It was mandatory on the part of the Factories to get their consignments transported through Shipping Corporation of India only.

Accordingly, contract was made on FOB basis and the consignments were transported through Shipping Corporation of India.

Ministry's contention was incorrect as OF Khamaria placed 11 supply orders during 2006-07 to 2008-09 on CIF basis. OF Chanda also placed three supply orders on CIF basis during this period.

Case 8: Unwanted airlifting of stores

An offer from M/s RBE, Russia was obtained in September 2006 for supply of 145 deficient items for assembly of the five T 90 tanks on CIP-Airport basis. OFB accorded sanction in January 2007 for the import proposal on CIP-Airport basis with a condition that contract should be concluded only if supply of the items could be completed by February 2007. Otherwise fresh offer from the firm on FOB-Seaport basis should be obtained and contract concluded.

As the firm refused to supply the items by February 2007, HVF obtained a fresh commercial offer from the firm in March 2007 for supply of 239 items. But the rates of the offer were on CIP-Airport basis even though HVF called for the rates on FOB-Seaport basis. As the rates quoted by the firm was considered very high, Chairman OFB constituted a Tender Purchase committee in March 2007 to negotiate the price and conclude a contract for product support required for T-90 tanks during 2007-08 and 2008-09. This committee consisted of five officers, which visited Russia in April 2007, negotiated and reduced the prices against only two items. Against, the offer received for 239 items to rebuild five CKD tanks only the prices of two items viz., Gear Box LH & RH was negotiated and price reduced. The Committee empowered to negotiate and conclude contract did not consider the issue of mode of transportation at all. Finally supply order was placed on the basis of air transportation only. Audit worked out an additional expenditure of Rs.85.74 lakh as the differential cost between air and sea transportation.

On receipt of stores, against the planned schedule of production of the last 5 CKD tanks in the year 2005-06, HVF issued the tanks only in 2008-09. Thus there was no urgency to justify the air lifting of the stores.

Ministry stated in June 2010 that airlifting of these items was necessitated for early completion and issue of tanks to the army. It was however noted in audit that the tanks were issued from October 2008 to February 2009.

Case 9: Wide variation in quoted price not analysed

Ordnance Equipment Factory Kanpur placed a supply order in December 2006 on Sangam India Ltd for procurement of fabric 410 gms OG WP PV Dope dyed at the rate of Rs 123.30 per metre. On 7 March 2007, another supply order was placed on the firm for the same material at the rate of Rs 142 per metre. The difference for the order quantity in March 2007 amounted to Rs 3.58 crore. While the TPC during negotiations brought down the price from Rs 152.01 per metre as originally quoted to Rs 142 per metre, there was no analysis done to assess the reasons which increased the price by more than Rs 18 per metre.

Ministry stated in June 2010 that there were enough competition and all possible efforts had been made by the TPC to bring down the rate.

Case 10: Undue benefit of Rs.10.36 crore to a private party in procurement of Motor Tube

OF Ambajhari procured 'Pinaka Motor Tube Flow Formed', in 2006-07 by conversion of Pre-Form Blanks where the required quantity of Pre-Form Blanks was to be procured by the factory from another Ordnance factory namely Metal and Steel factory against Inter Factory Demand. These were then provided to a private company HYT Pune under civil trade for conversion. However, during 2007-08 OFAJ procured the same item from the same private firm through outright purchase where the responsibility of procuring Pre-Form Blanks rested with the firm. In 2008-09, the factory procured the said item through both conversion and outright purchase routes. As seen from the comparative cost statement of conversion route and outright purchase route of Pinaka Motor Tube, the cost through conversion route and the outright purchase route was Rs.22,194 .80 per unit and Rs.38,190.11 per unit respectively. The private company however, procured the Pre form blanks from the same Metal and Steel factory, Ishapore which otherwise could have been done by OFAJ as they did in 2006-07. By deciding on outright purchase, OFAJ incurred an additional expenditure of Rs 10.36 crore for two years while giving an undue benefit to a private firm.

Ministry replied in June 2010 that there was no additional expenditure involved in the decision as MSF estimated Pre formed cost was Rs 65,000 and the conversion cost was Rs 56,353 which came to Rs 1.21 lakh. Ministry contended that placing order on HYT Pune at Rs 1.16 lakh thus was cheaper.

The cost of Pre form at Metal & Steel Factory was not Rs 65,000 and was only Rs 34,847 as per the annual accounts of Metal and Steel factory. Thus, the information provided by the Ministry was incorrect.

Case 11 Huge increase from the LPR ignored

Opto Electronics Factory, Dehradun floated a tender enquiry in February 2006 to 6 foreign firms out of which offers were received from BBT Poland and Topaz, Ukraine only. Examination of the details of offer submitted by the firms indicated that the increase over last purchase rate in respect of 11 items were ranging from 62 *per cent* to 5207 *per cent*.

Strangely, Rosoboronexport (RBE), Russia which was the OEM's nominated supplier of different items of T-72 tanks did not even quote. The reasons for such huge increases were neither assessed nor brought on board. OFB allowed OLF to place the supply order on BBT Poland for most of the items after BBT Poland brought down the rates for each item by US $ 0.50.

Ministry stated in June 2010 that the factory made all possible efforts to get the best possible rate ex-import.