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## FREIGHT AND WAGON MANAGEMENT ON INDIAN RAILWAYS

MINISTRY OF RAILWAYS

PUBLIC ACCOUNTS COMMITEE (2009-10)

NINETEENTH REPORT

FIFTEENTH LOK SABHA



LOK SABHA SECRETARIAT NEW DELHI

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## MINISTRY OF RAILWAYS



Presented to Lok Sabha on: 29 April 2010 Laid in Rajya Sabha on: 29 April 2010

> LOK SABHA SECRETARIAT NEW DELHI

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#### COMPOSITION OF THE PUBLIC ACCOUNTS COMMITTEE (2009-10)

\*Shri Gopinath Munde — Chairman

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- 5. Shri Naveen Jindal
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- 7. Shri Bhartruhari Mahtab
- 8. Dr. K. Sambasiva Rao
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- 17. Shri Sharad Anantrao Joshi
- <sup>\$</sup>18. Vacant
- 19. Shri Shanta Kumar
- 20. Dr. K. Malaisamy
- 21. Shri N.K. Singh
- 22. Prof. Saif-ud-Din Soz

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2.	Shri Raj Shekhar Sharma		Director
3.	Shri Sanjeev Sharma		Deputy Secretary
4.	Shri S.L. Singh		Committee Officer

<sup>\*</sup> Appointed as the Chairman of the Committee w.e.f. 6th January, 2010 Vice Shri Jaswant Singh resigned from the Chairmanship of the Committee.

<sup>&</sup>lt;sup>\$</sup> Vice Shri Ashwani Kumar retired from Rajya Sabha w.e.f. 9th April, 2010.

#### COMPOSITION OF SUB-COMMITTEE-III OF THE PUBLIC ACCOUNTS COMMITTEE (2009-10)

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Lok Sabha

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- 4. Shri Naveen Jindal

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\*Shri Santosh Gangwar — Chairman

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- \*\*9. Vacant
- 10. Prof. M. Ramadass

\*\*\*11. Shri K.S. Rao

- 12. Shri Sita Ram Singh
- 13. Shri Kharabela Swain
- 14. Shri Tarit Baran Topdar
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- 18. Shri B.K. Hariprasad
- 19. Shri Shanta Kumar
- 20. Prof. P.J. Kurien
- 21. Dr. K. Malaisamy
- 22. Sardar Tarlochan Singh

<sup>\*</sup> Elected *w.e.f.* 17th December, 2008 *Vice* Shri Rajiv Ranjan 'Lalan' Singh resigned his seat in Lok Sabha on 11th November, 2008.

<sup>\*\*</sup> Prof. Vijay Kumar Malhotra resigned his seat in Lok Sabha w.e.f. 18th December, 2008.

<sup>\*\*\*</sup> Elected w.e.f. 17th December, 2008 Vice Shri Brajesh Pathak ceased to be a Member of Committee consequent upon his election to Rajya Sabha.

#### INTRODUCTION

I, the Chairman, Public Accounts Committee, having been authorised by the Committee, do present this Nineteenth Report (15th Lok Sabha) on "Freight and Wagon Management on Indian Railways" based on Chapter I of the Report No. 6 of 2007 of the Comptroller and Auditor General of India (Railways—Performance Audit).

2. The Report of the Comptroller and Auditor General of India for the year ended March, 2006, No. 6 of 2007 (Performance Audit), Union Government (Railways) was laid on the Table of the House on 4th May, 2007.

3. The Public Accounts Committee (2008-09) took up the subject for examination and report. In the process, they took evidence of the representatives of the Ministry of Railways on the subject at their sitting held on 8th October, 2008. As the examination of the subject could not be completed due to paucity of time, the Public Accounts Committee (2009-10) again took up the subject for examination. A Sub-Committee was specially constituted for the purpose and they took further evidence of the representatives of the Ministry of Railways on 14th December, 2009. The Committee considered and finalised this Report at their sitting held on 26th April, 2010. Minutes of the sittings form Appendices to the Report.

4. For facility of reference and convenience, the Observations and Recommendations of the Committee have been printed in thick type in the body of the Report.

5. The Committee thank their predecessor Committee and also Sub-Committee III for taking oral evidence and obtaining information on the subject.

6. The Committee would like to express their thanks to the officers of the Ministry of Railways for tendering evidence before the Committee and furnishing information that the Sub-Committee/Committee desired in connection with the examination of the subject.

7. The Committee place on record their appreciation of the assistance rendered to them in the matter by the Office of the Comptroller and Auditor General of India.

New Delhi; 26 April, 2010 6 Vaisakha, 1932 (Saka) GOPINATH MUNDE, Chairman, Public Accounts Committee.

#### REPORT

#### PART-I

#### NARRATIVE PORTION

#### I. INTRODUCTION

Indian Railways play a crucial role in the social and economic development of the nation. With a vast network of 63,465 route kilometres, they are the principal mode of transportation for long haul freight movement in bulk. The Railways carried around 600 million tonne of freight during the year 2004-05 comprising 64 per cent of the total revenues earned by the railways. Railway transportation is a derived demand and is directly dependent on the growth of six major infrastructure industries in the country *viz.* electricity, coal, steel, crude pertroleum, petroleum refinery products and cement, to which majority of railway customers belong. However the Railways' share of the total transport share had come down from 53 per cent in the IV Five-Year Plan to 37 per cent in the IX Five-Year Plan. The report of the working group on Railway programmes for the X Five-year Plan (2002-07) lays down detailed freight operational and marketing strategies for achievement of projected freight targets. The achievement of these targets largely depends on the manner in which the Railways reshape their policies and strategies not only to regain the lost share in freight traffic but also to provide value for money to customers in terms of better facilities and improved services.

#### **Organizational Structure**

2. The Traffic Commercial Directorate of Railway Board is responsible for the policy formulation on tariff and marketing strategies. The Traffic Transportation Directorate monitors the movement of traffic of different commodities. The two directorates function under the overall control of Member Traffic. These directorates interact with trade representatives at regular intervals, identify high profit yielding commodities and monitor the freight business operations at the Ministry's level. At the Zonal Railway level, the freight business operations are looked after by Chief Commercial Manager, Chief Commercial Manager (Freight Marketing), Chief Operations Manager and Chief Freight Transport Manager. At the divisional level, the Sr. Divisional Commercial Manager is responsible for implementation of the policies and programmes.

