CHAPTER III : ARMY

3.1 Management of Defence owned Railway Wagons / Coaches

In audit of management of Defence owned Railway Wagons/Coaches, various deficiencies were noticed such as excess scaling of 17 AC Coaches/Military Langars (₹50 crore), loss of interest on advance payment (₹23.87 crore), excess payment due to non- uniformity in cost calculation of Military Special Trains (₹30.44 crore), non monitoring of Additional Rail Facilities (ARF) projects and non adjustment of ₹ 356 crore paid to Railway on account of ARF projects. Despite these deficiencies there is no mechanism in Army HQ to check commercial exploitation of Defence owned Railway Wagons/Coaches by the Railways.

3.1.1 Introduction

Railway wagons and coaches were introduced in Army in 1972 to carry personnel and weapons for operational mobilisation in war time and training, field firing& exercises during peace time.

To execute operational move during war time, trains are planned as per Operational Rail Move Plan (ORMP) to enable formations to reach intended area of operations at the earliest.

During peace time, trains are run every month to execute permanent moves of Indian Army units, for training, field firing and exercise purposes.

Movement of goods/stores and personnel through railway wagons and coaches both during war and peace time is a challenging task since it has a direct bearing on the operational requirement.

Specialized railway wagons called Critical Rolling Stock (CRS) are owned by Defence to carry different types of weapons and equipment as indicated below:

- Military Bogie Well Type (MBWT) - for carrying Tanks and specialised Signals equipment.
- Bogie Open Military (BOM)-for carrying Infantry Combat Vehicle (ICV), Self-propelled guns, tractors, *etc*.
- Bogie Railway Special (BRS)- for movement of Tank transport trailer.

- Bogie Flat Arjun Transportation (BFAT) - specially designed for movement of T-90 and MBT Arjun Tanks.

Besides, different types of coaches are also owned by Defence for facilitating movement of Defence Personnel.

3.1.2 Excess scaling of coaches

Government of India, Ministry of Defence, in June 2014, approved scaling of Defence owned railway coaches as 55 numbers of AC 2 Tier, 203 AC 3 Tier and 59 Military Langar Coaches. Railways undertakes the task of Periodic Over Hauling (POH) of defence owned coaches/wagons through affiliated Railway workshops. MoD while approving the scale of coaches/langar had taken into account 34 additional coaches for requirement of periodic overhauling (POH)/maintenance undertaken by Railways based on average time of two to three months for overhauling of one coach. We however, noticed that average time taken by Railways for POH of one coach was only 27 days. In this regard a query was made and in reply the same calculation done at the time of scaling was provided. Further, when we specifically asked to indicate the time period involved in inward and outward transit, Additional Director General (Strategic Movement) (ADG (SM)) stated (February 2017) that no record in this regard is maintained. In the absence of such record, while calculating the requirement for scaling, the time required for POH taken as two to three months lacks justification. As such keeping in view the inward and outward time line for transit the total time provided is on higher side, which can be reckoned to one to one and half months. This led to excess scaling of 17 AC coaches/ Langars for POH, which were procured at a total cost of ₹ 50.50 crore and was avoidable.

3.1.3 Capital Procurement of Wagons and Coaches

In Army, procurement of all equipment valuing ₹15 lakh each or more with a life of seven years or more is called capital procurement. Capital procurements are made as per the provisions contained in the Defence Procurement Procedure (DPP). All capital procurements are processed in two stages *viz*. pre-contract management and post contract management.

Capital procurement is initiated by the user's directorate in Army HQ with formulation of Qualitative Requirements and seeking Acceptance of Necessity (AON) of Defence Acquisition Council (DAC)/Defence Procurement Board (DPB) of the Ministry. Once approved by the Ministry, the same are processed in stages by Acquisition Wing in the Ministry and Weapon and Equipment (WE) Directorate in Army HQ till conclusion of the contract.

Post conclusion of the contract, execution of the same, including payment of advances and other payments, delivery, installation, commissioning, *etc*. is to be carried out as per terms and conditions indicated in the contract.

3.1.3.1 Delay in conclusion of contracts

During the period covered in audit *i.e.* 2011-12 to 2015-16, total five capital contracts valuing ₹1048.06 crore were concluded for procurement of Critical Rolling Stock (CRS) and Coaches. The details of all contracts with their present supply position are shown in **Table-16** below:

Table 16: Details of contracts concluded with their present supply position

Sl. No	Details of CRS/Coaches	Contract/ Indent date	Vendor	Qty	Cost (₹ in crore)	PDC	Supply Position as on 31.08.16
1.	CRS-Bogie Open Military (BOM) (	30.9.14	M/s Modern Industries	445	169.94	March 2016	445
2.	CRS-Military Bogie Well Type (MBWT)	30.9.14	M/s Texmaco Rail & Engineering Ltd	974	387.04	September 2016	912
3.	AC 2 Tier Coaches (Inter Ministry proc)	12.2.15	Integral Coach Factory (ICF) Chennai	40	249.64	2015-16=20 2016-17=20	30
4.	Military Langer Coaches (Inter Ministry proc)			32		2015-16=16 2016-17=16	Nil
5.	AC 3 Tier Coaches (Inter Ministry proc)	12.2.15	RCF (Rail Coach Factory) Kapurthala	90	241.44	2015-16=30 2016-17=30 2017-18=30	Nil
Total (in ₹)					**1048.06**		

Procurement of CRS and Coaches were made based on scaling approved in October 2011 and June 2014 respectively. We noticed instances of delay in pre-contract stages of procurement of the CRS and Coaches with reference to stipulated timelines in DPP.

Against the envisaged time of 48 to 60 weeks in multi vendor situation (without trial), the procurement took 208 weeks in case of wagons and 135 weeks in case of coaches respectively. As per DPP, Request for Proposal (RFP) should be issued within 08 weeks and contract should be signed within 48 to 60 weeks of AON, however, it took 63 weeks and 208 weeks respectively in case of CRS and 113 weeks and 135 weeks respectively in case of Coaches.

Further, in case of BRS, AON was accorded in October 2010, despite approval of Competent Financial Authority (CFA) post finalisation of CNC, contract was yet (August 2016) to be concluded. In reply to an audit query seeking the reasons as to why contract for procurement of BRS was not concluded, Army HQ stated (August 2016) that, the case file is under progress with MoD. The reply, however, did not indicate the exact reasons for not signing the contract despite lapse of more than three years of CFA approval.

3.1.3.2 Irregularity in advance payment in procurement of Rail Coaches and Military Langar

Ministry accorded AoN in February 2014 for procurement of 40 AC-2, 90 AC-3 Tier coaches and 32 Military Langar (ML) under Buy (Indian) Category through Inter-Ministerial route. Indents were to be placed on Railway Board and payment modalities as per terms mutually agreed between Ministry of Defence and Railways post AON.

As advised by the Railway Board, Ministry of Defence placed (February 2015) two indents directly on Production Units of Railways *viz*. Rail Coach Factory, Kapurthala (RCF) for 90 AC-3 Tier Coaches and Integral Coach Factory Chennai (ICF) for 40 AC-2Tier Coaches and 32 Military Langar.

As per Indent placed on RCF, 30 AC 3 Tier coaches each were to be delivered in 2015-16, 2016-17 and 2017-18 and 100 *per cent* advance for manufacturing of coaches for respective year was to be made.

As per Indent on ICF, delivery of 20 AC 2 Tier and 16 Military Langer was to be made in 2015-16 and 20 AC 2 Tier and 16 Military Langer was to be made in 2016-17 against 100 *per cent* advance payment.

We found that in case of RCF, advance payment was to be made against supply of respective financial year whereas in case of ICF, provision for 100 *per cent* advance payment for all coaches was made in the indent. Audit scrutiny revealed that ICF in their commercial bid had quoted for advance payment for manufacture of respective year. Despite this, provision for complete advance payment was made in the indent and the payment of ₹249.64 crore was made within a month of indent i.e. in March 2015. Thus advance payment amounting to ₹124.82 crore pertaining to manufacture of the period 2016-2017 was irregular.

Further, despite payment of ₹ 325.52 crore (including ₹ 75.88 crore to RCF) to both the Railway Production Units in March 2015, no supplies except 30 numbers of AC 2 Tier coaches were made till August 2016. As a result, Army HQ not only suffered by delay in receipt of coaches/Langers but also had a loss of ₹ 23.87 crore on account of interest on irregular advance.

In reply to an audit query (August 2016) regarding why two different yard-sticks were applied in payment terms, Army HQ stated (August 2016) that, payment terms were made based on the requirements forwarded by respective Production Units. The reply is not correct as ICF Chennai in their bid did not seek advance payment for the entire supply. Further, 100 *per cent* advance payment for the entire supply is also violation of DPP provision.

Above matter was referred to Railway audit in September 2016 for examination at ICF Chennai and in their reply (January 2017) Railway audit stated that ICF wanted advance payment in two instalments only whereas the Ministry of Defence had paid the entire amount in one instalment and ICF had kept advance payments received in the suspense head of account subject to adjustments.

3.1.4 Excess/Irregular payments to Railways

3.1.4.1 Infringement Charges- Every railway zone fixes its standard movement dimensions for a consignment depending upon bridges and stations enroute. A consignment, which exceeds the standard movement dimensions is termed Over Dimensional Consignment (ODC). Depending upon height, width, clearance from the top, *etc*. of the consignment, ODC is classified in to A, B & C and accordingly Infringement charges[11] towards ODC are levied by Railway authorities.

