Chapter II: Nalanda Factory

2.1 Transfer of Technology of Bi modular Charge System

The Indian Army after conducting trials of different types of propellants had recommended in 1998-99 procurement of Bi-modular charge system (BMCS) from Somchem, a division of [4]Denel, South Africa. The company was the only known manufacturer of BMCS at that time. Ministry of Defence entered into a contract with the company for procuring 4 lakh BMCS modules in April 2002. The contract envisaged transfer of technology (TOT) for indigenous production of the propellant by OFB.

Cabinet Committee on Security accorded approval in November 2001 for setting up a factory at Nalanda in Bihar at an estimated cost of Rs 941.13 crore to manufacture 2 lakh BMCS (8 lakh modules) per year. The approval included transfer of technology (TOT) from Denel at a cost of Rs 60.51 crore. The technology was to be acquired along with procurement of 4 lakh modules to meet the Army's immediate requirement from the Somchem.

Contract agreement for transfer of technology was signed between OFB and Denel on 15 March 2002. The effective date of the commencement of the contract was 15 March 2003. It envisaged supply and delivery of TOT documents which comprised Product specifications including detailed dimensional drawings and designs, Quality and Inspection procedures, Process descriptions and Production methods in respect of raw materials, intermediate products and final products. The total cost of the TOT package was of US $ 13.99 million which included US $11.86 million as license fee, US $ 1.25 million for Technical and manufacturing data pack and US $ 0.88 million for training.

The contract was to remain valid for a period of five years from the effective date i.e. 15 March 2003.. Two important conditions were to be valid for seven years. The first was the seller's warranty that if the product at semi stage have been duly accepted in accordance with the relevant quality assurance and inspection and

[4] For ease of reading, all companies, firms, partnership firms have been referred to only by name without using M/S. They are not individuals.

acceptance criteria as set out in the TOT document and that these semi stage products have been properly assembled and tested in accordance with the provisions in the same document by a competent, experienced and skilled manufacturer of products, then the final product will conform to the performance specifications set out in the Contract. The second one was the performance bank guarantee which was 10 *per cent* of the contract value of US $ 13.99 million. Both the warranty and guarantee had lapsed in March 2010.

2.2 Establishment of Nalanda Factory

In order to ensure single point responsibility of the supplier, it was decided that the main plant for BMCS which comprised of Combustible Cartridge Case Plant, Single Base Propellant Plant, Triple Base Propellant Plant, Nitro-cellulose/ Nitro glycerin paste plant and Propellant Charge Assembly plant would be procured as a package. The plants for the manufacturing of primary ingredients Nitro-glycerin (NG) and Nitro-cellulose (NC) being standard plants were to be procured separately on turn-key basis. It was to be ensured that the output from these plants complied with the specifications laid down in TOT documents. The project of setting up of the factory was thus effectively converted into three independent and uncoordinated procurement decisions.

As subsequent events would prove, this was a fundamentally flawed strategy which led to the situation where contracts for two feeder plants have been awarded but the main BMCS plant which will use output of these plants is nowhere in sight. The contract with IMI Israel for the main BMCS plant has now been mired in controversies and corruption charges and has put the future of the Nalanda plant in jeopardy. The overall progress of the factory has been dismal despite an expenditure of Rs 786 crore till March 2010.

On the earlier occasion, Ministry had also decided to cancel all contracts with Denel in June 2005 due to allegations of corruptions in some other case. The contribution of Denel to the project was to supply the TOT documents, which by that time had already been done and payment made. The Nalanda project was also kept in abeyance from June 2005 to July 2006. By the time, the project was stalled, tenders were received for all the three plants, namely the feeder Nitro-cellulose and Nitro-glycerin Plants and the main BMCS plant. The decision to keep the project in abeyance as also subsequent delay in finalizing contracts has led to considerable cost and time overrun as would be evident from the fact that the estimated cost has gone up from Rs 941 crore as originally sanctioned to Rs 2161 crore as per the revised sanction. As a result of the expiry of the warranty period for the transfer of technology, the delay has also resulted in a situation in which the manufacturing processes and outputs would be without any cover of warranty by the provider of the technology.