#### **Rationalisation of Freight Structure**

3. Over the years certain anomalies had crept into the freight structure due to *ad hoc* changes in the freight rates and the Railways had felt the need for rationalisation. In order to remove these anomalies and the simplify and make rail traffic more competitive with other modes of transport and also to bring transparency in tariffs and rules, the process of rationalization of the freight structure was initiated in 2002-03. Audit has

highlighted the following main features of the rationalisation as announced in various railway budgets:—

- The goods carried are segregated into groups and freight is charged under classes assigned to each group of commodities. Rates are fixed for each class on the basis of distance carried. Though the freight rates during 2003-04 were not increased the number of classes were reduced from 59 to 27 and they were then further reduced to 16 classes. The highest class was lowered from 300 to 250. In order to make the rail freight rates competitive, the classification of certain selected commodities such as petroleum products, iron and steel, cement, clinker, soda ash etc. was reduced causing an overall reduction in freight rates ranging fron 3.7 per cent for cement to 10.7 per cent for petroleum products.
- All commodities, which did not have a notified trainload class meant for carrying freight in rakes, were assigned a trainload class, one stage lower than the wagonload class meant for carrying goods in individual wagons.

In 2005-06 the highest class was further reduced from 250 to 240. The freight classes in 'Fives' were abolised retaining a uniform interval of 'Tens' between the successive classes. Three new special classes namely 90W1, 90W2 and 90W3 were introduced below class 90 for certain selected lightweight commodities. The total number of classes thus stand reduced from 27 to 19.

- Further, all commodities were clubbed into 80 Groups and a single uniform class for the various commodities in the group was provided.
- The procedure of fixing 'minimum weight condition' (MWC) for lightweight commodities, which could not be loaded up to full carrying capacity of a wagon, was abolished and a decision was taken to charge freight for weight equal to the carrying capacity of a wagon.
- Commodities were assigned only trainload classes and if booked as wagonloads, the next higher class was to be applied.

4. The rationalization of freight structure is a continuous and ongoing process and is being carried out as and when the need is felt. Railway Board claimed that the replacement of the erstwhile voluminous Goods Tariff with a simple and compact Goods Tariff has been appreciated by customers as well as field staff and the Indian Railways have registered unprecedent growth in freight loadings and earnings. A statement showing comparative performance of the Railways' freight services in pre and post-rationalisation phases is shown in *Annexure I*.

#### **Audit Review**

5. Audit reviewed the financial and other impacts of implementation of various steps proposed in the rationalisation of freight structure. The impact of enhanced loading of wagons on iron ore routes and coal routes was reviewed over Central, Eastern, East Coast, Southern, South Western, South Central and South Eastern Railways. The impact of rationalisation of freight structure was reviewed on all Railways. In respect of Container Corporation of India (CONCOR) traffic the position was reviewed on all container depots. The procurement of wagons was reviewed at the Railway Board and the position in respect of utilisation, maintenance and detention to wagons

was reviewed at 18 goods sheds, 30 private and public sidings, 30 exchange yards and 13 workshops engaged in periodical overhauling of the wagons. The period of review was restricted to four years from 2002-03 to 2005-06.

6. The highlights of the Audit Review are enumerated below:----

- Railways have permitted the running of trains loaded with enhanced quantity without complying with the conditions laid down for protecting track and rolling stock. Even after permitting loading of wagons with enhance quantity, the trend of overloading continued. Increased incidence of rail fractures, weld fractures and defects in wagons and locomotives was seen.
- While rationalising the freight structure, the rates for eleven commodities were reduced by three to 54 per cent. Further, in respect of transportation of three of these commodities edible oils, motor cars and tea the decrease in rates resulted in even the haulage cost not being recovered.
- Non-provision of wagon load class for commodities placed in highest class has abolished the provision of charging higher freight in case of non-compliance with conditions laid down for availing the benefit of concessional train load rates. While the parties get the benefit of concessional rates even without compliance of all conditions, Railways have lost the operational benefits gained through bulk movement.
- Lowering of class of Petroleum products has not resulted in achieving the intended benefit of increasing the Railway's share of traffic. Instead earnings have decreased by 15 per cent in the year 2003-04 and 2.62 per cent in year 2004-05.
- The decision of the Railway to allow CONCOR to carry CC commodities in containers and recover haulage rates instead of Railway tariff rates has resulted in decrease in revenue of 49 to 73 per cent per wagon. In one year alone, Railway lost revenue of Rs. 28.37 crore.
- Non-charging of freight for traffic carried by CONCOR, on the basis of the carrying capacity of the wagon has resulted in freight being recovered for less weight to the extent of 5 to 33 tonne per wagon. Railway has lost revenue of Rs. 4.38 crore on this account during 2005-06 alone.
- Though wagon supply by PSUs was not as per target, orders for sizeable quantities were continued to be placed on them resulting in backlog of supplies and hampering Railway's procurement schedules.
- Wagons were detained at stations/sidings/exchange points/yards for want of adequate handling capacity. Railways suffered a total loss of earning of Rs. 168.48 crore during the six month period from October 2005 to March 2006.
- There was underutilisation of Broad Gauge (BG) wagons during transhipment of contents of Metre Gauge (MG) wagons resulting in loss of Rs. 5.63 crore.

- Wagons due for periodical overhauling underwent excess detention at various stages—before being sent for Periodic Over Haul (POH) to the workshops, during POH in excess of the time allowed and after POH before being sent back for operational use. Detention due to these reasons resulted in loss of earning capacity of Rs. 65.26 crore.
- Infrastructural facilities continued to be deficient resulting in detention and levy of demurrage. Further, Railways waived a major portion (56 per cent) of the levied demurrage thereby weakening the deterrent effect of imposition of such charges.

7. This Report is based on the aforesaid Audit review as appeared in Chapter I of Report of the C&AG of India for the year ended March 2006 Union Government (Railways—Performance Audit) No. 6 of 2007 relating to "Freight and Wagon Management on Indian Railways". In the succeeding paragraphs, the Committee have dealt with key Audit findings/observations and the position explained thereon by the Ministry of Railways (Railway Board).

#### II. ENHANCEMENT OF CARRYING CAPACITY OF WAGONS

8. The carrying capacity (CC) of a wagon is based upon the load that the axles of the wagon can carry. Prior to November 2004, the wagons were allowed to be loaded up to CC+2 tonne where the permissible axle load was taken as 20.32 tonne. From November 2004 onwards, the loading was permitted up to CC+4+2 tonne. In May 2005, as a pilot project, Railway Board permitted running of these wagons loaded up to CC+8+2 tonne on sixteen identified iron ore routes in order to increase throughput. Subsequently, wagons loaded with coal up to CC+6+2 tonne were also allowed to run on nominated coal routes. The extra loading was, however, to be restricted up to a maximum axle load of 22.82 tonne. In all, 31 iron ore and 41 coal routes were covered under the pilot project.