We noticed that Railways levied infringement charges for 28 wagons of a Military Special train having 23 Open Wagons and five Bogie Covered Wagons (BCN) which were admitted by the Movement Control Office (MCO), Allahabad in May 2016. As infringement charges should not be applicable to BCN wagons, payment of infringement charges ₹ 3.80 lakh for five BCN wagons was made in excess. In reply (November 2016) ADG (SM) stated that the actual amount is calculated as per Railway Board letter, circulars and distance calculated in automated manner by Centre for Railway Information System (CRIS). Reply is not convincing as infringement charges should not be levied on a covered wagon and the ADG(SM) should have pointed out this fact to Railways.

3.1.4.2 Overpayment of Additional Surcharge **-** As per Railway Board Rate circular No. 32 of 2014 additional surcharge should be levied @ 20 *per cent* on actually used/supplied Railway owned wagons to Defence. We noticed that Railways Charged additional surcharge on Defence owned wagons also. This had resulted in overpayment of ₹ 33.49 lakh to Railways. In reply (November 2016) ADG (SM) accepted the overpayment and forwarded the case to Railways for consideration.

[11] The rate for the year 2016-17, 2015-16 & 2014-15 of Infringement (ODC) charges applicable were ODC "A"-₹50, ₹45 & ₹40 Per Km, ODC-"B"- ₹75, ₹65 & ₹60 Per km and ODC -"C"-₹380, ₹340 & ₹310 Per Km respectively.

***3.1.4.3 Overpayment of Passenger Fare Tax* -** As per Railway Board Rate Circular 32 of 2014, Passenger Fare Tax is not applicable for Military Special Trains, However it was noticed that the same have been charged by North Central Railway and Northern Railway resulting in overpayment of ₹7.66 lakh**.** In reply (November 2016) ADG (SM) agreed with the audit contention and accepted the issue of variable charging of prices by different zonal railways and different implementation of orders/circulars.

***3.1.4.4 Irregular payment of Service Tax*-**Defence or Military equipment is exempted from service tax vide Government of India , Ministry of Railways, Railways Board, New Delhi circular No. 7 of 2015 dt. 08/04/2015. Service Tax were charged by Railways on Military equipment resulting in overpayment of ₹75.55 lakh. In reply (November 2016) ADG (SM) accepted the audit contention and stated that the issue was raised with the railways. It was also stated that while, the railway authorities of particular zone/ division apply rules, the army personnel can object but not over rule the railway authorities. Reply is not tenable because Government of India, Ministry of Finance in June 2012 exempted service tax on "Defence and Military equipment" Services by way of transportation in Rail, but due to failure of ADG (SM) the case was never taken up with the Ministry of Finance/Railway, resulting in avoidable payment of ₹75.55 lakh on account of service tax to Railways from June 2012.

***3.1.4.5 Excess payment of Siding and Shunting Charges*-** Government of India, Ministry of Railway, Railway Board has fixed All India Engine Hour Cost (AIEHC) for siding and shunting charges w.e.f. 1st April 2006.

- We noticed in HQ MC Group, Secunderabad that siding charges were continuously being paid at old rates since April 2006, resulting in excess payment of ₹ 28.11 crore to South Central Railway. In reply (November 2016), ADG (SM) stated that the matter was taken up with Railways for recovery/adjustment of excess payment on old rates.

- We also noticed that Southern Railways had used Diesel Engine between Avadi and PTMS for shunting purposes, but charged partly for Electric Engine and partly for Diesel Engine, which had resulted in excess payment of ₹ 6.88 lakh**.** In reply (September 2016), Embarkation Hqrs Chennai accepted the audit contention and sought for clarification from the Hqrs Southern Railways, Chennai for actual shunting charges.

***3.1.4.6 Discrepancy in Distance*-**We noticed at HQ MC Group, Jhansi that the distances charged for Military Special Train, were more than the actual distance covered, resulting in excess payment of ₹ 64.46 lakhs to Railways. In reply (November 2016), ADG (SM) accepted the overpayment and agreed to initiate action for recovery of mentioned Passenger Vans (VPs).

3.1.4.7 Busy Season Charges and Development Charges- We noticed at Embarkation HQ, Chennai that Busy Season charges, and Development Charges of ₹ 7.09 lakh levied on Military Special Trains by Southern Railway for all outgoing Passenger Vans (VPs). However, Busy Season Charges and Development Charges were nowhere laid down by the Railway Board for charging on Defence. In reply (November 2016) ADG (SM) accepted the audit point and agreed to initiate action for the recovery of overpayment.

3.1.4.8 Over Payment due to discrepancy in calculation - We noticed at Embarkation HQ, Chennai that in respect of a Military Special Trains (VP 487) move, excess charges of ₹ 33.43 lakh were charged owing to calculation errors. On pointing out the excess charging, Embarkation HQ intimated 152 MC Gp Firozpur & 169 MC/MF Det Pathankot to take up the matter with Railways. In reply (November 2016) ADG (SM) agreed to ascertain overcharging and initiate action for recovery of excess amount paid.

In reply (January 2017) to all the above eight cases, ADG (SM) stated that the matter is being taken up with Railways for reconciliation/adjustments.

3.1.4.9 We also noticed instances of excess payments made to Railways against Railway Warrants and credit notes:

- In respect of Vouchers submitted by Nothern Railway Zone an amount of ₹4.04 crore was adjusted in March 2015 by PCA (Fys), Kolkata against Bank Advice of November 2012 with NIL objection. On scrutiny of the above bill it was noticed that excess payment of ₹10.45 lakh on account of Infringement (ODC) charges had been made to the Railways. On pointing out by audit, the PCA (Fys), Kolkata agreed to take necessary action.

- Similarly, we noticed that Railways overcharged carriage bill of ₹53 lakh in Bank Advice of April 2015 of ₹6.64 crore against which no objection was raised by PCA (Fys) Kolkata. On raising the issue by audit, PCA (Fys) Kolkata agreed to recover an amount of ₹ 53 lakh from Railways.

- We pointed out excess payment to Railways on account of Passenger Fare Tax, Overflow charges and Additional Surcharge. PCA (Fys), Kolkata accepted excess payment of ₹24.57 lakh to Railways towards Passenger Fare Tax, Overflow charges and Additional Surcharge awaiting for refund from Railways.

CGDA stated (January 2017) that as pointed out by the Audit, the matter was referred to concerned Railway Zone to reconcile and intimate the applicability of these charges on Military Tariff.

3.1.4.10 Non receipt of the proceeds of Condemnation of Wagons

We noticed at MCO Jhansi, that credit to MoD for 291.33 MT Defence Scrap disposed off by Railways for ₹72.60 lakh was pending since August 2014. On raising the issue with MCO, it was replied that Railways agreed to give credit to Defence account which was awaited as of November 2016.

Further ADG (SM) stated (January 2017) that matter has been continuously pursued with the DRM Jhansi.

3.1.5 Upkeep and maintenance of wagons and coaches

As per the stabling plan the stock of CRS are to be kept at various locations for operational use. Stabling of this stock at various locations would be of no value, if the stock is not maintained in a fit state. For verification of track worthiness, CRSs are to be moved at least 100 to 200 Kms distance every three months. We noticed at three MCOs, one MC Group HQ and Embarkation HQ, that the CRS stock held since its receipt were lying without movement. In response to audit query it was replied that no specific movement of CRS were undertaken by the Railways to keep them track worthy but CRS were moved only when they were due for POH or for use in Military Special Trains. Non-movement of CRS would affect operational use of these wagons, even though maintenance charges were paid for the same. ADG (SM) replied (January 2017) that the regular movement of all rolling stock, though desirable, is not mandatory to ensure their track-worthiness. Reply is not acceptable as Army HQ, in 1990 issued a letter to all Zonal Railways indicating that every three month the stabled rolling stock should be moved at least 100 to 200 KMs distance for verification of its road worthiness under advice to the directorate in Army HQ and MCO but the same was not done.

3.1.6 Commercial exploitation of Defence Wagons by Railways

During scrutiny of documents at MCOs, we noticed instances of commercial exploitation of Defence owned Wagons by Railways without the knowledge of defence authorities. For instance two wagons lifted by Railways in April 2014 for periodical overhaul from Defence siding at Allahabad were extensively used by Railways for movement of oil tankers for two years. Similarly, the extensive use of 32 Defence wagons by Railways for commercial freight operation was reported from Jhansi for which no credit had been given to MoD.

These instances indicate that there is no mechanism with the Army to check such commercial exploitation of the Defence Wagons and Coaches by Railways for its operations. ADG (SM) replied (January 2017) that the misuse of Army's rolling stock was reported by MCOs across the country and all steps were taken by the Directorate suo-moto.

3.1.7 No physical verification of existing wagons and coaches by the Army

The Indian Army owns a number of Wagons and coaches which are located in the Railway network of the country. No physical verification of the stock was conducted by the Army during last five years except in January 2016. The census carried out in the year 2016 indicated a deficiency of 428 Wagons and seven coaches valuing ₹ 170 crore. In reply (November 2016) to audit query, ADG (SM) stated that Army owned rolling stocks are temporarily untraceable. Reply is indicative of the possible use of their CRS stock by Railways for commercial purpose without due knowledge of Army.