2.3 Contract of Main BMCS Plant to IMI Israel

Tender Enquiry for BMCS plant was issued for the first time on 29 March 2004. Technical bid was opened on 12 July 2004 and price bid on 26 October 2004. IMI Israel emerged as the L-1 firm at a cost of Rs 571.71 crore. The matter did not progress since project was kept in abeyance by Ministry in June 2005.

After the project was restarted in July 2006, IMI was called for negotiation meeting on 2nd/3rd August 2006 at OFB and asked to reduce the price as assessed by a committee constituted by OFB. IMI however insisted on a price increase from original 2004 price of Rs 571.71 crore to Rs 654.79 crore. OFB refused to accept the increased price and decided to issue global tender enquiry to generate more competition.

Fresh Tender Enquiry was issued on 26 February 2007. However, hardly any fresh competition was generated as a result of that. Against five companies to whom tenders were issued, only three responded within time. One of them, DMP Italy refused to sign integrity pact and to pay the earnest money deposit of Rs 3 crore. As a result only two companies namely IMI, Israel and Simmel Difesa, Italy remained in consideration. The price bid was opened on 28 January 2008. The offer of IMI Israel was the lowest at Rs 1090.83 crore and the next higher quote of Simmel Difesa was at Rs 1885 crore. During the earlier negotiations, the escalation demanded by the IMI was 15 *per cent* over a period of two years from July 2004 to August 2006. Against the fresh tender, the escalation was 67 *per cent* over a period of one year. The scope of supply in the quotes in March 2004, September 2006 and February 2007 remained the same.

Internal assessment indicated that the rate quoted by IMI was very high

The internal assessment of OFB indicated that compared to the quotation of IMI Israel in 2004, the rates quoted by IMI in January 2008 was on a high side. By adding escalation factors to the estimates quoted in October 2004, the base price came to Rs 800.34 crore as against Rs 1050.01 crore quoted by IMI in the fresh tender. Another estimate carried out by University Institute of Chemical Technology Mumbai arrived at a cost of Rs 832.22 crore. For the single base propellant plant, Ordnance Factory Bhandara calculated the basic cost at Rs 269.1 crore as against the cost of Rs 747.23 crore demanded by IMI.

Against this background, MOD constituted Cost Negotiation Committee (CNC) on 27 March 2008 with former DGOF as Chairman. Four meetings CNC meetings were held on 10 April 2008, 30 April & 1 May 2008, 21 May 2008 and 22 July 2008.

CNC did not make any firm and final recommendation

The basic objective of the CNC was to negotiate price and other commercial terms and conditions. However, in no meeting, CNC took any firm decision regarding the final negotiated cost of the plant. The indecisiveness of the CNC will be apparent from the following records of discussions in the CNC:

Meeting on 10 April 2008

Decisions and conclusions:

1. IMI was requested to give a presentation in the next meeting about the new features incorporated in the current proposal which are much more technologically advanced as compared to the offer of 2004 and whether this has resulted in savings arising out of usage of input material, fuel, power, water and cost of manpower;

2. IMI was requested to indicate the source for the major machine/equipment in the presentation and justify the higher cost quoted by them in the present offer;

3. IMI was asked for the reasons for high escalation in the cost of Design Documents, Erection and Commissioning costs quoted by them in the present offer; and

4. CNC desired that the justification in cost escalation should be supported with indices of the major input materials and foreign exchange currency movements in the related currencies.

Meeting on 30 April and 01 May 2008

Decisions and conclusions

(1) IMI offered a reduction of 3 million Euro. CNC however raised several issues relating to high prices. IMI asked for time for offering clarifications and justifications on the issues raised by CNC.

Meeting on 21 May 2008

Decisions and conclusions

(1) CNC decided to adjourn the meeting as no headway was being made in the negotiations;

(2) CNC also felt that there were only a few suppliers in the world, who not only have the capability but also are willing to supply the BMCS Plant. IMI had emerged as the lowest bidder twice in response to the global tender enquiry. It further felt that the past retendering action indicated that any further re-tendering action of the BMCS plant was not likely to yield any reduction in prices. Further it might lead to a single supplier situation; and

(3) CNC also decided that Ministry of Defence, higher management would be apprised about the current position on file prior to proceeding further for negotiations.

Meeting on 22 July 2008 (Last meeting of CNC)

Chairman of the CNC requested the representatives of IMI to

(1) Extend the validity of the offer up to 31 Oct 2008;

(2) The price to be reduced to the minimum.