9. During the Pilot Project, it was planned to take number of studies to assess the realistic value of track modulus, rail stresses and dispersal of longitudinal forces on bridges etc. On 29 August 2005, a multi-disciplinary workshop was held in Railway Board under the aegis of Institution of Permanent Way Engineers (India) [IPWE(I)] to assess the effect of Pilot Project on infrastructures so far i.e. on track, bridges and rolling stock. All the Railways confirmed that no appreciable adverse effect has been noticed on track and bridges till then. No abnormal increase has been noticed in rail fracture/weld failure in Pilot Project routes during winter also. In November 2005, Board permitted CC+6+2 T in BOXN for 'E', 'F' and inferior grade coal on selected routes. CC+6+2 T has been subsequently been universalized over Indian Railways except a few routes and also extended to BOXN, BOXNHS, BOBR, BOBRN, BCN, BCNA, BCNAHS & BOST wagons and all other types of commodities. Presently Pilot Project covers 145 routes under CC+8+2T.

10. Railway Board affirmed that CC enhancement was done on Indian Railways as a policy after a paradigm shift in the conceptual perception of design of track structures from deterministic to probabilistic. The decision has been taken based on the field experience gained after running freight wagons (BOY and BOBS wagons with an axle load of 22.9 metric tonne) for years and research and development work done in-house

by Research Design and Standards Organization (RDSO). The Ministry elucidated the study undertaken by RDSO as under:—

#### "Track and Bridges

RDSO has done a number of studies on the effect of overloading of track and bridges and working of Wheel Impact Load Detectors (WILD) instruments. This report covers the effect of higher axle load on rails. The report calls for greater control on overloading, increasing number of WILD instruments alongwith other factors to prolong life of rail in track. RDSO report on monitoring of bridges has indicated no major effect of higher loading on bridges. Report of RDSO on WILD also indicates that the instruments are giving reliable results.

RDSO has developed and approved single rail tester capable of scanning railhead center as well as gauge face corner with the help of industry. Similarly existing double rail testers were retrofitted with gauge face corner defect detection capability. The item was deliberated in 77th Track Standards Committee (TSC) meeting and it was decided that testing of rails for gauge face corner defect should also be carried out at the frequency prescribed for Need Based Concept (NBC) in Ultra Sonic Flaw Detection (USFD) Manual.

#### Wagons

Based on their study, RDSO recommended providing additional springs in suspension and AAR approved grease in axle box bearings of wagons. These are being provided progressively and out of 129075 wagons, approximately 87380 have been upgraded so far."

#### **III. EXPANSION OF ENHANCED CC ROUTES**

11. Running of freight trains loaded up to CC+8 tonne with an additional loading tolerance of 3 tonne when loaded in BOXN wagons was initially permitted on certain specified routes (mainly Dedicated Freight routes except a few kms. on main line which are required for connectivity from mines to steel plants or from mines to port) as a pilot project for one year effective from 15.05.2005. The commodities permitted to be loaded up to CC+8 were ores, gypsum, limestone and dolomite, stones and clinkers. The Pilot Project was gradually enhanced and more routes have been included in the project. Similarly in addition to BOXN wagons, other wagons were also included in the project. More commodities like cement, grain, sugar etc. are also permitted in addition to iron ore, coal and other heavy minerals. Subsequently, C+6 routes have since been universalized. All BG routes of Indian Railways except a few (*i.e.* except CC+6 routes) have been notified as CC+6 routes.

12. Asked what prompted Railway Board to permit the increased load on more routes without ascertaining possible adverse effects especially on the tracks, the Committee have been informed as under:—

"Increase in the axle load was permitted with the objective to carry more tonnes per wagon thereby increasing the throughput on congested routes and also reducing the unit cost of operations by saving on locomotives, additional wagons, staff and paths to move additional trains. The Indian Railways had an originating freight loading of 429.38 MT in the year 1997-98. In the next 5 years, the Indian Railways reached a level of loading of 518.74 MT *i.e.*, an incremental of 89.36 MT at the average rate of 17.87 MTPA. This further grew to a level of 794.21 MT by 2007-08 *i.e.*, an incremental loading of 275.47 MT at the average rate of 55.09 MTPA. Indian Railways is a key ifrastructure provider for the Indian economy. Capacity additions in an infrastructure sector have long gestation periods. However, the above quantum increase could be made possible in the freight loading only through a major strategy of increasing the axle load duly taking into account safety considerations. For the present, the tracks on which higher axle loads have been permitted are under observation and behaviour being studied. This subject is also under constant review."

#### IV. NON-FULFILMENT OF PRE-REQUISITE CONDITIONS

13. Railway Board issued a clarification in March and May, 2005 stating that the enhanced loading may be permitted subject to:

- Installation of adequate number of Wheel Impact Load Detectors (WILD) on the zonal railways.
- Thorough physical examination of bridges, rehabilitation of distressed bridges, analysis of bridges for expected loading and installation of bridge load monitoring system.
- Instrumentation and evaluation of bridges by specialised agencies for increased longitudinal loads and higher axle loads.
- Ultra Sonic Flaw Detection testing at appropriate frequencies to detect rolling fatigue and also to assess the impact of enhanced loading on track and rolling stock.
- Installation of in motion weigh bridges to have a check on the overloading over and above the permitted enhanced loading. The impact of enhanced loading on the track, bridges and rolling stock was to be monitored through quarterly progress reports for ensuring corrective action where required.

14. However, Audit review of eleven and six selected routes, where enhanced loading of iron ore and coal respectively was permitted, had revealed that in almost all the Railways, the pilot projects of permitting the wagons loaded up to CC+8+2 tonne and CC+6+2 tonne were commenced even without fulfilling the conditions of installation of in-motion weigh bridges and provision of Wheel Impact Load Detectors. As against the eleven in-motion weigh bridges to be installed on East Coast Railway, only one was installed as of September, 2006 despite notification of eight routes on this Railway. Similarly, on South Central Railway only five out of nine weigh bridges were installed. The position of provision of Wheel Impact Load Detectors was even worse as none was provided on any of the Railways as of September, 2006.

15. Insisting that the installation of Wheel Impact Load Detectors (WILD), instrumentation of bridges, installation on in-motion weigh bridge was not a

prerequisite before starting of Pilot Project, Railway Board claimed that the contention of Audit that the enhanced loading was permitted subject to the above conditions is not valid.

16. Audit, however, maintained that the enhanced loading of wagons was commenced without compliance of conditions laid down and even one year after the commencement of the increased loading, the weigh bridges at most of the locations are still to be provided and the checks are not in place as evident from the overloading beyond the enhanced limits. This has resulted in overshooting the revised axle tolerance limits.