Further, in January 2017 ADG (SM) clarified that it would be impossible for Army to regulate the CRS on daily basis as these are held in custody of Railways, yet physical verification being an enduring activity, is still continuing. The reply is not convincing because audit had highlighted the lack of periodical physical verification.

3.1.8 Delay in creation of Additional Rail Facilities (ARF)/Military Sidings

Additional Rail Facilities (ARF)/Military Sidings are created for defence at various Railway stations on Defence/Railway land for handling military traffic during peace and war. These facilities though created out of defence fund remain on the charge of Railways. Necessity for creating an ARF is identified by Army with approval of ADG (SM). Once the project for creation of ARF is included in Army Major Works Programme, money is released for construction of the project to the Railways as a deposit work.

Audit noticed that out of 14 projects of ARF at various locations which were approved from 2004 to 2013 at a cost of ₹ 258.01 crore, none of them was completed as of November 2016. Out of 14, only three projects had been completed by 60 *per cent,* 70 *per cent* &76 *per cent* and balance 11 projects were yet to be commenced. The cost overrun of eight projects was of ₹101.12 crore, which included two of the above three completed projects. In the balance six projects, the cost was to be revised and hence cost overrun was yet to be arrived at. Thus the delay in creation of the ARFs had resulted in cost escalation of the projects.

In reply (January 2017) ADG (SM) stated that delay in creation of ARF is a worrisome trend and is a result of differing priority of the Railways.

3.1.9 Non adjustment of MoD funds by Railways

In 2003, a proposal for gauge conversion of Sakri Laukhabazar – Nirmali and Saharsa – Forbesganj as alternate route to north east states through Bharat – Nepal border, was initiated by the then Minister for Railways for development under strategic consideration. In principle agreement to this proposal was accorded by the then Defence Minister and the project was to be practically funded by the Ministry of Defence amounting to ₹ 356.01 crore in five years. In February 2006, Ministry of Defence, backed out from funding this project as the project was not of a strategic importance and suggested to Railways to take up a project *viz* Rangiya-Murkongselek-Pasighat being the project having a strategic importance. Accordingly, Ministry of Defence (MoD) provided to Railways ₹ 356 crore between 2005-06 and 2009-10 on quid pro quo basis. Subsequently, in February 2009, the Rangiya – Murkongselek project was declared as a "National Project" and as such, the money provided by MoD of ₹356 crore was to be refunded / adjusted for carrying out some other ARF works.

In reply (January 2017) ADG (SM) stated that further details regarding execution of any quid-pro-quo work in lieu of Sakri Laukhabazar – Nirmali and Saharsa – Forbesganj are being ascertained from Ministry of Railways.

Thus the amount of ₹356 crore paid to Railways by MoD long back was neither refunded to MoD nor adjusted in other ARF projects.

3.1.10 Non Serviceability of Military Sidings

During audit it was noticed that none of the three Defence Railway sidings at Allahabad were functional. The railway track network of COD Chheoki was completely worn out and declared unfit for movement since January 2015. The Military siding at OD Fort was last operated in April 2008. Similarly, Khusrobagh military siding was not being used due to the approach road leading to the Defence Railway sidings being unsuitable for movement of heavy vehicles and Guns. In spite of non-functioning of various Defence Railway sidings at Allahabad, annual maintenance charges of ₹31.58 lakh had been paid to the Railways for the period from 2011-12 to 2013-14.

In reply (January 2017) ADG (SM) stated that whether a siding is used or not the yearly interest and maintenance charges of a siding is due to Railways as long as the siding is serviceable. The reply is not accepted as the audit had pointed out about the unserviceability of railway sidings which was confirmed by ADG (SM) in February 2017 and hence the payment of ₹ 31.58 lakh made to Railways was irregular.

Conclusions

- Due to excess scaling of AC coaches/Military Langars (ML) against Periodical Over Hauling (POH) requirement, procurement of 17 AC coaches/ML for ₹ 50 crore was avoidable.

(Para 3.1.2)

- Against the provision of advance payment of 15 *percent* in Defence Procurement Procedure (DPP), Army HQ made 100% advance payment of ₹325.52 crore in March 2015 to Integral Coach Factory (ICF) Chennai and Rail Coach Factory, Kapurthala for procurement of AC coaches and Militray Langars. Moreover both the production units could not deliver the coaches/Military Langars in stipulated time, which had resulted in loss of interest to the tune of ₹ 23.87 crore on advance paid.

(Para 3.1.3.2)

- Due to non-uniformity in cost calculation of Railway Charges for Military Special Trains at various MCOs, an excess/irregular payment of ₹30.44 crore had been made to the Railways on account of Infringement charges, Additional Surcharge, Passenger Fare Tax, Service Tax, Railways Siding and Shunting Charges, Busy Season/Development Charges *etc*.

(Para 3.1.4.1)

- Against Bank Advices of ₹49.59 crore from January 2016 to September 2016, bills of ₹ 39.64 crore were not received from six Railway Zones by the PCA (Fys), Kolkata as of September 2016. Further, due to lack of proper scrutiny of vouchers by PCA (Fys), an overpayment of ₹ 88.02 lakhs had been made to the Railways.

(Para 3.1.4.9)

- Army has no mechanism to check the commercial use of its Railway wagons/coaches by Railways. As a result 34 defence owned wagons were extensively used by the Railways for commercial use but no credit was given to MoD. This happened due to lack of regular physical verification of its wagons by the Army. When physical verification was done by the Army in 2016, a deficiency of 428 wagons and 7 coaches costing to ₹170 crore was found.

(Para 3.1.6 and 3.1.7)

- Out of 14 ARF projects approved from 2004 to 2013 at a cost of ₹258.01 crore, no project was completed as of November 2016. This had not only resulted in cost overrun of the projects by ₹ 101.12 crore but also had adversely affected the operational requirement of the Army.

(Para 3.1.8)

- An amount of ₹ 356 crore paid to the Railways by Ministry of Defence for construction of Additional Railway Facilities (ARF) which were subsequently declared national project in 2009, was neither refunded to

Ministry of Defence nor adjusted in other ARF Projects as of November 2016.

(Para 3.1.9)

- Annual maintenance charges of ₹ 31.58 lakh were paid to the Railways even for Non-functioning Military Railway Sidings at Allahabad

(Para 3.1.10)

Recommendations

- Scaling of the wagons/coaches should be done as per actual requirement.
- Procurement process of wagons/coaches including payment of advance should be as per DPP provisions.
- Railway charges for Military Special Trains should be admitted as per orders of the Ministry of Railways and should be properly checked by the concerned MCOs as well as PCA (Fys) Kolkata. All such payments for the last 5 years may be reviewed by the PCA (Fys), Kolkata.
- Physical verification of wagons and coaches to be conducted annually/at regular intervals to check commercial use of the Defence owned Railway Wagons/Coaches by the Railways.
- Ministry of Defence/ADG (SM) should monitor the progress of the ARFs projects for its early completion and take immediate action for refund/adjustment of the amount paid to the Railways.
- In case of staggered delivery period spanning beyond a year, periodical quantum of supplies should be indicated clearly in the Indent to avoid paved lee-way to Production Units for supply according to their own convenience.

The matter was referred to the Ministry of Defence in December 2016; their reply was awaited (January 2017).

3.2 Ammunition Management in Army-Follow up Audit

Despite serious concerns highlighted by Audit in Performance Audit report on 'Ammunition management in Army', no significant improvement took place in the critical deficiency in availability of ammunition and quality of ammunition supplied by the Ordnance Factory Board (OFB) since March 2013. Shortfall in meeting the production target by OFB continued. Further, majority of the procurement cases from other than OFB which were initiated by Army HQ during 2009-13 were pending as of January 2017. There were persisting delays in completion of the defect investigation by DGQA and replacement/repair of rejected/unserviceable ammunition by OFB. Ammunition depots with shortage of firefighting staff and equipment remained accident prone.

3.2.1 Introduction

Comptroller & Auditor General of India's Performance Audit (PA) Report No 19 of 2015, Union Government (Defence Services) on "Ammunition Management in Army" was tabled in Parliament in May 2015.

The main focus of the PA of the Ammunition Management in Army was critical shortage of ammunition and the factors attributable to such shortage *i.e.* non-observance of Government policy, delay in procurement/ manufacturing of ammunition, quality issues *etc*. To overcome the critical shortage of ammunition, nine recommendations were made by Audit.

Pending Action Taken Note (ATN) from the Ministry, follow up audit on ammunition management in Army was conducted in January 2017 in order to assess the implementation of our recommendations for improvement in the availability of ammunition and its efficient management.