IMI representative informed the CNC that there was no scope for reducing the price of BMCS plant as the cost of input materials for the manufacturing of the plant had increased substantially. In fact, the firm also brought in the issue of introduction of a price variation clause for the Indian component of the plant. While discussing the issue of extension of validity of their offer, IMI informed that their Indian partner has sought incorporation of a price variation formula to protect themselves from the losses arising out of steep hike in the prices of steel, cement etc. The price variation formula was to be based on prices as on 01 July 2008 and would be applicable on the Rupee content of the contract.

The meeting was adjourned for ten minutes. On re-assembly, IMI informed that their Indian partner has been consulted and they were not in a position to extend the validity without the price variation formula. Since the Request for Proposal for the BMCS plant was based on firm and fixed prices, it was decided by the CNC not to include price variation formula "***at this stage***". **IMI representative intimated that they would revert back in a few days after consulting their Indian Partner to the project.** However, on the same day, another meeting was held among Director (P&C), Ministry of Defence, DDG (New Capital) of OFB and Director Business Development IMI. IMI agreed to extend the validity of the commercial offer up to 31 October 2008. It was also stated in the minutes of the meeting that "the price variation formula, for the rupee content of the contract would be applicable from 01 August 2008 till the date of the first advance payment. This is subject to confirmation by both the parties."

Cabinet decision for revision of estimated costs of the factory was interpreted by Ministry as "implicit approval" for the procurement. This was incorrect.

The Competent Financial Authority for approval of procurement of BMCS plant was Cabinet Committee on Security. It was also the competent financial authority for approving the revised cost. These two were different issues though the increased cost of BMCS plant inter-alia led to increasing the cost of the project as a whole.

Ministry of Defence in December 2008 put up the note to Cabinet seeking approval for revision of the estimated cost of project from Rs 941.13 crore to Rs 2160.51 crore. The "approval para" of the note to the Cabinet did not refer to the BMCS plant at all and sought only the approval of the revised costs of the project. In the note, the facts of the increased cost of the BMCS plant and IMI's offer of reduction of only US $ 3 million were mentioned as contributing reasons to the escalation of the costs. The lack of resolution on the issue in the CNC was not mentioned. Similarly, the issue of introduction of the price variation formula was not brought into the notice of the Cabinet.

Ministry on 5 February 2009 conveyed to OFB sanction for the revised cost of project. OFB in a fax on 6 February 2009 requested to authorize it to conclude contract for BMCS plant "at the rate negotiated and approved by the Competent Financial Authority." Ministry on 10 February informed OFB that the revision of the cost of the project as a whole has been approved by the competent authority and OFB may conclude the contract for BMCS plant "at the approved and negotiated cost." Neither the Ministry nor the OFB clarified in their correspondence as to what exactly was the "negotiated and approved cost."

Deputy Director General New Capital in the OFB in his note dated 10 February 2009 which was endorsed and approved by the former DG, clearly stated that "from the minutes of the meeting of CNC dated 22 July 2008, it is seen that the CNC did not make any conclusive decision or recommendation to MOD with regard to acceptance of the negotiated price. Also the terms for advance payment of 20 *per cent* demanded by M/S IMI in their offer were not specifically referred to MOD for approval (being beyond OFB powers), it may be presumed that MOD has considered the entire issue covering all aspects in its totality and conveyed their sanction accordingly." The note was endorsed by the former DG.

Thus based on the "presumption" regarding the negotiated cost having been approved by the Competent Financial Authority, which in this case was the Cabinet, OFB concluded the contract for the BMCS plant with IMI Israel in March 2009 at the total cost of Rs 1175 crore. It also paid an advance of Rs 174 crore to IMI in March 2009, which would remain idle as all the transactions with IMI were put on hold in June 2009 by Ministry.

As per the existing orders on the subject normally only 15 *per cent* advance was admissible. However, IMI sought an advance of 20 *per cent* of the Euro cost of the project. The same was allowed on the ground that CNC was aware that such an advance demanded and therefore should be treated as integral part of the CNC proceedings. Seeking a separate approval for the payment of advance beyond admissible limit was considered a "redundant exercise". In no meeting, did CNC consider the issue of recommending the payment of advance. OFB, on the other hand, "presumed" that "the Ministry has considered the entire issue covering all aspects in its totality and conveyed their sanction accordingly."