#### **Delay in Installation of WILD**

17. In view of the essentiality of WILD in monitoring the impact of enhanced loading, the Committee asked the Railway Board to explain the delay in the installation of these vital equipments. In their reply, Railway Board stated as under:—

"To measure the impact of the wheel system of Wheel Impact Load Detector (WILD) was developed by Indian Railways. This system is not an off the shelf equipment and was being developed for the first time in the country. Keeping complexities of the system in mind, a global tender with two-packet system has been floated and finally order was placed on an Indian firm with the system integration capability for designing and integration of complex systems. The system was developed, manufactured, calibrated and tested before actual field deployment. The deployment of the system has to be done by inserting instrumented track in the track carrying the normal traffic. Since most of the locations chosen for installation are located on the high density network routes, it involves inter-departmental coordination and detailed planning to insert the instrumented track and commission the system without any disruption to the traffic and affecting the safety of operations.

Instructions have been issued *vide* Rate Circular No. 86 of 2006 to ensure weighment in all cases. Implementation of this Rate Circular is in process. In terms of these instructions, weigh bridges on all the loading points are not planned. Weigh bridges are, however, planned to be installed for each stream of traffic to ensure weighment in all cases."

18. Asked what specific action plan has been taken to expedite installation of 'WILD' for all vulnerable routes identified, which was considered essential for monitoring the impact of enhanced loading, Railway Board informed in December, 2008 that the following action plan is under implementation to expedite the installation of WILD for all vulnerable routes identified:—

- (a) Total nine systems have been commissioned.
- (b) Tender for procurement of further seven systems is under finalization by COFMOW.
- (c) In future, WILD to be incorporated in Online Monitoring of Rolling Stock (OMRS) system.
- (d) Another case for procurement of 25 Nos. of Acoustic Bearing Detector and WILD for Online Monitoring of Rolling Stock has been opened and is under finalization.

19. Asked about the latest position regarding installation of Wheel Impact Load Detectors, Railway Board in November, 2009 informed as under:—

"Total nine systems ordered on M/s. Apna Technologies, Chennai by COFMOW have been installed at the following locations:

(1) Mahalimarup, SER (Chakradharpur Division)

(2) Hospet, SWR (Hospet Division)

(3) Arakkonam, SR (Arakkonam Division)

(4) Bhilai, SECR (Raipur Division)

(5) Guntakal, SCR (Guntakal Division)

(6) Mughalsarai, ECR (Mughalsarai Division)

(7) Asansol, ER (Asansol Division)

(8) Vishakhapatnam, ECoR (Waltair Division)

Tender for procurement of further seven systems is under finalization by COFMOW. In future, WILD would be incorporated in Online Monitoring of Rolling Stock (OMRS) system. Another case for procurement of 25 Nos. of Acoustic Bearing Detector and WILD for Online Monitoring of Rolling Stock has been opened and is under finalization."

#### **Delay in Installation of Weigh bridges**

20. Weighment on weigh bridge is necessary for charging freight for the correct weight and checking overloading. Greater emphasis on checking overloading has been given since 2004 after surprise checks detected overloading to great extent. Accordingly, power was delegated to General Managers to sanction expenditure up to Rs. 15 lakh on installation of weigh bridges. In the same year, all Zonal Railways were directed to review the availability of weigh bridges and chalk out an action plan for providing electronic in motion weigh bridges at originating points as also at other convenient locations where weighment were operationally feasible. In 2006, instructions were issued to Zonal Railways to notify weigh bridge associated with every loading point so that the Railway Receipt can be prepared on the basis of actual weighment.

21. During 2008-09, Railway Board constituted a committee to draw up a blueprint indicating all the locations on Indian Railways where electronic in-motion weigh bridges need to be provided. In the following table the status of installation of weigh bridges on Indian Railways in December 2008 is compared with that in November 2009:—

As in	No. of existing commissioned weigh bridges	No. of weigh bridges under Commissioning	No. of weigh bridges planned to be installed	No. of private weigh bridges
December 2008	114	15	84	63
November 2009	133	26	69	63

#### 22. Year-wise break-up of the commissioned weigh bridges is given below:

(1) Available up to 2005	:	42	
(2) Commissioned in 2006	:	48	
(3) Commissioned in 2007	:	24	
(4) Commissioned in 2008	:	11	
(5) Commissioned in 2009	:	08	
(as in November 2009)	Total	133	

23. Railway Board also informed that instructions have been issued recently asking all Zonal Railways to:—

- (a) Commission all planned/proposed weigh bridges within the next six months.
- (b) Provision of in-motion weigh bridges has been made mandatory in all new private sidings having outward traffic.
- (c) All new weigh bridges which are presently planned/proposed or which may come up subsequently due to new streams of traffic emerging should be as close to the loading point as possible, if not at the same station.

24. The Committee's scrutiny has revealed that the same instructions were issued in 2008 by Railway Board. The reasons for slow proliferation of weigh bridges are attributed to the following:

"Previously, traffic was carried in 4-wheeler wagons for which suitable weigh bridges were installed at important loading points. Gradually, 4-wheeler wagons were replaced by 8-wheeler wagons for which earlier weigh bridges were not suitable. Development of reliable electronic in-motion weigh bridge of the desired technical specification and cost of 120 tonne weigh bridge were main reasons for slow proliferation."

#### V. OVERLOADING OF WAGONS BEYOND ENHANCED LIMITS

25. It is revealed in Audit review that even after permitting loading of wagons with excess weight up to ten tonne on iron ore routes and eight tonne on coal routes, wagons on South Eastern, South Western, East Coast and Eastern Railways were found to be overloaded beyond these limits. The overloading beyond the permissible enhanced limits was to the extent of one tonne to 5.70 tonne on an average resulting in loading of wagons to the extent of 24.49 tonne per axle as against the permitted axle load of 22.82 tonne thereby exceeding the axle load limits by one tonne to 1.68 tonne per axle. Audit has observed that exceeding the axle load beyond permitted weight limits would lead not only to axle damages but also serious implications for the safe running of trains due to impact on track and rolling stock.