The follow up audit covered four years period from April 2013 to September 2016 as the original PA on Ammunition Management had covered the period up to 2012-13. The audit was carried out in offices of the Directorate General of Ordnance Services (DGOS), Directorate General of Quality Assurance (DGQA) Armament, Central Ammunition Depot (CAD), Pulgaon, three Ammunition Depots(ADs)[12], Ordnance Factory Board (OFB), six[13] ammunition filling factories , five[14] components manufacturing factories and

[12] AD Bathinda, AD Dappar and AD Bharatpur

[13] Ordnance Factory Chanda (OFCH), Ordnance Factory Badmal (OFBL), Ordnance Factory Khamaria (OFK), Ordnance Factory Dehu Road (OFDR), Ammunition Factory Kirkee (AFK), Ordnance Factory Varangaon (OFV)

[14] OF Ambajhari, GSF Cossipore, OF Kanpur, OF Katni, OF Itarsi

Controllerate of Quality Assurance (CQA) (A) Kirkee. Selection of units was also aligned with those selected in the original Performance Audit.

3.2.2 Audit Findings

3.2.2.1 No significant improvement in holding of ammunition in War Wastage Reserve (WWR)

War Wastage Reserve (WWR) is the reserve to meet the requirements for the expected duration of operations. The Ministry approved authorization of WWR as 40(I) i.e. 40 days of intense period. Further in 1999, Army introduced 'Minimum Acceptable Risk Level (MARL)', a bottom line requirement of 20(I) days considered as minimum inescapable requirement of the ammunition to be maintained at all times to meet operational preparedness.

As observed in paragraph 2.3.2 of the PA report, all types of ammunition during the period 2008-09 to 2012-13 were far below the authorized scale 40 (I) days of WWR.

In follow up Audit, we analysed the availability of WWR ammunition in Army during the period from 2013-14 to 2016-17 (September 2016) which is summarized in the **Table-17** below:-

Table No.17: Holding of WWR ammunition

Range of days (D)	No. of types of ammunition available				
	March 2013	March 2014	March 2015	March 2016	September 2016
D < 10	85	77	56	65	61
10 =< D< 20	40	30	19	26	22
20=<D< 30	16	23	25	27	26
30=<D < 40	12	18	15	14	12
40=<D	17	30	27	29	31
Total	**170**	**178**	**142**	**161**	**152**

*(**Source:** Army HQ letter No. A/17974/Audit/2016-17/Vol-I/10/OS-6A dated 10.01.2017)*

- As could be seen from the above Table, as of September 2016, out of 152 types of ammunition, only 31 (20 *per cent*) met the authorization level of 40 (I) against 17 out of 170 types of ammunition (10 *per cent*) (March 2013) as was reported in PA Report. Balance 121 types of ammunition (80 *per cent*) were still below the authorization level. Though there appears slight improvement in availability of WWR stock, scrutiny of category wise details of ammunition (**Annexure-V**) revealed that the WWR level had increased mainly on account of increase in the stock of explosive and demolition items while majority of high calibre ammunition relating to Armoured Fighting Vehicle (AFV) and Artillery

(Arty) ammunition meant for sustaining superior fire power were under critical level.

- We had mentioned in paragraph 2.3.2 of the PA report that even the reduced scales of MARL *i.e.* 20 (I) were not achieved in respect of stock availability of ammunition as 125 out of 170 types of ammunition (74 *per cent*) were below MARL as on March 2013. With a view to mitigate the existing low levels in ammunition holdings, Ministry in June 2013 had approved the Ammunition Road Map, a progressive plan to build up the WWR stock levels up to 50 *per cent* of approved scale i.e. 20(I) by March 2015 and the balance deficiency to be made up subsequently by March 2019.

  It can be seen from **Table-17**above that percentage of types of ammunition below MARL to the total types of ammunition improved to 55 *percent* (83 out of 152) by September 2016 from 74 *per cent* as of March 2013. The figures in respect of high calibre AFV and Arty ammunition ranged from 67 *per cent* to 72 *per cent* during March 2014 to September 2016 (**Annexure-V**) as against 90 *per cent* as of March 2013.

- It was observed in paragraph 2.3.2 of the PA report, ammunition with the availability of less than 10 days (I) is considered 'critical' and any further decrease in the population of such ammunition should be an area of high concern. As of March 2013, the number of types of ammunition available for less than 10 days (I) was 85 against total 170 types of ammunition held (*50 per cent*). As could be seen from **Table-17** above that the stock of 61 out of total 152 types of ammunition (40 *per cent*) was still in critical level.

Thus, despite lapse of more than three years (from March 2013) no significant improvement in availability of WWR ammunition was noticed in audit. Further, the stock levels of majority of high calibre ammunition relating to AFV and Artillery, meant for sustaining superior fire power, remained under critical level.

3.2.2.2 Excessive shortage of Fuzes

Fuze is the brain of the Artillery ammunition which is fitted to the shell just before assembly/firing. Mention was made in paragraph 3.3.2.2 of the PA Report about the deficiency of fuzes to the extent of *89 per cent* as of March 2013. As stated the report, main reason for the critical shortage in the availability of the fuzes was the decision to shift from mechanical fuze to electronic fuze without ensuring the development of adequate sources except M/s Electronic Corporation of India Limited (ECIL).

During follow up audit, we observed that deficiency of fuzes was still at 83 *per cent* as indicated in **Table 18** below:

Table-18 : Shortage of fuzes

Particulars	As of March 2013 (in lakh rounds)	As of September 2016(in lakh rounds)
Availability of ammunition	67.78	68.89
Actual holding of fuzes	7.76	11.78
Deficiency in holding of fuzes	89 *per cent*	83 *per cent*

***(Source:** All India Availability Report)*

We observed that despite critical deficiency of fuzes, case for the procurement of 20.50 lakh fuzes under Road Map (sanctioned in June 2013) was still in AON stage. Further, Ordnance Factory Board (OFB) which had again started production of mechanical fuzes from 2012-13 onwards failed to supply the targeted fuze during the period from 2013-14 to 2015-16. As the ammunition remain unusable without fuzes, only 17 *per cent* of scarcely available ammunition would be gainfully utilized for operational requirements.

3.2.2.3 Continued shortage of training ammunition

Mention was made in paragraph 2.3.2.2 of the PA report regarding the shortage of training ammunition and subsequent imposition of restriction on training by Army HQ. In the follow up audit, we examined the availability of training ammunition from the All India Availability Report (AIAR) during March 2014 to September 2016, result of which is summarized in the **Table-19** below:-

Table No. 19: Details on availability level of training ammunition

Period	Total types of ammunition	Ammunition available for less than 5 days	Ammunition available for more than 5 days	Percentage of ammunition available for less than 5 days to total ammunition
2013	24	22	02	91
2014	27	21	06	77
2015	23	20	03	87
2016	23	19	04	83
2016 (Sept 2016)	24	21	03	88

***(Source:** Army HQ letter No. A/17974/Audit/2016-17/Vol-I/10/OS-6A dated 10.01.2017)*

It could be seen from the Table above that the majority of training ammunition (77 to 88 *per cent*) remained critical i.e. less than five days during March 2014 to September 2016 as against 91 *per cent* in March 2013.

We further observed that keeping in view the overall shortage of ammunition, the imposition of restriction by AHQ on training ammunition continued during March 2014 to September 2016. As reported in the PA Report, during 2012-13 out of 170 types, 136 types of ammunition (80 *per cent*) was authorized for training with restriction. Against this, 159 out of total 203 types of ammunition (78 *per cent*) were authorized for training with restriction ranging from 25 to 100 *per cent* during 2016-17. As there was no improvement in the restriction scenario, it was obvious that the shortage of ammunition would continue to hamper the training of the Army in the years to come.

Regarding the steps taken by the Ministry to mitigate the critical shortage of ammunition as discussed in the PA Report, Army HQ stated (January 2017) in addition to measures *viz*. five year Roll on Indent for ammunition on OFB and Ammunition Road Map for achieving the required level of stock by March 2019, following steps had been taken to make up the shortage of ammunition:

(i) The Ministry accorded (2016) enhanced delegated financial powers to Vice-Chief of Army Staff (VCOAS) to fast track the procurement in emergency cases.

(ii) Eight types of ammunition had been identified for manufacture by Indian Industry. Request for intent (RFI) has been uploaded and responded by 23 vendors. Preparation of Request for proposal (RFP) was under progress.

However, the build-up of stocks would depend on vendor's capacity of supply of ammunition being procured. Since OFB could not meet the targeted quantity despite the timely placement of a five years roll on indent (discussed in paragraph 3.2.2.6), steps taken by AHQ to mitigate the critical shortage of ammunition were yet to fructify.

3.2.2.4 Slippages in Procurement of ammunition

As pointed out in paragraph 3.3.1 of the PA report, nine items were initiated for procurement under the ‘Capital category’ during the period 2008-2013. During the follow up audit, we observed that out of nine items, contracts were concluded for five items during 2014-16. Procurement action for the balance four items were still in progress as shown in **Table -20** below:-

Table No. 20 : Status of Capital Procurement

Sl. No.	Name of ammunition	Date of AON	Position as per PA report	Current status
1.	TGTSM	13.09.2011	Request For Proposal (RFP) was yet to be issued.	RFP was yet to be issued. (No change).
2.	Up-gradation of BMP-2 to BMP 2M	08.07.2011	Case was foreclosed and RFP was yet to be issued.	RFP was yet to be issued. (No change)
3.	Electronic Fuzes for 130mm Gun	07.10.2011	CNC was being constituted.	CNC was yet to be finalized. (No change)
4.	Electronic Fuzes for 155mm Gun	07.10.2011	Technical evaluation was completed in April 2013. Trials were under progress.	Trials were yet to be finalized. (No change)

*(**Source:** Integrated HQ of MoD (Army) letter No. 28262/Proc/GS/WE-8/2017 dated 02.02.2017)*

No other fresh procurement of ammunition was initiated since 2014.