On the draft note to the Cabinet, Ministry of Finance (MOF) wanted Ministry of Defence to confirm in the CCS note that the cost and time projected now were firm and there would be no further escalation. Ministry confirmed that the "revised project estimates are based on the negotiated price cost for main Plants and Machinery. Therefore, no further cost and time overrun is foreseen." The assertion by the Ministry was untrue as it was fully aware that in the last meeting of the CNC, IMI had insisted on the price variation clause on the Indian content of the contract. Two junior officers- one from the Ministry and another from OFB – had also reached agreements with IMI that price variation formula would be applicable from 1 August 2008.

The deal with IMI Israel has been put on hold. Meanwhile, IMI has already been paid Rs 174 crore as advance which has been retained by the Company. The prospect of Nalanda factory coming up in foreseeable future is remote.

To sum up,

(i) OFB's refusal to accept the revised offer of IMI of Rs 654.79 crore and the consequent decision to retender to generate more competition was ill advised. Both OFB and Ministry were aware that the number of firms capable and willing to supply BMCS plant was very few.

(ii) Ministry took the doubtful stand that the approval of the Cabinet to revision of costs of the entire project amounted to "implicit approval" of the procurement of main BMCS plant.

(iii) Ministry misled MOF stating that no escalation is foreseen knowing fully well that IMI has insisted on price variation formula for the Indian portion of the project.

(iv) CNC headed by the former DG did not take any decision on the two critical aspects namely extension of the offer up to 31 October 2008 and introduction of the price variation formula. It also did not recommended a final price for the BMCS plant. The final contract was entered into on the basis of many presumptions and assumptions.

(v) Ministry and OFB between themselves obfuscated the issue of "negotiated and approved cost." While Ministry did not hesitate to inform the Cabinet that such price has been negotiated by CNC, OFB took the stand that CNC had not recommended any “negotiated and approved” price to the Ministry.

(vi) Ministry allowed payment of 20 *per cent* advance against the Euro cost of the project arguing that CNC was aware of the issue and therefore it should be treated as integral part of the CNC considerations on the whole issue. OFB took the stand that this was not recommended by the CNC. In fact, the issue indeed was never considered by the CNC.

Thus, in order to execute the contract of main BMCS plant for Nalanda factory, laid down procedures and approved processes and procedures were significantly undermined.

Ministry stated in its reply that there were valid and unavoidable reasons for the cost and time overrun. Ministry further stated that it would not be correct to say that the project had been converted into three independent and uncoordinated procurements. Separate tenders had to be issued for different plants as these were from different OEMs. Similarly, there had to be a separate tender for the main BMCS plant as the OEM supplying the plant would have to ensure integrated functioning of all the plants.

Ministry in its reply also stated that IMI in April 2008 provided a list of enhanced number of equipments which included Indoor Fire Detection & Suppression system, Explosion proof Air Conditioning Equipment system in the offer to create a more safe working atmosphere. It further stated that IMI gave various reasons of not giving sufficient discount considering 30 *per cent* increase in salaries for increase in scope of engineering man hours needed for the project due to reassessment of design and documentation requirement, to set up pre-production facilities, inclusion of Effluent Treatment Plant (ETP) equipment separately, price increase in travel, boarding & lodging facilities expenses etc.

Ministry’s reply about three different tenders for three plants is appreciated. However, the fact remains that there was no coordination in timing and award of these contracts. Two contracts for the feeder plants were awarded without even finalizing the contract for the main plant which was to use the outputs of these plants. The situation as of now is that while construction of the two feeder plants is in progress, the plant that will use the outputs is nowhere in sight.

On cost overrun, Ministry's reply must be viewed against the fact that the rates quoted were 67 *per cent* higher than the price demanded by IMI about a year ago. The internal assessments also took into account the escalation factors. Most importantly, however, the CNC itself requested IMI time and again to justify the higher costs quoted by them but did not get any cogent explanation. In its meeting on 21 May 2008, "CNC intimated to the representatives of IMI that there has been no change in the scope of supply and the capacity of the plant from 2004 to 2008. The increase in price could be allowed on account of three elements which were omitted by IMI in their 2004 offer namely (i) increase in air conditioning heat load, (ii) installation of fire fighting equipment and (iii) inclusion of pre production test for process validation. However" the CNC further observed "the price is substantially higher compared to the previous offer of 2004, when the elements were considered." Notably, CNC did not consider the fact that the process technology was transferred as part of the transfer of technology agreement. Ministry's reply also ignores the observation of the CNC in the last meeting that "since no headway was being made in the negotiations, it was decided to adjourn the meeting".