26. On being asked whether adequate measures have been taken to prevent overloading beyond the permissible limits, Railway Board submitted their reply as under:—

"In order to check and prevent overloading of wagons, instructions have been issued to notify the Associated Weigh bridges and Alternate Associated Weigh bridges where loaded rakes from each stream of traffic are required to be weighed. For this, weigh bridges are being installed at major/important loading points. Overloading is detected generally in respect of high-density commodities, which are offered for booking in loose condition in bulk. The weight of these commodities sometimes gets increased due to rain, moisture, etc. Sometimes pay loaders are not able to load the wagons with the correct quantity. Overloading lines inside the wagon. Overloading is also done sometimes intentionally by unscrupulous parties with a view to have some savings in freight. But overloading is at times unintentional. Overloading is checked through visual examination of wagons and by weighment on a weigh bridge."

27. Railway Board, however, conceded that overloading of commodities in wagons cannot be controlled precisely, particularly in loose condition and because of which loading tolerance of 2 tonnes has been provided for open wagons in which generally heavy weight, loose and bulk commodities like ores and minerals, coal, bauxite, dolomite, etc. are loaded. Loading tolerance of 1 (one) tonne has been provided for covered wagons in which generally bagged commodities like cement, sugar etc. are loaded.

28. The Committee specifically asked what action had been taken by Railways to prevent overloading from a station where it was not considered feasible to instal weigh bridge at the loading point. In their reply, Railway Board stated as under:

"Railways have initiated the action to check overloading by way of weighment of wagons on a weigh bridge. Instructions have been issued to the effect the Railways will notify the associated weigh bridges at which rakes loaded at each loading point for each stream of traffic would be weighed. If it is not operationally convenient to weigh the wagons at the notified weigh bridge for any reason, the weighment will be done at an alternative associated weigh bridge. However, if on weighment on a weighbridge, it is found that a wagon is overloaded beyond the permissible limits, the excess weight will either be unloaded or the overloaded wagon will be detached from the rake. The weighment details would be communicated by the associated weighbridge and Alternate Associated Weighbridge to the concerned loading point. Railway Receipts (RRs) are required to be prepared on the basis of actual weighment details. Punitive charges for overloading of wagons will be recovered the loading point itself. Thus a check on overloading of wagons is being ensured."

#### VI. PUNITIVE CHARGES FOR OVERLOADING

29. In order to discourage overloading in wagons, punitive charges for overloading have been made stringent for those customers who have a *mala fide* intention to overload. Two types of situations "A" & "B" have been provided in rules of punitive charges for overloading *i.e.* the Railways (Punitive Charges for Overloading of Wagon) Rules, 2006.

30. In situation 'A' where the aggregated payload in a rake does not exceed the combined permissible carrying capacity (PCC) of the rake, it can be assumed that there is no *mala fide* intention on the part of rail user. However, overloading of individual wagon endangers the safety. Keeping in view both these points, lenient punitive charges have been prescribed which is 2 times of the aplicable freight Class. Even in this situation, if overloading exceeds more than a limit, punitive charges levied is 3 times of the highest freight Class.

31. In situation 'B' where the aggregated payload in a rake exceeds the combined permissible carrying capacity (PCC) of the rake, then rail user may have *mala fide* intention. Overloading of wagons not only endangers the safety but there is a leakage of revenue also. Keeping in view these points, stringent punitive charges have been prescribed which is up to 5 times of the highest freight Class.

32. The Committee have been informed that data for punitive charges levied for overloading in situations 'A' and 'B' is not maintained separately. The following table shows the details of weighment and punitive charges for overloading during the period April to September of 2008:—

Railway Zone	No. of wagons weighed	No. of wagons found	Overloaded quantity (in tonnes)	Average overloaded quantity per	Punitive charges levied/
		overloaded		overloaded	recovered
				wagon (in	(Rs. in
Control Do'lloo	215002	0025	20157	tonnes)	thousands)
Central Railway	215892	9925	20157	2.03	25493
Eastern Railway	237160	39801	59508	1.49	239589
East Central Railway	478637	25809	107918	4.18	226910
East Coast Railway	421517	71171	204357	2.87	502812
Northern Railway	11595	3495	6919	1.97	33820
North Central Railway	7460	1787	4563	2.55	2009
North Eastern Railway	1155	366	625	1.70	143
Northeast Frontier Railway	26463	5457	8872	1.62	22599
North Western Railway	14511	9453	8397	1.53	31423
Southern Railway	83081	5277	13095	2.48	397
South Central Railway	245191	2491	8374	3.36	15471
South Eastern Railway	477240	94280	343732	3.64	70546
South East Central Railway	839881	35805	91521	2.55	130293
South Western Railway	293579	18722	61495	3.28	273579
Western Railway	62380	13200	14711	1.11	9137
West Central Railway	14127	1927	3957	2.05	13242
Total	3429869	338966	958201	2.82	1597463

33. It is seen from the above table that overloading is quite widespread on the Indian Railways. On being asked what more could be done to prevent overloading of wagons beyond permissible limits, Railway Board replied as under:—

"Levy of punitive charges for overloading is the most effective means to discourage overloading. This dissuades the customer from loading more than what is permissible since punitive charges of up to five times the highest class is quite severe. Overloading of wagons can be controlled if the customer does not overload. Counseling of the customer, particularly those who load heavy bulk comodity in loose can be one of the ways to check overloading. Besides, availability of weighbridge at loading points can be an effective way of checking overloading since RR will not get issued and rake will not move unless load adjustment is done and excess weight off loaded. As most of the loading on Indian Railways is done in private sidings, the existing siding owners can be persuaded to ensure provision of weighbridge at their sidings."

34. The Committee enquired about the quatum of over loading noticed on the notified routes on various Zonal Railways and the punitive charges recovered so far. Railway Board stated as under:—

"Instructions have been issued to weigh the rakes in each stream of traffic and to prepare the Railway Receipts (RRs) on the basis of actual weighments. However, route-wise statistics of punitive charges for overloading is not maintained."

35. Asked about the latest details regarding wagon overloading and punitive charges levied/recovered, Railway Board furnished in November 2009 the following information pertaining to the period 01.10.08 to 31.07.09:—

Railway Zone	No. of wagons weighed	No. of wagons found overloaded	Overloaded quantity (in tonnes)	Average overloaded quantity per overloaded wagon (in tonnes)	Punitive charges levied/ recovered (Rs. in thousands)
1	2	3	4	5	6
CR	360122	17797	51228	2.87	46833
ER	413688	78172	52120	0.66	55081
ECR	919906	44019	132956	3.02	309281
E. Coast	908996	50174	290085	5.78	457643
NR	6818	1660	7290	4.39	45070
NCR	8505	1588	2826	1.78	1861
NER	2242	299	571	1.90	376
NFR	59626	12864	19563	1.52	8284
NWR	34227	6061	4906	0.80	55
SR	134922	13488	33776	2.50	6428

1	2	3	4	5	6
SCR	510116	11811	21575	1.82	9541
SER	792577	149283	457571	3.06	232078
SECR	1507726	46396	119749	2.58	156773
SWR	404065	26080	60805	2.33	252000
WR	204940	11807	18839	1.59	33905
WCR	49816	14612	29871	2.04	31353
Total	6318292	486111	1303731	2.68	1646562

36. While informing that instructions have been issued for issuing Railway Receipt (RR) only after weighment particulars have been obtained, Railway Board stated that for the period April to September, 2008, overloading was approximately 9.88 per cent and in the period October, 2008 to July, 2009, overloading percentage had come down to 7.69 per cent.