Further, under paragraph 3.3.2 of the PA report, we had observed that there were 28 pending cases of revenue procurement ex-import which were initiated between 2008-09 and 2012-13. Out of 28 cases, contracts were concluded only in respect of two cases as of January 2017. The balance 26 cases were still in various stages such as RFP/TEC *etc*. No other fresh procurement action was initiated since 2014.

3.2.2.5 Tardy progress in procurement under Ammunition Road Map

In the paragraph 2.5 of the PA report, it was mentioned that the Ministry approved the Ammunition Road Map in July 2013 to build up the stock level upto 50 *per cent* of the Government approved scales by March 2015 and the balance deficiency to be made subsequently by March 2019. It aimed to mitigate the existing low levels in ammunition holdings which had a decisive effect on the operational preparedness of the army. The Ministry's approval of July 2013 envisaged procurement worth ₹16594 crore through import. Though the Acceptance of Necessity (AON) was accorded to 17 procurement cases in 2013, no contract was concluded till December 2014.

In response to audit query seeking present status, DGOS furnished the details of 13 cases out of 17 cases (as stated in PA report) along with 9 new cases of procurement for which AON was accorded in the period from October 2014 to August 2015. We noticed that no case had culminated into the contract despite their sanction under Ammunition Road Map by the Ministry in 2013. Out of 22 cases, five cases were in Commercial Negotiation Committee (CNC) stage, nine cases were in AON stage, three cases were in RFP stage the balance five cases were in TEC/retender stages as of January 2017.

3.2.2.6 Production performance of OFB

As mentioned in paragraph 3.1 of the PA report, OFB is the main source of supply of ammunition to the Army which caters for 84 to 96 *per cent* of the ammunition requirement during the year 2008-09 to 2012-13. We noticed that during the period from March 2014 to November 2016 also, OFB remained the main source of supply of ammunition catering to 88 to 99 *per cent* of the total requirement of ammunition of Army. The details are given in **Table-21** below:

Table-21: Share of various supply sources of Ammunition (₹in crore)

Year	OFB	Import	Trade	Total	Percentage of OFB's supply	Percentage of trade supply
2012-13	3677.00	360.58	102.80	4140.38	89	2
2013-14	3428.93	Nil	28.6941	3457.6241	99	1
2014-15	3976.98	Nil	76.0022	4052.9822	98	2
2015-16	3858.82	Nil	72.1627	3930.9827	98	2
2016-17 (November 2016)	1587.62	Nil	252.75	1840.37	86	14

***(Source:** DGOS letter No. A/18120/Audit/OS Amn Proc dated 10.01.2017)*

OFB is mandated to meet the targets accepted by it through the five years Roll-on –Indent placed by AHQ. For this, OFB allocates annual target to the filling factories for manufacture of complete ammunition and matching targets to the sister factories for making required components. The filling factories are required to accomplish the production targets and issue the requisite ammunition to the Army within the financial year itself.

As mentioned in paragraph 3.2 of the PA report, out of 48 types of ammunition selected in audit, the slippage in meeting the targets ranged from 54 to 73 *per cent* of ammunition types during 2009-10 to 2012-13. In the follow up audit, we examined the data on target, issue and achievement of targets relating to the period from 2013-14 to 2016-17 which is summarized in the **Table-22** below:-

Table-22: Analysis of shortfall in production/issue of selected ammunition

Year	Number of ammunition				
	Examined in Audit	For which target allotted by Army	For which Army's demand not met	Percentage of slippage (4/3*100)	With more than 50 *per cent* shortfall
(1)	(2)	(3)	(4)	(5)	(6)
2013-14	48	39	32	**82**	15
2014-15	48	42	31	**74**	11
2015-16	48	42	27	**64**	12
2016-17[15] (up to Dec. 2016)	48	42	40	**95**	30

(Source: *Roll-on-indent, Production Performance Reports and OFB's letter dated 22.08.2016)*

It can be seen from the table that the Army's demands were not met in respect of 64 to 95 *per cent* types of ammunition during 2013-17 (up to December 2016) as against 54 to 73 *per cent* types of ammunition during 2008-2013. Further, scrutiny of achievement *vis a vis* targets of every ammunition **(Annexure VI)** revealed shortfall of more than 50 *per cent* and up to 100 *per cent* for 11 to 30 types of ammunition as against 4 to 11 *per cent* types of ammunition during 2008-2013.

Despite continued slippages in supply of ammunition to the Army by the concerned ordnance factories, no mechanism has been introduced by the Board or factories to fix the responsibility for such slippages as recommended in our PA Report.

In response to Audit query, OFB, stated (January 2017) that liasioning with feeder factories and other divisions was done at OFB level based on daily/weekly/monthly production reports from the factories. The Board added that regular production review meetings are also held by Members and Chairman where all issues are discussed thoroughly and actions are taken and OFs are instructed to complete their target in the prescribed time. Two of the factory managements (AFK& OFDR) stated (January 2017) that there was no failure related to factory in manufacture and issue of ammunition as some of the items are very critical/complex to manufacturing, hence production is dependent on supplies of hardware/components from different trade sources. The replies are not convincing due to the following reasons:

- Production review meetings at the Board level were not effective enough to arrest recurrent slippages in issue of ammunitions.

[15] 3/4th target of 2016-17 has been considered for three quarters up to December 2016 for analysis.

Moreover, in most of the monthly production performance report sent by the factories to the Board, item-wise specific bottlenecks/problem areas were neither mentioned, nor the OFB regularly issued direction/guidance to the factories to overcome such production bottlenecks.

- Advance production planning and procurement planning for input materials/components from trade/sister factories are prime responsibility of filling factories to achieve the production target in the financial year itself.

3.2.2.7 Continued high percentage of Return for Rectification (RFR) at Quality assurance stage

Quality assurance on ammunition is provided in a multi-tiered control frame work comprising the Quality Control (QC) section of the Ordnance Factories and representatives of DGQA for quality assurance. DGQA provides the final clearance on the basis of inspection of a sample and it is for the factory QC which conducts 100 *per cent* checks during manufacture to return a product to the production shop for rectification (RFR).

There was high percentage of Return for Rectification (RFR) pointed out at QA stage noticed during the period 2008 -2013 which should have been detected in the inspection by QC. Percentage of RFR was as high as 20 to 100 *per cent* in several types of ammunition.

Details of quantum of RFR during 2013-14 to 2016-17 (up to December 2016) in respect of selected Factories along with reasons for filled ammunition items (11 types) are indicated in **Annexure-VII**. Substantial and recurring incidence of RFR came to notice.

Details of quantum of RFR along with reasons for empty components (20 items) are indicated in **Annexure-VIII.** Instances of high percentage (10 *per cent* and above) and recurring incidence of RFR in respect of 16 empty items came to notice during the follow up audit.

Further, six types of ammunitions manufactured by Ordnance Factory Kanpur were pronounced as RFR to the extent ranging from 40 to 100 *per cent* during the period 2013-16.

The reasons for RFR of both filled ammunition and empty components clearly indicates lapse of the filling/component making factories in executing mandated 100 *per cent* QC checks during various stages of the manufacturing process as per Quality Assurance Plan.

3.2.2.8 Rejection of filled ammunition and empty components

Details of rejection of filled ammunition (14 types) and components (7 types) during 2013-14 to 2016-17 (up to December 2016) along with reasons for rejection are indicated in **Annexure- IX**. Total value of such rejections aggregated to ₹ 191.78 crore representing around 1 *per cent* of the total ammunition issued (₹19365 crore) in this period against the rejection of ₹ 234 crore during the period 2008-13. Significant quantum of rejection was observed in respect of 81mm ammunition (valuing ₹ 65 crore) and 155mm ammunition (valuing ₹ 49 crore) which together accounted for 59 *per cent* of total rejection in terms of value.

Further, it had had been reported in the PA report that empty components of ammunition (shell/bomb body, fuze, cartridge case, tail unit, *etc*.) amounting to ₹ 94 crore manufactured by three component making factories *viz.* Ordnance Factory Ambajhari (OFAJ), Ordnance Factory Kanpur (OFC) and Gun & Shell Factory Cossipore (GSF) were rejected by QA agency during 2008-13. In follow up audit, we examined the empty components of four factories *viz.* OFAJ, OFC, GSF & Ordnance Factory Khamaria (OFK) and found that components aggregating ₹.119.27 crore were rejected during 2013-14 to 2016-17 (up to December 2016). Details of such rejection along with its reasons are given in **Annexure -X**.

3.2.2.9 Rejected ammunition at Ammunition Depots

In paragraph 5.2.2 of the PA report, it was observed that 13 types of ammunition valuing ₹ 1,617.94 crore were lying rejected at different depots due to manufacturing defects. During the audit, we observed that out of 13 cases, full replacement had been made for five cases during 2016. In respect of balance cases, part quantity had been replaced by the OFB up to December 2016. While the full replacement of the defective ammunitions were awaited, 65 new cases for free replacement came to notice which were under compilation by AHQ.