Regarding refusal to accept the higher quoted price in 2006, the Ministry replied that on restarting the project, the firm was called for negotiations and asked to reduce their price. However, instead of reducing their price, the firm asked for increase in price to Rs 654.79 crore. Since as per prevailing guidelines there was no provision to accept such increase against fixed price tender, OFB decided to issue global tender enquiry to generate more competition.

IMI's tender was originally submitted in July 2004. OFB called them for negotiations in August 2006. It would be extraordinarily naïve to expect that even after two years have passed by, the firm would actually reduce the price and there would not be any cost increase. As subsequent events unfolded, OFB and Ministry refused to accept a 15 *per cent* increase over a two year period but accepted a 67 *per cent* increase over one year.

In the other two plants i.e. NC Plant and NG Plant, the same pattern was seen. Firms which had quoted in 2004, were called for negotiations in 2006 and their proposal for increase was not acceded to. Global tenders were called for and in both cases, OFB accepted a price which was much higher that the negotiated cost demanded by the suppliers in 2006.

As regards the implicit approval by the Cabinet, Ministry stated in its reply that the Cabinet was intimated about the completion of negotiation for the BMCS plant and the revised cost of the project was based on the negotiated cost of the main plant and machinery. Since the revised cost of the project included the negotiated cost of BMCS plant, it was clear that approval of CCS for revision of project cost from Rs 941.13 crore to Rs 2160.51 crore also constitutes the approval for BMCS plant.

Ministry's contention is not correct. In this case, the CCS was the Competent Financial Authority, the "approval para" in the Note for the Cabinet did not indicate approval for procurement of the BMCS plant. "Implicit approval" by the Cabinet as mentioned in the internal notes of the Ministry cannot be assumed as the Cabinet Secretariat did not communicate specific approval of the procurement.

On the issue of CNC not making any firm recommendations, the Ministry stated that "It is not correct to say that CNC did not make any firm recommendations. When it was found that negotiations with M/S IMI were not resulting in any further reduction of the cost, the case was brought to the notice of the RM. It was noted that the offer of the L-II bidder was about 50 *per cent* higher than that of IMI and it was considered that it might not be prudent or useful to go for a fresh tender. It was decided to seek the approval of CCS for the negotiated cost."

Ministry's reply confirms that the decision to approach the Cabinet on the basis of the quoted price with a discount of 3 million Euro was an internal decision and not the final decision of the CNC. In fact, as the minutes would indicate, even in the last meeting, the CNC did not reach any firm decision. This is further reinforced by the fact that even after the decision of the Cabinet and communication of approval to OFB by the Ministry, OFB was not clear about the "negotiated and approved cost".

Regarding price variation clause, Ministry stated that the clause was not included at any point in the process of procurement. While it is true that contract entered with IMI Israel did not include the price variation clause, Ministry had entered into an understanding that the price variation clause will be implemented in future. The fact was not brought into the notice of either the Cabinet or the Ministry of Finance.

2.4 NG and NC Plant

Nitro Glycerin (NG) Plant

For the NG Plant, Biazzi of Switzerland emerged as the lowest tenderer when the price bids were opened in January 2004. Letter of intent was issued at Rs 30.06 crore in August 2004 to the Company. However, the matter did not progress any further as the project was kept in abeyance. After the project was restored in July 2006, Biazzi did not accept the earlier quoted price. OFB decided on 30 August 2006 to re-tender the case and OFB TPC[5] finalized the case in November 2007. The order was placed on Biazzi at the total cost of Rs 40.10 crore in June 2008. A payment of Rs 9.14 crore has been made till January 2010.

