### **OVERVIEW**

This Report contains the results of audit of the financial transactions for the year ended March 2016 and performance reviews of projects/schemes of Ministry of Defence pertaining to Army, Ordnance Factories, Department of Defence, Department of Defence Production, Defence Research and Development Organisation, Military Engineer Services and Border Roads Organisation.

The significant audit findings as brought out in the report are summarised as follows:

## Functioning of Directorate General Married Accommodation Project (MAP)

Directorate General Married Accommodation Project (DG MAP) was created as a special organisation, to construct deficit married accommodation for the defence services personnel in an expeditious and time bound manner. Audit of the Directorate revealed that only 80,692 Dwelling Units (DUs) were constructed up to March 2016 against a target of 1,98,881 DUs, which were to be constructed in four phases of four years each from 2002 onwards. Incorrect prioritisation of stations, inaccurate assessment of deficiency and construction of accommodation beyond authorisation accentuated the impact of shortfall.

(Paragraph 2.1)

### Loss in procurement of Jelly Filled Cable

Lack of clear direction from Director General Quality Assurance (DGQA) regarding conduct of the tests for which they do not have their own facility led to inordinate delay of 15 months in completion of evaluation of Jelly Filled Cables. As a result, commercial offer was revised by the vendor culminating in loss of ₹1.28 crore to the Government in procurement of 3000 Km Jelly Filled Cable.

(Paragraph 2.2)

#### Overhauling and procurement of microlite aircraft

In deviation from the extant policy, 34 engines of existing microlite aircraft were contracted for overhaul at a cost exceeding 50 *per cent* of the cost of a new engine by the Director General, National Cadet Corps (DG NCC).

Further, additional 110 microlite aircraft were procured at a cost of ₹52.91 crore despite low utilisation of the existing fleet.

(Paragraph 2.3)

#### 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.

(Paragraph 3.1)

### Ammunition Management in Army - Follow up Audit

" For the contents of this paragraph/report, printed version of the relevant report may be referred to"

(Paragraph 3.2)

## 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.

(Paragraph 3.4)

#### 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.

(Paragraph 3.5)

#### 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.

(Paragraph 3.6)

#### 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

(Paragraph 3.7)

Unfruitful expenditure of ₹4.46 crore on part construction of security walls at Central Ordnance Depot, Agra and along the eastern boundaries of Cantonment area at Dehradun

Failure to ensure availability of site resulted in part construction of security walls thereby impinging on security of Central Ordnance Depot, Agra and Cantonment area of Dehradun besides an unfruitful expenditure of ₹4.46 crore.

(Paragraphs 4.2 and 4.4)

#### Unwarranted expenditure on execution of work

Against the requirement of cantilever type racks on First-in-First-Out system of operation, 2000 racks were constructed for ₹5.88 crore at Central Ordnance Depot, Jabalpur with Last-in-First-Out system of operation. This had resulted in unfruitful expenditure of ₹5.88 crore. Further, an over payment of ₹ 1.57 crore had been made to the contractor by giving an unwarranted deviation order.

(Paragraph 4.3)

### Excess payment of electricity charges amounting to ₹ 32.13 crore

Maharashtra State Electricity Distribution Company (MSEDCL) introduced, in August 2012, a new tariff for consumers providing public services, which also included defence establishments. MSEDCL further introduced separate tariff, in June 2015, for government educational Institutes & hospitals and other Defence establishments falling under the category of public services. However, seven Garrison Engineers, who received electricity in bulk from MSEDCL for supply to defence educational institutes, hospitals and other defence establishments, failed to exercise checks on the correctness of tariff applied before making payment to MSEDCL, resulting in excess payment of ₹32.13 crore.

(Paragraph 4.5)

#### Non utilization of assets

Failure of Chief Engineer, Bareilly to make clear provision of bypass road in drawings and to incorporate the complete scope of work in the contract had resulted in non-completion of the road. As a result, Explosive Dump constructed in May 2014 at a cost of ₹7.65 crore could not be utilized.

(Paragraph 4.6)

#### Avoidable extra expenditure

Failure of Director General, Border Roads in accepting tenders within the validity period and inadequacies in tender documents resulted in retendering and avoidable extra expenditure of ₹6.47 crore.

(Paragraph 5.1)

#### **Development of an Integrated Aerostat Surveillance System**

Import of a balloon costing ₹ 6.20 crore by a DRDO's lab under a project for development of aerostat surveillance system lacks rationale. Further, the project itself did not achieve its objectives despite an expenditure of ₹49.50 crore.