Further, while repair/ replacement of downgraded ammunition as mentioned in paragraph 5.2.3 of the PA Report was under progress by OFB, a fresh case of down gradation of 4.15 crore rounds of 7.62 mm belted ammunition amounting to ₹129.26 crore, manufactured between 2009-11 by Ordnance Factory Varangaon, came to notice during the audit. The shelf life of the ammunition was 18 years but the same was downgraded within one third of its shelf life.

As replacement entails additional expenditure and loss to the state, the need of the hour is improvement of the existing controls of QC and QA to make them accountable as had been recommended in the PA report.

3.2.2.10 No improvement in the serviceability status of ammunition

We had observed in paragraph 6.2 of the PA report that significant quantities of ammunition were lying in segregated and unserviceable condition in various Ammunition depots. Total availability of ammunition with Army in various conditions as of March 2013 and September 2016 is shown in **Table-23** below:

Table -23: **Availability of ammunition (Quantity in MT)**

Category	Available as on 31 March 2013	Percentage of total quantity	Available as on 30 September 2016	Percentage of total quantity
Serviceable	3,40,693	82.57	3,28,622.99	81.70
Segregated	28,771	6.97	32931.36	8.19
Repairable Major	30,862	7.48	26909.58	6.70
Obsolete	27	0.007	11.24	00
Obsolescent	141	0.034	0	0
Unserviceable	12,080	2.93	13705.23	3.40
Total	**4,12,574**	**---**	**402180.40**	**----**

(Source : DGOS letter)

As evident from above, about 18 *per cent* of the available ammunition as on 30 September 2016 was either "Unserviceable", "Segregated" or "Repairable Major" category as against 17.5 *per cent* on 31 March 2013.

Further, 8.19 *per* cent (32931.36 MT) ammunition was in segregated state. We had pointed out in paragraph 6.2.1.1 of the PA report that 241 cases (2008-2013) were outstanding for defect investigation as of March 2013 which should have been completed by DGQA within three months. AHQ stated in January 2017 that out of 241 cases, 234 cases were cleared. However, fresh 218 cases (2014 to 2016) had been shown as outstanding due to delay in defect investigations.

Scrutiny of the time taken in completion of defect investigations revealed that out of 562 cases of defect investigation of ammunition items closed during 2013-14 to 2015-16 only in 41 cases (7.29 *per cent*) the defect investigations were completed the prescribed time limit.

The main reasons for delay in investigation as stated by CQA (June 2016) were non receipt/delay of more than three months and even up to one year of detailed report/ samples from the users against the stipulated period of 30 days and involvement of multiple agencies spread/located at different places. AHQ stated (January 2017) that it was the responsibility of DGQA to carry out defect investigations. While the blame game is still going on, a large quantity of ammunition remained segregated over long periods (2014-16) due to delay in defect investigation. Thus despite being pointed out in the PA report, no improvement came to notice during the follow up audit.

3.2.2.11 Inadequate Fire control system

Ammunition is a hazardous commodity designed primarily to inflict damage on the enemy in war. However, if ammunition functions prematurely while in trajectory, or at the gun, or in storage, it brings devastation to its own camp. To reduce the potential hazard, a sound firefighting mechanism including timely disposal of defective ammunition should be in place.

As observed in paragraph of 6.6 of the PA report, there was deficiency of firefighting staff and equipment during 2008-13 to the extent of 47 and 65 *per cent* respectively in eight selected depots. We had opined that the depots were functioning with risk of fire accident.

During the follow up audit, it was observed that the step for revision of firefighting staff and equipment, initiated in November 2011 was still pending (January 2017). Overall deficiency of firefighting staff and equipment was still persisting. AHQ stated (January 2017) that the overall deficiency of firefighting staff including fire man was 1325 and the recruitment for filling up the 435 vacancy of fire man was under progress. Procurement of deficient firefighting equipment was underway.

In spite of the audit frequently pointing out the deficiency of firefighting, demilitarization plant and delay in replacement of defective mines, adequate safety measures were yet to be taken by the Ministry/ AHQ. Thus, the depots were functioning with risk of fire.

The above observation may be seen in relation to the massive fire breakout at Central Ammunition Depot (CAD) Pulgaon on 31 May 2016. In the PA Report (paragraph 6.7.1 and 6.7.2) we had commented that there was delay in disposal of unserviceable ammunition resulting in occupation of valuable storage space and increased risk of accidental explosion, fires *etc*. and that environment friendly disposal technique like demilitarization plant had not been adopted by the Army HQ.

The ammunition involved in the fire accident at CAD Pulgaon was Anti Tank Mines manufactured by Ordnance Factory Chanda (OFCH). The mines in question were first received by CAD in year 2010. Subsequently, OFCH was informed that the mines manufactured in February 2010 and received in May 2010 were found to be exuding trinitrotoluene (TNT), a chemical compound in

June 2010. In July 2011, the Master General of Ordnance (MGO) brought the issue to the notice of Secretary (Defence Production), highlighting the defects. On the order of DGOS, the mines were segregated. Later in 2012, OFCH proposed repairs to the mines and for the next four years there were many experiments, trials and tests conducted to evolve an approved repair methodology. However, till the occurrence of the accident (31 May 2016) repair methodology could not be finalized.

The fact thus, remained that the mines were continued to be held as segregated condition on account of exudation of TNT which ultimately resulted in massive fire ,causing loss of precious human life of 19 personnel along with loss of ammunition / Government assets valuing ₹15.05 crore.

In the PA Report it was recommended to establish environment friendly demilitarization method for disposal of ammunition and explosive. Post fire accident at CAD Pulgaon on 31 May 2016, Army proposed for installation of a demilitarization plant in the CAD, in principle approval of the same was accorded by RM in September 2016. The procurement process is under progress as of January 2017.

3.2.2.12 Inordinate delay in implementation of Computerized Inventory Control Project (CICP)

We had pointed out the abnormal delay in implementation of CICP (paragraph 6.8) in our PA report. The project was sanctioned by the Government in 1994. Phase I was completed in December 2003. After the Cabinet Committee on Security (CCS) approval for conducting system study and porting developing software in phase II in November 2005, contract of CICP phase II was signed between the Ministry and M/s L&T on 30 July 2015 at a cost of ₹ 358.12 crore with implementation period of 18 months i.e. by 31 January 2017. However, implementation of the project has been delayed. The benefits envisaged would only be known after successful implementation of the project.

3.2.3 Conclusions

The follow up audit was conducted with the aim to assess the actions taken on the audit contentions/recommendations brought out in PA report on 'Ammunition management in Army'. Against nine recommendations made in the PA report in order to overcome the critical shortage of ammunition and its efficient and effective management, no response has been received from the Ministry as of February 2017.

We observed no significant improvement in the availability of ammunition (September 2016). Out of a total of 152 types of ammunition, the stock of 121 types of ammunition (*80 per cent*) was below the authorization level of 40 days (I). Further, availability of 55 *per cent* types of ammunitions was below MARL i.e. minimum inescapable requirement to be maintained for operational preparedness and 40 *per cent* types of ammunitions were in critical level having stock of less than 10 days. Availability of high calibre ammunitions relating to AFVs (Tanks) and Artillery are in more alarming state. Moreover, in the absence of fuze, *83 per cent* of these high calibre ammunitions presently held with Army were not in a state to be used in operation.

Though OFB remained the main source of supply of ammunition to Army (86 to 99 *per cent*), it could not meet the targets accepted by it. The shortfalls in supply by OFB were in 64 to 95 *per cent* of types of ammunitions during April 2013 to December 2016. Four items for which procurement under capital head was initiated during 2008- 13, could not fructify as of January 2017. Out of 28 cases initiated during 2008-13 for procurement of ammunition ex-import, two contracts were concluded. Even most of the procurement cases under 'Road Map' for which AONs were accorded in 2013, did not culminate in signing of the contracts as of January 2017.

As regards the serviceability state of ammunition, high percentage of Return for Rectification at quality assurance stage continued. Further, 18 *per cent* of the total quantity of ammunition held was lying in segregated, repairable and unserviceable condition (September 2016) which shows little improvement over the period from 17.5 *per cent* as in March 2013. DGQA failed to keep pace with the stipulated time frame of three month for conducting defect investigation for which ammunition remained in segregated condition for several years.

Due to delay in disposal of unserviceable ammunition a major fire accident at CAD Pulgaon had resulted in loss of precious human life and public money. Continued deficiency in firefighting staff and equipment further add to risk of fire in ammunition depots.

Computerized Inventory Control Project (CICP) sanctioned by the Ministry in 1994 had not seen the light of the day as Phase II of the project for which contract was concluded in July 2015 was yet to be implemented.

The matter was referred to the Ministry on 10 February 2017; their reply was awaited.

3.3 Extra expenditure due to non-placement of order within validity of the offer

Non- acceptance of an offer within its validity led to procurement of 85259 Bicat Strip at an extra expenditure of ₹90.26 lakh, which was avoidable.

Bicat strips are practice munitions comprising of safety fuse inserted with crackers at strategic intervals which simulate gun fire when ignited.