Nitro Cellulose (NC) Plant

As regards the NC Plant, Josef of Germany emerged as a lowest tenderer at a cost of Rs 106.06 crore against the tender enquiry issued in November 2004. On restarting the project in July 2006, Josef increased the price to Rs 136.27 crore when called for negotiations. The firm was asked to match the price with the offer of NC Plant to Ordnance Factory Bhandara, which was Rs 87.72 crore.

On refusal by the firm, global tender enquiry was issued in two phases. In the first phase, global tender was floated in October 2006 for supplier selection and short listing of firms. Three firms, namely Josef, Germany, DMP, Italy and Bowas, Austria responded and tender enquiry was issued to them in February 2007 in the second phase.

The tender enquiry did not have any provision of signing of integrity pact. The Technical Evaluation Committee of OFB however decided in its meeting on 14 August 2007 that both the short listed firms namely Josef and Bowas should provide integrity pact in terms of DPP[6] 2006 before their price bids were opened. Both the

[5] Tender Purchase Committee
[6] Defence Procurement Procedure

companies confirmed that they would provide OFB with integrity pact and Earnest Money Deposit(EMD) if they are found to be L1[7] on opening of the price bids.

The TPC in its meeting on 3 October 2007 allowed the price bids to be opened. The price bids were opened on 15 October 2007 after almost eight months from the date the tender enquiry was issued. The lowest offer of Josef, Germany was at Rs 134.26 crore. However, the firm backed out citing that they had applied for export licence without which they could not provide the integrity pact and EMD. They also stated that their suppliers were booked for next two years, inflation had reached at 3 *per cent* and they could not extend the validity period without an increase of 5.5 *per cent* for equipment, machinery and spares, 4 *per cent* for supervision charges and an increase of 3 months in delivery time. It was decided by OFB TPC to retender the case.

Against the fresh tender enquiry issued in January 2008, Ministry accorded sanction in October 2008 for Rs 186.46 crore for procurement of NC Plant. The contract was concluded by OFB with Bowas in January 2009. A payment of Rs 49.15 crore has been made to the firm till March 2010.

Normally if a supplier reneges on the conditions and commitments provided at the time of submission of tender documents, a serious view would be taken. However, in this case, despite the fact that Josef had backed out after opening of the price bids, the TPC decided to issue the tender enquiry again to the company in January 2008. The company, however, did not respond to the enquiry. The cost of the plant went up by almost 80 *per cent* on account of various delays in decision making.

DPP 2006 was applicable to all capital acquisitions undertaken by the Ministry of Defence. DRDO, OFB and DPSUs, were however, allowed to continue to follow their own procedures. The TEC[8] had no authority to introduce a condition after tender enquiries were floated and technical bids were opened. The TPC again did not have the authority to relax the condition and allow the price bids to be opened. The matter was not referred to the Competent Financial Authority i.e. the Ministry. The decision to issue the tender enquiry again to the company, who only a few months back reneged on commitments and delayed the procurement, was also incorrect.

[7] L1 represents the lowest tenderer on opening of the price bids.
[8] Tender Evaluation Committee

In case of NG Plant, when Ministry had allowed OFB on 22 April 2008 to conclude a contract with the firm concerned, an instruction was issued to restrict the expenditure to the amount already approved by the Cabinet. Remaining expenditure was to be incurred only after approval of the Cabinet to the revised costs. In this particular case, no such instruction was issued despite the fact that Cabinet approval to the revised cost was still not processed.

Ministry in its reply stated that TEC introduced the condition of integrity pact on the basis of directives issued by MOD(Finance) in February 2006 for inclusion of "Integrity Pact" as standard condition of contract. The condition was relaxed on the assurance of the firm that they would submit it before opening of price bid. On their failure to do so , TPC decided to retender the case.

As regards issue of tender enquiry again to Josef, Germany despite backing out after opening of the price bid on earlier occasion, the Ministry replied that worldwide there were a few manufacturers of this type of plant and out of them only a handful are willing to part with the technology. Thus, the Ministry stated, in order to have sufficient competition, Josef Germany was issued tender enquiry again.

Ministry's reply did not indicate on whose authority TPC decided to relax the condition of the integrity pact.

As would also be evident, competition or lack of it has been used as a factor by OFB to influence the tender processes. The decision to retender in 2006 in case of all the plants was to generate more competition. While it was well known that there were only a limited number of suppliers in the world, the retender did not any case generate significantly more competition but it increased the price substantially.