(Paragraph 6.1)

# Irregular sanction and expenditure of ₹5.20 crore on construction of vehicle testing ground after completion of the project

Director General, Research & Development accorded sanction for construction of Vehicle Testing Ground at Vehicle Research & Development Establishment, Ahmednagar (VRDE) at a cost of ₹5.20 crore in April 2009 based on VRDE's proposal of March 2005 to meet the specific requirement of testing the Unmanned Ground Vehicle (UGV) being developed on 2.5 Ton 'B' vehicle. However, by then UGV Project was closed. The expenditure is rendered infructuous because the Testing Ground cannot be gainfully utilized as Army's requirement is of a 50 Kg UGV for which existing VRDE Test Tracks would suffice.

(Paragraph 6.2)

#### Infructuous expenditure of ₹19.53 crore

To demonstrate the missile in the range of 1200M and 1500M as stipulated by the Army, Combat Vehicles Research & Development Establishment (CVRDE), Avadi procured 20 LAHAT missiles in spite of reservation of the foreign supplier due to technical constraints related to stability of the missile. During demonstration trials, the missiles failed to achieve the stipulated criteria/range of 1200M to 1500M. Army refused to accept the missile, thereby the payment of ₹19.53 crore made to the supplier was rendered infructuous.

(Paragraph 6.3)

#### ORDNANCE FACTORY ORGANISATION

#### Performance of Ordnance Factory Board

Ordnance Factories: 41 in number divided under five operating groups produce a range of arms, ammunition, equipment, clothing *etc.* primarily for the Armed Forces of the country. The factories function under the Ordnance Factory Board.

The Board received budgetary grant of ₹14,750 crore and ₹687 crore in 2015-16 to meet its revenue expenditure and capital expenditure respectively. During the last five years, both revenue and capital expenditure have shown increasing trends.

During 2015-16, the Cost of Production at the Board was ₹18,294 crore with the share of Stores, Labour, Direct Expenses and Overhead costs at 57 per cent, 11 per cent, 2 per cent and 30 per cent respectively. Cost of Production showed 11 per cent increase over the figures of 2014-15. Over the period 2011-16, the average overhead charges per annum was ₹4674 crore which constituted around 28 per cent of the average annual Cost of Production (₹16,462 crore) of Ordnance Factories Organisation. Major elements of the overheads are supervision charges and indirect labour cost which together registered 60 to 70 per cent of total overhead cost during 2011-12 to 2015-16.

Value of issues increased by 12 per cent from ₹16,664 crore in 2014-15 to ₹18,624 crore in 2015-16. The Army is the major indentor for the products of the Ordnance Factories, accounting for nearly 80 *per cent* of the total issues during the year 2015-16. Deficit incurred in respect of issues to the Army was ₹128 crore in 2015-16 against surplus of ₹161 crore in 2014-15. Though, total Defence issues reported a deficit of ₹91 crore in 2015-16, losses in their issue, are offset by surplus generated by the IFD factories (₹227 crore) resulting in an overall profit of ₹167 crore in 2015-16.

(Paragraph 7.1)

#### **Management of Import Contract in Ordnance Factories**

Ordnance Factories import crucial part of its stores and plants & machineries. Audit examination of selected import contracts concluded by the five factories during 2012-15 revealed that there were deficiencies in management of the contracts at pre-contract as well as post-contract stages.

Audit found that undue time was taken in negotiations and approval of supply orders as only 2 out of 28 test checked supply orders had been placed within the stipulated time frame. Provision for constitution of collegiate committee,

as instructed by the Ministry with a view to reduce the time taken in negotiation and approval, had not been incorporated in the procurement manual. Further, owing to non-inclusion of clause relating to 'Liquidated Damages' with cost implications in two orders, Factories were rendered weak in enforcing timely delivery of stores from the supplier.

There were also delays in supplies ranging from 2 to 17 months: in eight cases due to delay in conduct of Pre-Despatch Inspection (PDI)/ opening of Letter of Credit (LC) by the Factories and in balance cases, on the part of suppliers. We also noticed instances of delay both in referring quality claims by the Factories and subsequent resolution of the same by the suppliers resulting in quality claims worth ₹2.24 crore remaining pending for settlement from seven to ten months. Ordnance Factory Board may consider including a provision of Liquidated damage (LD) for delayed supply as well as delay against quality claims.