Army HQ floated request for proposal (RFP) for procurement of 85259 numbers of Bicat Strips to five firms in March 2013 wherein bids were to be valid till 02 November 2013.The lone bid submitted by M/s Ganesh Explosives Pvt. Ltd. Coimbatore was opened on 02 May 2013 with validity of the bid as prescribed in the RFP. Tender Evaluation Committee (TEC) in May 2013 decided for capacity verification of the firm and post-verification (December 2013) through Controllerate of Quality Assurance (CQA), Kirkee, Pune, the commercial bid was opened on 30 January 2014. Since the quoted price of ₹643.26 per item was much more than the benchmarked price of ₹226.33 arrived at by Commercial Negotiation Committee (CNC) in December 2013, the price was negotiated (February 2014) by CNC to ₹295.90 per unit. Meanwhile, validity of the offer was extended by the firm thrice from 02 November 2013 to 02 January 2014, 02 March 2014 and finally to 31 March 2014. The case forwarded to Integrated Financial Advisor (IFA), Army on 7 March, 2014 was concurred by him on 13 March 2014.No supply order was placed till validity of the offer which was 31 March 2014. Subsequently, Competent Financial Authority (CFA) accorded approval for re-tendering in June 2014 and procured 85,259 numbers of Bicat Stripsat a unit price of ₹401.77 under supply orders placed in September 2015 on two different firms, other than the firm to whom supply order was not placed within its validity till 31 March 2014.

On being pointed out by Audit (May 2016), Army HQ stated (July 2016) that this did not result in any loss as the earlier bidder being new one, had reduced his price drastically and could have refused to supply even after placement of supply order.

The reply is an afterthought as negotiation with the lone bidder was carried out only after assessing his capability to supply the store and the negotiated price of ₹295.90 per unit despite drastic reduction as stated, was still higher than the benchmarked price of ₹226.33 per unit.

Thus, Army HQ failed to place the supply order on the firm with which negotiations were conducted within the validity period despite multiple extensions of validity of offer by the firm. Subsequently procurement was made from another firm after re-tendering which resulted in avoidable extra expenditure of ₹90.26 lakh.

The matter was referred to the Ministry of Defence in September 2016; their reply was awaited (January 2017).

3.4 Loss due to non-recovery of rent and premium in respect of Mobile Towers installed in a military station.

13 mobile towers of private telephone companies were installed at Chandimandir Military Station without the requisite approval of the Ministry of Defence, leading to loss of ₹4.33 crore on account of non-recovery of rent and premium.

Government of India, Ministry of Defence (GoI, MoD) decided in September 2008 that the Public Sector and Independent Infrastructure Providers (IP-I), who have been granted license by the Department of Telecommunications (DoT) to build, operate and maintain various services, such as Unified Access Services, Basic Services and Cellular Mobile Services *etc*, may be considered for allotment of Defence land on leasehold basis, to lay the Optical Fibre Cables and set up/construct shared communication towers on Defence land at Military Stations/Cantonments on certain terms and conditions including the following:-

i. The land may be allotted at the commercial lease rent i.e. four times the residential rent, based on the current STR/market rate of the area with one time premium at 10 times the annual rent.

ii. The Authority competent to grant the lease of land to communication operators would be the MoD or the authority to whom such powers may be delegated not below the General Officer Commanding -in- Chief (GOC-in-C) of the Command and its equivalent in other services.

The MoD in April 2012, clarified that it had not issued any order for delegation of these powers and the authority to grant leases of land to communication operators was with MoD only. In terms of the Regulations for Military Engineer Service (RMES), the Garrison Engineer (GE) is responsible for making demands for payment of all revenue and for taking steps for its prompt realisation.

During audit of GE Chandimandir (May 2016) and Station Headquarters Chandimandir (July 2016), Audit noticed (May & July 2016) that 13 mobile towers had been installed between March 2006 and June 2013 by the private telephone companies at Chandimandir military station without sanction of the competent authority i.e. MoD. Further, though recoveries of electricity bills were being effected by the GE Chandimandir, no recovery towards rent/one time premium had been made for 13 Mobile towers thereby resulting into loss of rent of ₹1.56 crore and one time premium of ₹2.78 crore till July 2016.

In reply to an audit query, Defence Estates Office (DEO), Chandigarh intimated (June 2016) that no information/record regarding installation of Mobile/Telephone towers was held by that office. Station HQrs Chandimandir replied (July 2016) that no rent was being charged as no rent agreement was concluded with mobile company by them.

HQrs Western Command (WC) stated (December 2016) that the process of getting sanction from the MoD under the 2008 policy is a laborious process and a case taken up in 2008 for establishment of mobile towers at Chandimandir military station has still not seen the light of the day. Hence, a conscious decision was taken to provide temporary relief to troops purely as welfare measures. It was further intimated that no agreement was concluded except electricity charges being paid as per actual usage.

Thus, case reveals that 13 mobile towers have been installed at Chandimandir military station without approval of the competent Authority i.e. MoD. Further, no rent agreement was concluded in violation of the policy of September 2008 thereby causing a loss of rent of ₹1.56 crore and one time premium of ₹2.78 crore till July 2016.

The case was referred to the Ministry (October 2016), their reply was awaited (January 2017).

3.5 Wasteful expenditure on procurement of incompatible equipment

Outboard Motors (OBM) costing ₹1.26 crore, which were procured by invoking Army Commander Special Financial Powers to meet immediate requirement in Northern Command, could not be utilised. 46 out of 50 OBMs have been used for less than 10 hours in seven years. User units attributed low utilisation of the motors to lack of compatibility with the boats held and to absence of scope for training in the available terrain.

To obviate non availability becoming a constraint in counter insurgency and internal security duties and to meet immediate operational requirements, special financial powers have been delegated to Army Commanders for incurring expenditure on procurement of equipment and stores to supplement the availability through central source. These powers can also be invoked for purchasing stores and equipment which have not been introduced in Army {Non Standard Pattern (NSP)} but which are perceived by Army Commanders to be necessary for operational reasons in their command areas. The procurement of NSP items would however be only need based. It means that procurement of stores/ equipment for training, and flood relief operations *etc* was not authorised under the ACSFP.

Engineer units in Northern Command (NC) are authorised Outboard Motors (OBMs[16]). Against an authorisation of 100 OBMs, the units in NC had a deficiency of 48 OBMs of 30 horsepower (HP) in 2007. HQNC initiated a proposal in November 2007 for procurement of 50 OBMs of higher HP *viz* 90 to 100 HP, under the Army Commander's Special financial powers (ACSFP) on the plea that OBMs of 90 to 100 HP would be more effective in rivers in the NC theatre for carrying out training and in flood relief operations.

Notwithstanding the defined purpose of the delegation, HQ NC accepted the necessity and procured 50 OBMs at a total cost of ₹1.26 crore in March 2009 under the ACSFP. These OBMs were released in April 2009 to three Corps HQ (Corps 'A', 'B' and 'C') and Command Engineer Units including Combat Engineer Training Camp (CETC)[17] under the Northern Command. The OBMs were received by March 2010.

Audit examined the receipt and utilisation of these OBMs and observed that even before the actual receipt, Corps 'A' ordered (May 2009) the transfer of 12 out of its 15 allotted OBMs to the CETC. Similarly three OBMs released to the Command Engineer Unit were also transferred to the CETC in February 2013, as the Engineer unit could not utilise the same due to non-availability of power boats. These 15 OBMs along with the six released to the CETC were held (April 2016) with the training unit and none of these OBMs had been used for more than 10 hours ever since their procurement in 2009. In respect of the OBMs issued to other two Corps, Audit observed that the total hours run by each of them was also in single digits, except for four OBMs held by one Engineer unit under Corps 'C', where the usage was between 32 to 34 hours. Overall state of holding and utilisation of the 50 OBMs procured is summarised in the **Table-24** below:

[16] OBM- A propulsion system for boats consisting of a self-contained unit that includes engine, gear box and propeller and can be easily removed for storage or repairs.

[17] CETC- Engineer Training unit meant to provide assistance to Engineer Regiments of North Command in terms of stores for Training, Flood Relief and CI Operations.

Table-24

Formation/ Unit	Number of OBMs released	Unit-wise sub allocation		Present state of holding		Total hours run (April 2016)
		Unit	No	Unit	Since (As per Command Release Order)	
Corps 'A'	15	Corps HQ	10	CETC	April 2009	1.5 to 9.5 hrs
		Corps ER	03	Corps ER	April 2009	-
		Corps ER	02	CETC	Jan 2010	Less than 8 hours
Corps 'B'	09	Corps ER	09	Corps ER	April 2009	Not run – Equipment not found successful by the formation
Corps 'C'	12	Corps ER	03	Corps ER	April 2009	4 hrs
		Corps ER	05	Corps ER	April 2009	Not run
		Corps ER	04	Corps ER	April 2009	32 to 34 hrs
Command Engr. Unit	03	Command ER	03	CETC	Feb 2013	Less than 2 hrs
CETC	06	CETC	06	CETC	April 2009	Less than 10 hours
Engineer Park	05	EP	05	Engr. Park as reserve	April 2009	

It is evident from the above details that none of the 50 OBMs procured at a total cost of ₹1.26 crore, as an NSP item to meet immediate operational requirements, by invoking ACSFP were used by the Units in NC. The reasons for non-utilisation as stated by the holding units were:

- OBMs not found successful due to non-availability of power boats
- High power of the OBMs topple the boats held
- Non availability of compatible power boats for the OBM
- Absence of scope for training in the available terrain

Audit further observed (October 2016) that out of 21 OBMs held by CETC, six were already declared unserviceable (in July 2016) and deposited as salvage. Again, 39 OBMs had been issued on loan to other Commands from February 2015 to October 2016. Thus as of October 2016, the NC was holding only five OBMs in serviceable condition.