## VII. ADVERSE IMPACTS OF ENHANCED LOADING ON RAIL TRACKS AND WAGONS

37. Audit has pointed out that the enhanced loading has resulted in increase in rail fractures and weld fractures on Central and South Eastern Railways. Glued joint failures, Switch Expansion Joints and Points and Crossing failures were seen on almost all the routes. Further, the overloading of wagons has caused increase in spring failures, Centre Buffer Couplers (CBC) failures and body damages. While the increase of spring failure on South Eastern Railway was 9.65 per cent, the same was 76.84 per cent on South Western Railway. Similarly the increase in CBC failure was to the extent of 11.87 per cent and 16.49 per cent on South Eastern and Southeast Central Railways respectively. As reported by mechanical department, failure of certain locomotive components such as Cylinder Heads, Brake Blocks, Dynamic Grid Separator and Element, Power Contractor Tip and CBC Knuckles had also increase in addition to stalling of trains.

38. Substantiating their findings, Audit has brought out from the records available in Board's office the following adverse impacts of running wagons with increased axle load during 2005-06 as compared with those of 2004-05.

- 45.6 per cent increase in train parting cases.
- Hot axles increased by 7.7 per cent.
- Increase of 11.32 per cent in the body under frame damage.
- Bogies and spring defects increased by 11 and 23 per cent respectively.

Year	Fracture Type	July to September	October to December	January to March	Total
2005-06	Rail Fractures	99	223	141	463
	Weld failures	227	527	392	1146
2006-07	Rail Fractures	97	159	149	405
	Weld failures	279	503	158	1,240
Percentage	Rail Fractures	(-)2	(-)29.69	(+)5.67	_
increase/ decrease ove last year	Weld failures	(+)22.9	(-)4.55	(+)42.34	_

39. The Audit findings on Rail fracture and weld failures during the first two years of the enhanced loading are as follows:—

40. Audit has observed that since Railway Board permitted increased loading by as much as six and eight tonne for coal and iron ore respectively, there would be an adverse impact on track, bridges and rolling stock unless the Railways take urgent action to upgrade the track and monitor the parameters closely. The adverse impact would be even more serious in case of overloading beyond permissible limits.

41. On being asked to indicate the steps taken by them to contain/control the adverse impacts of the enhanced loading effects on the rail tracks, Railway Board informed the Committee as under:—

- (i) Periodical review is being done at GM's level in Railway, where effect of higher axle load on fixed infrastructure and rolling stock is reviewed and inputs are accordingly planned.
- (ii) USFD examination is being done in addition to normal testing to detect Rail corner fatigue defect. Railways have been authorized to outsource the same, if available resources are not sufficient to take care of additional workload in view of above, so that defects, if any can be detected in time and preventive action can be taken.
- (iii) Up-gradation of track structure, sleeper density for further track renewal works have been standardized as 1660 nos. per km. This is sufficient for traffic upto 25T axle load. (Presently CC+8+2T is the loading permitted which is equivalent to 22.82T axle load).
- (iv) Wherever 25T axle load operation is planned to be introduced, existing 72 UTS rails metal/CST-9 sleepers are being replaced on priority. 60kg/52 kg 90 UTS rails on PSC sleepers with 1540/1660 nos. per km are provided in their place.
- (v) Permitted speed for enhanced loading is restricted. In addition suitable speed restrictions, depending on available track structure and its condition are imposed as Temporary Speed restrictions.
- (vi) Rail Grinding is also envisaged as Maintenance practice. Procurement of machine is under process.

- (vii) Switches and xings are weak areas in track. Policy has been stipulated to provide Thick web switches, weldable CMS xings on IR. These are sturdier in structure and will require less in service maintenance.
- (viii) Lubrication of rails with mechanized measures is planned especially in Ghat section on sharp curves to start with."

42. Railway Board further stated in a note the following action undertaken by them to contain the adverse impacts of enhanced loading:—

"Wagons: Keeping in view requirement of enhanced CC loading, wagons are being strengthened by provision of additional springs etc. This is expected to take care of any likely adverse impact on wagons on this account.

Track: With enhancement of carrying capacity (CC) of Railway wagons the assets are subjected to more intensive use and their earlier renewal is on accepted lines. Rail in track may call for replacement on account fatigue besides wear and corrosion. Various limits of renewal have been laid down. For wear limits of vertical and lateral wear are laid down based on which renewals are planned. Priority for replacement of rail on fatigue account is fixed when number of rail withdrawal exceeds the limit, laid down in the IRPWM. Observing in-service behaviour of the rail is ensured so that rail track in service remains strong enough to bear the enhanced load. With above philosophy, higher axle load has been permitted. While permitting higher axle load, greater emphasis on monitoring of in-service behaviour of infrastructure, both fixed and roling stock is being kept in mind. Higher axle load may decrease life of rail but with greater emphasis on having zero tolerance for overloading, USFD examination of rails, monitoring of in-service defects of wagons with help of WILD, instrumentation of bridges etc., effect of higher axle loads on track will get reduced. Also rail grinding and lubrication which have been envisaged will also prolong life of track components."

43. During evidence, the Committee raised concerns about possible threat to rail safety following the emergence of adverse impacts of enhanced loading. The Member (Engineering), Railway Board conceded as under:—

"I would request you to consider that in three years time when this exercise was started with the CC plus 8 tonne, the safety record is evident, but it is also true that the deterioration of such tracks with the heavier axle loads will be a little faster and the inputs are required to be increased at a faster rate."

44. Asked whether the Railway Board have realistically assessed the threats to rail safety which may arise due to the adverse impacts of enhanced wagon loading, the Ministry stated in a note as under:—

"During the Pilot Project, it was planned to take number of studies to assess the realistic value of track modulus, rail stresses and dispersal of longitudinal forces on bridges etc.

