OFFICE OF THE COMPTROLLER & AUDITOR GENERAL OF INDIA

NEW DELHI 10th March, 2017

CAG PERFORMANCE AUDIT REPORT ON WORKING OF ARMY BASE WORKSHOPS PRESENTED IN PARLIAMENT

Union Performance Audit Report of the Comptroller and Auditor General of India No. 36 of 2016 on Working of Army Base Workshops, Defence was tabled in Parliament today and has now become a public document.

The Performance Audit of "Working of Army Base Workshops" was taken up to assess the effectiveness of the Workshops with regard to timeliness of overhaul, adequacy of infrastructure for overhaul, timely availability of spares and quality of the repairs.

The Performance Audit covered a period of six years from 2010-11 to 2015-16. Five out of eight Army Base Workshops (ABW) *viz.* 505 ABW New Delhi, 509 ABW Agra, 510 ABW Meerut, 512 ABW Kirkee based on the criticality of the equipment to the Indian Army and 515 ABW Bengaluru being the only spares manufacturing workshop were selected for audit.

The following were the important audit findings:

1. Backlog in overhaul of fighting equipment

The Indian Army has a large inventory of weapon systems and equipment which need to be maintained and sustained in battle worthy condition. The periodicity of overhauling an equipment is based on the maintenance philosophy promulgated at the time of induction for the envisaged life cycle.

In case of Tank T-72, the quantum of backlog of overhaul was 713 at the end of 2010-11 and 479 at the end of 2015-16 which constitutes around 20 *per cent* of total holding.

802 BMPs (Infantry Combat Vehicles) constituting around 33 *per cent* of total holding and 200 ARV WZT-2 (Armoured Recovery Vehicles) constituting 90 *per cent* of total holding were due for overhaul at the end of 2015-16, reducing the effective availability of the fleet for the operations to that extent.

2. Backlog in overhaul of signal equipment

We observed backlog in first overhaul of 18 *per cent* of Radar Fly Catcher, 34 *per cent* of Radar TC Reporter and 21 *per cent* of Battle Field Surveillance Radar. Backlog of 25 *per cent* was noticed in second overhaul of Radar Fly Catcher.

3. Non Formulation of overhaul policy for Class 'B' Vehicles-Scania, Tatra and Kraz

No overhaul policy for Scania, Kraz-255 B/B1 and Tatra T-815 was available with HQ Base Workshop Group and the concerned workshops.

4. Lack of facilities for repair/ overhaul of MBT Arjun

124 numbersof Main Battle Tank (MBT) Arjun were inducted into the Army from 2004-05 onward and is due for overhaul from 2020-21. At the time of induction, 69 *per cent* components were imported. The two agencies *viz*. Combat Vehicle Research Development Establishment and Heavy Vehicle Factorywere responsible for providing the components required to sustain the fleet during its life cycle through indigenization or import. However, owing to the failure of CVRDEinindigenizing the required components and that of HVF in providing spare support, MBT Arjun was not being operational since 2013.

5. Extent of achievement of overhaul targets by ABWs

At 505 ABW, overhaul in respect of Tank T-72, during the period from 2010-11 to 2015-16 ranged between 60 to 83 *per cent* of original targets excepting 2011-12 when 10 Tanks were overhauled against a target of 50.

At 512 ABW, there was shortfall in achieving the targets *vis a vis* original targets in respect of BMP ranging from 13 to 62 *per cent*. In respect of ARV WZT-2, achievement was only 22 against the target of 222.

At 509 ABW, there were shortfalls in achieving the targets *vis a vis* original targets up to 50 *per cent* in respect of Radar Fly Catcher and up to 60 *per cent* in respect of Radar TC Reporter.

6. Inordinate delay in overhaul

Against the norm of 153 days, the 512 ABW took up to 1512 days for the overhauls of BMPs.Similarly, for Tanks T-72, the delay ranged up to 836 days against the norm of 144 days. The average time taken for overhaul of each UTD-20 engine for BMP was 308days which was 10 times of the stipulated time frame of 30 days. Overhaul of Radar and its variants also experienced delays up to 921 days.

7. Delay in dispatch of overhauled equipment to Units

Backlog and delay in overhauls were further compounded by late issue of release orders by Army HQ and delay in dispatch of the equipment by the Ordnance Depots. This delay was mainly due to absence of any laid down norms and time frame for these activities.

8. Non-availability of testing facilities at the ABWs

As per Original Equipment Manufacturer (OEM) recommendation, test firing of overhauled guns was a mandatory requirement. The BMPs and Tank T-72 overhauled by ABWs were issued to user units without test firing and testing amphibious capability as the ABWs did not have the requisite test facilities.

9. Non-existence of cost accounting system

While the guidelines issued by the Ministry stipulated that the cost of overhaul of vehicle and engine would in no case exceed 30 *per cent* of the cost of new vehicle/engine, no cost accounting mechanism was in place in the ABWs to ensure the cost effectiveness of the repairs and overhauls.

10. Inordinate delay in creation of Overhaul facilities

Facility for overhaul of ARV WZT-2 was set up in March 2009 after 28 years of its introduction. The vehicle was due for overhaul since 1996-97, but only 22

ARV WZT-2 could be overhauled against the total strength of 222. The equipment was likely to be de-inducted by 2018.

Due to delays in initiation and sanction of the Component Level Repairproject for Tank T-90, not only the project cost escalated from ₹287 crore in 2004 to ₹1835 crore in 2011, but also the first Medium Repair of Tank T-90 which was due in 2012 waspending.

Project Tulip, for establishment of additional facilities at 512 ABW, as a nucleus for repairs/overhaul of communication and night vision devices for BMP II/ IIK was sanctioned in January 2003 at a cost of ₹22.54 crore, which is yet to be fullyimplemented.

11. Non-availability of critical spares leading to deviation sanctions

Deviation sanctions were accorded by Master General of Ordnance (MGO) in respect of 398 overhauled BMPs and 179 Tanks T-72 due to non-availability of critical spares and assemblies. The deviations were accorded for vision devices, communication sets, tracks *etc.*, thereby impacting the capability of BMPs and T-72 tanks.