The insignificant utilization of OBMs since their receipt in March 2010 clearly indicates that (i) the requirement for procurement of the OBMs was not for immediate operational purposes and (ii) higher horsepower OBMs were procured disregarding their compatibility with the available boats. Thus, the special delegation of financial powers made on the Army Commander was injudiciously used, resulting in wasteful expenditure of ₹1.26 crore.

The matter was referred to the Ministry in October 2016; their reply was awaited (January 2017)

3.6 Unnecessary expenditure on cattle perimeter fencing

General Officer Commanding (GOC), Headquarters Delhi Area sanctioned jobs in piecemeal for construction of cattle perimeter fencing around Officers married accommodation in Delhi Cantonment although perimeter wall around complexes was already existing. This had resulted in unnecessary expenditure of ₹3.42 crore.

Scales of Accommodation, Defence Services- 2009 stipulates that perimeter and boundary wall of 1.3 M high may be provided around living accommodation complex as considered necessary to prevent trespassing and occupation by unauthorized settlers. Further, Defence Works Procedure (DWP) 2007 prescribes that no project or work services will be split up to bring it within the powers of a CFA at a lower level.

Audit noticed (December 2015 & October 2016) that Head Quarters (HQ) Delhi Area accorded 21 administrative approvals (A/A) between November 2013 and December 2015 totalling ₹ 3.12 crore for provision of cattle perimeter fencing for officers married accommodation, which had perimeter/boundary wall. The amount of each A/A was kept below ₹ 15 lakh i.e. within the powers of HQ Delhi Area by way of splitting up the works in contravention of the provisions in DWP-2007. For execution of the jobs, 13 contracts were concluded by two Garrison Engineers (GEs) and one Commander Works Engineer (CWE) between December 2013 and June 2016. Out of 21 jobs, 15 were completed between March 2014 and July 2016 at a cost of ₹ 2.41 crore.

In reply to audit queries, the concerned GEs stated (August/September 2016) that no quarters/dwelling units were outside the existing perimeter wall of the objected area. Chief Engineer Delhi Zone (CEDZ) in July 2016, admitted that as per scales, fencing to a dwelling unit was not authorized wherever the perimeter wall exists, while stating that the case shall be taken up with the Ministry of Defence through proper channel for change in scales of accommodation and that no more work of this nature shall be undertaken till the scales are modified or the work would be sanctioned as a special item of work by the competent authority.

Audit, however, noticed (November2016) that another two such works totalling to ₹0.30 crore had been sanctioned by HQ Delhi Area and as such in backdrop of the quoted responses of the Military Engineers Service, solicited justification for the sanctions from HQ Delhi Area.

HQ Delhi Area responded (December 2016) by referring to a similar audit observation of December 2015 which was settled in view of response of the

GE and stated that if audit authorities now have different interpretation then the same is noted for future compliance, wherein the work will be sanctioned as a special work.

The justification of HQ Delhi Area about settlement of the audit observation is not factually correct as the settlement was driven out of the GE's response that did not reveal the fact of existence of the perimeter/boundary wall around the married accommodation complexes/works questioned in the observation.

Thus, sanction/construction of cattle fencing around officer's married accommodation complex having the existing perimeter wall was unnecessary, resulting in sanction/expenditure of ₹ 3.42 crore for infructuous work. Further, sanctioning of such work as a special work would not make the work fruitful and would introduce a new practice thereby being violative of the codal provision.

The matter was referred to the Ministry in October 2016; their reply was awaited (January 2017).

3.7 Loss due to procurement of defective equipment

In procurement of 20 numbers of Photowrite Systems, Director General Military Intelligence had accepted separate Performance Bond and warranty bonds of each system by violating the contract provisions. Eleven systems became non-functional within 3 to 22 months of procurement resulting in loss of ₹ 21.28 crore. Despite poor performance of the firm during delivery and warranty period of the systems, warranty bonds were allowed to lapse without encashment.

The Photowrite Systems are authorised to all the Imagery Interpretation Teams (IIT) at Army Command, Corps and Divisional Headquarters level. The equipment is used for generation of large format hard print from digital data of Satellites/Aerial Imageries for interpretation purpose. The Director General Military Intelligence (DGMI) is responsible for acquisition of the equipment.

A total of 20 Photowrite Systems had been procured by DGMI between 1996 and 2000 from M/s Speck Systems Limited (firm). After completion of in-service life of the equipment, DGMI, in February 2009, proposed to replace the existing 20 systems with Large Format Photowrite System to be procured as a repeat order from the firm. The proposal was approved by Defence Procurement Board in December 2009. DGMI in August 2010 concluded a contract with M/s Speck Systems Limited, Hyderabad (firm) for the supply of 20 equipment at a cost of ₹33.0 crore. The delivery schedule of the equipment was in three phases *i.e.* 10 equipment by February 2011, 05 equipment by May 2011 and balance 05 by August 2011. Pre Dispatch Inspection (PDI), commissioning and Acceptance Test Procedure (ATP) of the equipment were to be completed within 12 months of the effective date of contract. Payments were to be made in stages *i.e*. 15 *per cent* in advance, 70 *per cent* on delivery of the equipment in batches and remaining 15 *per cent* on successful completion of ATP.

However, the firm failed to supply even a single equipment within delivery schedule. In view of lackadaisical attitude of the firm, DGMI had initiated the case for termination of the contract twice- first in March 2011 and subsequently in December 2012. However, on the advice of Principal Integrated Financial Advisor (PIFA-Army) on both occasions extension in the delivery period was granted culminating into effective extension of 24 months from the original delivery schedule.

PDI of all equipment was completed between May 2012 and August 2013. The installation/commissioning of 20 systems were carried out between June 2012 and May 2014 but ATP of 19 equipment was completed up to February 2014 and of balance one is yet (May 2016) to be completed. Payment of ₹38.68 crore (including taxes) had been made to the firm as of April 2014.

Audit scrutiny of the case revealed the following:-

(a) As per Article 14 and 15 of the contract, warranty period of the system was 18 months from the date of acceptance or the date of installation and commissioning whichever is later. Against this, the firm had given a warranty bond in the form of BG equal to 5 *per cent* of the total value of the contact *i.e*. ₹ 1.65 crore with validity up to 3 months after the ATP and acceptance of consignment warranty period. Further, the warranty bond was subject to encashment by the buyer in case conditions regarding warranty and settlement of claims in the contract are not fulfilled by the firm.

We noticed that performance of the firm towards maintenance of the systems was unsatisfactory as ATP of one system was yet to be completed (May 2016) and as of December 2015, 10 systems had become non functional within 03 months to 22 months from their acceptance. Out of them seven systems, became non-functional during the warranty period for which no action had been taken by the firm to repair or replace them. Although, the warranty of non functional systems was to be extended, the firm did not extend the warranty period. We noticed that despite inaction on the part of the firm towards maintenance and warranty extension, encashment of BGs towards warranty bonds was not initiated by DGMI and BGs against five systems amounting to ₹41.25 lakh were allowed to lapse.

(b) As per the Article 4 of the contract, the firm was to give a Bank Guarantee (BG) equal to five *per cent* of the total value of the contract *i.e.* ₹1.65 crore towards performance bond with validity up to 90 days after the Acceptance Test Procedure (ATP) and acceptance of last consignment at site. However, deviating from the contractual provision, separate performance bonds of ₹8.25 lakh for each system were accepted from the firm and they were allowed to expire within 90 days of the ATP of the respective system. As a result, DGMI failed to take punitive action by means of recovery of performance BG which otherwise would not have been lapsed since ATP of one system is yet to be completed (May 2016). Thus, splitting the performance bond with different validity periods defeated the very purpose of taking performance BG from the supplier.

(c) We further observed that Defence Procurement Manual (DPM), which contains guidelines for revenue procurement, stipulates performance BG amounting to 10 *per cent* of the contract value where as in Defence Procurement Procedure (DPP) for capital procurement the provision is for 5 *per cent* of total contract value. Provision for 5 *per cent* BG in capital procurement is not only insufficient to safeguard government interest but also indicate the incongruity in taking performance guarantee from the vendor in defence procurements.

It was noticed that Vice Chief of Army Staff (VCOAS) had ordered (March 2016) to fix accountability of the respective Project Officer/dealing Officer for lapse of the BGs and apprised CGDA office to initiate the disciplinary action regarding involvement/ improbity of PIFA in rendition of advise for extension in the delivery period. Though the firm was blacklisted by the Ministry in May 2016, response to audit query seeking status of inquiries against erring officers was awaited. (January 2017).

In light of the above case Audit recommendations are following:-

- Provision regarding quantum of the performance BG in DPP should be reviewed keeping in view the provision of DPM.

- Splitting of performance BG by the firm should not be allowed as it defeats the very purpose of securing interest of the government pertaining to the whole of procurement order.

- Court of Inquiry against the erring officers as ordered by VCOAS should be expedited so as to ascertain as to what went wrong and what lessons could be learnt for future.

The matter was referred to the Ministry in September 2016; their reply was awaited (January 2017).