To monitor the effects of Higher Axle Load and longitudinal loads on bridge components and also to confirm the theoretical values with practical results, Indian Railways have taken up instrumentation of few selected bridges as a part of pilot project of running of Heavy Axle Load (HAL). Instrumentation work has been assigned to specialized agencies such as Structural engineering Research Centre (SERC)-Chennai, Indian Institute of Science (IISc)—Bangalore, Central Road Research Institute (CRRI)-New Delhi. Results obtained so far do not indicate unexpected adverse effects of Heavy Axle Load on bridges. However, position would be clearer when more results becomes available. Fatigue life of the bridges may get reduced because the same depends on stress range and number of cycles, which are more in case of Heavy Axle Load traffic This study would also assist in formulating a more realistic approach for Longitudinal Forces. Vision is to extend the results obtained to other similar bridges."

45. Railway Board also stated that Procedure Orders have been put in place to monitor/control overloading and with more monitoring further updates are under constant evaluation and needful shall be done for a safe and economic operation. When asked to furnish time frame within which review of policy of enhanced loading including rail safety would be completed, Railway Board replied in a note as under:—

"This issue is being reviewed periodically. However, to fully understand the effect of enhanced loading on freight stock, its effects need to be observed during the complete codal life of a particular type of wagon. The codal life of different types of wagons varies between 30-35 years. Therefore, this is an ongoing process."

#### Speed Restriction due to Enhanced Loading

46. Audit has pointed out that the track structures on routes notified for enhanced loading of wagons over Central and South Eastern Railways were found laid with mixed rails of 90R, 52 KG and 60 KG resulting in imposition of speed restriction of 30 kms per hour. Thus, the advantage of extra loading was likely to be nullified by extra time taken in transit. The Committee desired to know how many cases of new speed restrictions have been imposed to facilitate running of trains with enhanced loads and whether the speed restrictions did not affect the overall performance of other trains. In their reply, Railway Board stated that:—

"While enhancing the carrying capacity, speed restriction of 30 kmph on 90R rail track structure has been imposed, to ensure safety. The maximum permitted speed for such goods train is 60 kmph. Suitable speed restrictions are also imposed on bridges. No adverse impact has been felt on the performance of other trains."

47. While replying to a Committee's query in this regard, the Member (Engineering) of Railway Board deposed during evidence as under:—

"If I give you the numbers-Rails: 90 pound rails: it will carry at a speed of 30 kilometres per hour. 52 kg. rails, it will carry at the speed of 60 kilometres per hour. So, such things have been specified after going into calculations, after doing the studies in the fields and of course monitoring."

#### **Cost Implication of Enhanced Loading**

48. The Committee desired to know whether the Railway Board had studied the cost implication of the enhanced loading of wagons *vis-a-vis* the expected earnings therefrom. In their reply, Railway Board pleaded their case as under:—

"The increased axle load was started as a pilot project on certain mineral routes (Iron-Ore) and subsequently other routes were cleared for running of enhanced load trains in a phased manner. The net effect of costs and earnings cannot be gauged immediately as these pilot projects were started only from the year 2005. As these clearances were obtained in a phased manner and over different routes, it is not easy to quantify costs and earning. However, the experience gained from the exercise over the last 2 years indicates a substantial growth in loading and has resulted in the Railways deciding to go in for a higher axle load regime in future with procurement of newly designed 25T axle load wagons and upgradation of track structure to carry such higher loads without any speed limiting factors which are currently operative. These actions will result in the Railways achieving a lower unit coast of transportation thereby making it competitive with other modes of transport."

49. Asked how far Indian Railways have succeeded in bringing down the unit cost of operations as a result of increase in loading and whether any comparison has been done in respect of unit cost of operating freight train prior to and after permitting the enhanced loading, Railway Board submitted in a note as under:—

"A comparison between the freight unit cost for the years 2004-05 and 2005-06 shows that despite an increase in working expenditure by 11.3 in 2005-06 over 2004-05; the freight unit cost per NTKM came down by 1.3% in 2005-06. Increase/ decrease in unit cost depends on various factors *viz.* working expenditure, operational efficiency, cost savings, etc. The increase in average wagonload is definitely a contributory factor in bringing down freight unit cost."

50. Audit has, however, pointed out that Railways' decision to go further in higher axle load regime will attract heavier investments in the up-gradation of track structure as well as in procuring rolling stock. Given this situation, in the gestation period wherein heavier investment are anticipated, the Railways may not be able to achieve a lower unit cost (comparable with the other modes of transport) immediately and possible the Indian Railways will loose traffic to other streams. Board itself has not been able to gauge the net effect of costs and earning from the pilot project of enhanced loading which took off in the year 2005.

51. Railway Board reiterated that net effect of higher axle load on track maintenance cost in the Pilot Project is a long-term study and it is not possible to exactly quantify the same at this stage as the present data is not enough. However, they stated that with modernization of track structure and maintenance practices, the overall expenditure on account of renewal and maintenance of track put together would not increase and use of latest technology like modern materials, computerization etc. is likely to reduce maintenance cost in future.

52. As informed by Railway Board, the performance of freight wagons running with enhanced loading is being monitored on the basis of feedback being sent by zonal railways and the process of review of the policy is still on. Accordingly, the assessment of extra expenditure required for repair and maintenance of rolling stock is slated only after the review of policy of enhanced loading is completed.

53. The Committee enquired the Railways' schedule for completion of review of policy of enhanced loading which, if delayed, would lead to non-assessment of extra expenditure required for repair and maintenance of rolling stock and consequently to plounge the Railways' earning. Railway Board replied as under:—

"Pilot Project for running of CC+8+2T has been extended to June, 2009. Depending upon the effect on both fixed and infrastructure and rolling stock, further decision for its continuance or otherwise shall be taken. Conclusive study of effects of Higher Axle Load running has to be long term only as adverse effects if any may not be noticed within short span of 2 to 3 years. Any hasty conclusion in this matter will not be proper. On the basis of ongoing trends Pilot Projects has been extended on more routes. Study on a wide base is likely to provide more rational data for arriving at correct conclusion."

54. On a positive note, the Committee have been assured that:----

"The Depreciation Reserve Fund (DRF), which used to be at a level of Rs. 2000-2500 crores prior to 2003-04 has increased exponentially and is targeted to reach a level of Rs. 7291.39 crores in 2008-09. The increased earnings can then the ploughed back into the system to make it cost effective and sustainable in the long run."