(Paragraph 7.2)

# Non-revision of Labour Estimates after introduction of CNC machines and incorrect payment of Piece Work Profit

Ordnance Factories are required to revise the Labour Estimates after introduction of Computer Numerically Controlled (CNC) machines. The Estimate quantifies the unit labour cost for each item of production and serves as the template for labour planning, deployment and control on costs. But in three-fourth of the sampled cases examined, the selected four Factories did not revise the labour estimates.

In deviation from the norms laid down by the Board, two Factories overestimated the labour hours (SMH) required for meeting production targets in 2013-14 and 2014-15. All the four Factories under-estimated the available SMH in eight out of 10 instances by applying incorrect norms during 2012-15. The Target SMH and Available SMH figures being unreliable, labour planning in the Factories was deficient to that extent. At Metal & Steel Factory (MSF) Ishapore, actual output SMH was less than those reported in three production shops in 99 out of 102 instances. This resulted in excess payment of Piece Work Profit (PWP) aggregating ₹2.60 crore to direct Industrial Employees (IEs). Further, payments of PWP to indirect workers (not eligible for PWP) were also noticed in all the four Factories.

Despite outsourcing, the in-house IEs were paid on the basis of Estimates from which the outsourcing element (in the form of SMH) had not been deducted. This led to excess payment of ₹10.94 crore made to the IEs in two Factories for sampled items during 2012-13 to 2014-15.

(Paragraph 7.3)

#### Management of Manufacture Warrants

Manufacture Warrant is the authority of the Ordnance Factory Management to the production shops for deployment of labour to undertake work placed on the Factory. It records the number of authorised Standard Man hours (SMH) required to manufacture the order quantity based on estimate.

Keeping the warrants open for unduly long periods beyond the stipulated six months of its issue is fraught with risk of allowing unauthorised adjustments. Only 189 (27 per cent) of 693 warrants sampled in Audit and issued between 2012-13 and 2014-15 were closed within the six-month period across the four sampled Factories. While 403 (80 per cent) of the remaining warrants were closed after the stipulated period, 101 warrants (15 per cent) were still open and awaiting closure (March 2015). Open warrants provided an opportunity to the Factories to spread rejections across warrants (in order to keep it within the normal rejection limits) or transfer excess material or excess labour drawn to other warrant through Transfer Vouchers. Transfer Vouchers were being used in the Factories without following the relevant internal controls.

(Paragraph 7.4)

#### **Procurement of defective Radiators**

Heavy Vehicles Factory (HVF), Avadi placed an order for Radiators to be fitted in T-90 tanks on a firm which had no prior experience of manufacturing required Radiators. The Factory accepted Radiators worth ₹2.78 crore which did not conform to the stipulated technical requirements and rendered T-90 tanks fitted with such Radiators unacceptable to Army.

(Paragraph 7.5)

# Avoidable loss of ₹31.32 crore towards rejection of empty Fuze A-670M due to delay in defect investigation

Despite repeated failure in production of Empty Fuze A-670M in two Factories since 2008-09 onwards, OF Board constituted Joint team only in April 2014 which could give its recommendation in July 2016. Meanwhile, the production continued and empty Fuze A-670M valuing ₹31.32 crore were lying as rejected in two Factories as of July 2016.

(Paragraph 7.6)

## Avoidable rejection due to failure to diagnose exact causes of earlier rejections

Failure of Ordnance Factories and the Quality Assurance Establishments in identifying exact causes of rejection resulted in continued rejection of lots of 105mm HE ammunition valuing ₹10.02 crore during 2013-16

(Paragraph 7.7)

#### Under utilisation of costly machines

Two tooled-up CNC machines were purchased at a total cost of ₹9.32 crore by Rifle Factory Ishapore despite the existing capacity to meet the targets. One tooled-up machine is non-functional since July 2014 for want of special purpose tools (as of April 2016) and the prospect of utilization of the other machine engaged in production of two components is also bleak in view of procurement of these components from trade at a much cheaper rate.

(Paragraph 7.8)

#### Delay in production of BLT variant of Tank T-72

As per Indent, T-72 Bridge Laying Tanks (BLT) variants were scheduled to be delivered by HVF, Avadi in a phased manner during 2012-2017. On account of delays in execution of infrastructure projects and frequent changes in the sealed design of T-72 BLT, HVF was yet to commence issue of T-72 BLT variant and the advancing tank column of the Armoured Regiments, therefore, remained incomplete to that extent.

(Paragraph 7.9)