#### VIII. TRACK MAINTENANCE AND RENEWAL

55. Track maintenance and renewal is a continuous process and is carried out as and when it becomes due to renewal on age cum condition basis subject to availability of funds. Funds for these works are provided from the Railways' internal resources in the form of Depreciation Reserve Fund (DRF). However, Railway Board informed that over the years these funds were less as compared to the requirement and therefore certain amount of arrears for track renewals accumulated. In the year 2001-02, a Special Railway Safety Fund (SRSF) was created, for replacement of over aged asset including track. Railway Board claimed that all the arrears of track renewal have been wiped out after creation of SRSF. In addition to SRSF, the fresh accrual of track becoming due for renewal after 01-04-01 is being sanctioned and executed under DRF. During track renewal, not only the track structure gets modernized but other associated works like formation treatment, proper formation, adequate ballasting, proper drainage system, replacement of turnouts and replacement of bridge timber sleeper are also carried out to complete all works in a particular block section. Railway Board further informed that track maintenance and renewal activities have been planned for complete mechanization by year 2012.

#### **Unspent Special Railway Safety Fund**

56. Funds under Special Railway Safety Fund (SRSF) were sanctioned for projects/ works under the Plan Heads pertaining to Track Renewal; Bridge Works; Rolling Stock; Railway Research; Signalling and Telecommunication Works; and Machinery and Plant.

57. The statement given below shows the position of amount sanctioned for the above works out of SRSF during the years 2001-02 to 2007-08:—

Year	Total provision under SRSF	Withdrawals	Unspent balance
2001-02	14550994	14342799	208195
2002-03	25179083	24863083	316000
2003-04	25929804	25837744	92060
2004-05	37541654	36777759	763895
2005-06	32476030	27831353	4644677
2006-07	21826602	19556037	2270565
2007-08	11650000	13967567	-2317567
Total	169154167	163176342	5977825

(Rs. in thousand as per Fund Account)

58. It would be seen from the above that SRSF to the tune of Rs. 464.48 crore and Rs. 227.06 crore remained unutilized during the financial years 2005-06 and 2006-07 respectively. The quantum of such unspent SRSF accumulated to Rs. 597.78 crore at the close of the financial year 2007-08. This unspent amount was subsequently surrendered in 2008-09.

#### IX. IDENTIFICATION AND REHABILITATION OF DISTRESSED BRIDGES

59. Audit has highlighted that though South Eastern Railway had identified 223 important and major bridges for monitoring, inspection on 40 such bridges had not been carried out so far (August 2006). South Eastern Railway had completed bridge instrumentation for measuring the impact of overloading only on one bridge and tenders for provision of the same on remaining twelve bridges were yet to be finalised. Though South Central Railway had identified thirteen bridges as distressed on these routes, rehabilitation of only one bridge was completed and the rehabilitation works on other bridges were in progress.

60. According to Audit, pilot project on the enhanced loading took off in May 2005, but the Railways went slow on the process of rehabilitation of the distressed bridges, which is evident from the following table:—

Year	No. of distressed bridges	No. of distressed bridges awaiting rehabilitation at the end of the year for rehabilitation.
2004-05	136	26
2005-06	110	44

61. Railway Board further apprised that each year, targets are fixed for rebuilding/ rehabilitation of distressed bridges depending on the number of Bridges balance for rebuilding/strengthening on Railways. The highest priority is given to completion of distressed bridges. The number of rebuilding/rehabilitation/repair/strengthening of Railway Bridges (including distressed bridges falling on routes identified for running of heavier axle load wagons) on Indian Railways since 2005-06 is as under:—

Year	Total No. of sanctioned	No. of Bridges/rebuilt/ rehabilitated/repaired/	Total No. of sanctioned	No. of Distressed Bridges rebuilt/ rehabilitated/ repaired/	
	Bridges	strengthened during the year	Distressed Bridges		
				strengthened during the year	
2005-06	4,311	1,431	122	38	
2006-07	3,940	1,114	88	34	
2007-08	3,655	1,208	75	29	
2008-09	4,273	272 (up to June, 2008)	69	36	

62. The Committee desired to know as to how many of the bridges identified as distressed were on the routes where the freight trains with the enhanced load were being run, Railway Board put forward their version in a note as under:—

"...that safety of bridges is accorded high priority on Indian Railways. Repair/ rehabilitation/rebuilding/strengthening of Bridges is an ongoing process on Indian Railways. A well laid down system of multi-tier inspection of Bridges is followed on Indian Railways, Railways undertake rehabilitation/rebuilding/ strengthening of Bridges on the basis of their physical condition as ascertained during regular inspections carried out in the field. Certain Bridges, which may show signs of deterioration of physical condition indicating need for rehabilitation etc., are classified as Distressed Bridges. These, however, are neither unsafe nor dilapidated Bridges."

63. Replying to a query on slow rehabilitation of distressed bridges, the Member (Engineering) of Railway Board deposed before the Committee during evidence as under:—

"about bridges, by instrumentation and by even recheck of the designs, we have largely determined that up to 45 meters span bridges, the extra loads are carriable and there is no reason to doubt their capacity but there are cases that bridges are distressed but they are not distressed just because of heavier axle loads. At some point of time, out of about 1,27,000 bridges that we have, we do have distress in a few bridges and that is irrespective of heavier axle load though the heavier axle load though the heavier axle load would accelerate the deterioration that there is not doubt. So, it is that type of work which is also a continuous work."

64. Railway Board in their note also informed that as a part of pilot project of running of Heavy Axle Load (HAL), Indian Railways have taken up instrumentation of few selected bridges to monitor the effects of Higher Axle Load and Longitudinal Loads on bridge components and also to confirm the theoretical values with practical results. Instrumentation work has been assigned to specialized agencies such as Structural Engineering Research Centre (SERC)-Chennai, Indian Institute of Science (IISc)-Bangalore, Central Road Research Institute (CRRI)-New Delhi. 59 bridges have been instrumented in the first round and further rounds of instrumentation are in progess in various stages. Railway Board emphasized that results obtained so far do not indicate unexpected adverse effects of Heavy Axle Load on bridges.

65. According to Railway Board, it is assumed that the total time period required for completion of a Bridge work, after its sanction in Budget, is there to four years due to various complexities involved in execution of Bridge Works. All the Bridge works, including Distressed Bridges, which have been sanctioned more than four years ago, are given special attention and their progress is monitored at the highest level.

66. Asked to state the constraints in rehabilitating the distressed bridges, Railway Board replied as under:

"Constraints in rehabilitating the distressed bridges are mainly non-availability of engineering restrictions/traffic blocks, difficult working conditions, bad weather conditions, floods, non-availability of construction-specific steel, contractual problems, non-availability of goods agencies to take up works which are isolated and have difficult or no access by road etc. With growing traffic, the window between trains is coming down, putting another handicap. In spite of that, distressed bridges are rehabilitated /rebuilt/strengthened in maximum numbers."

67. Audit has further pointed out that of the total 1,27,768 bridges on Indian Railways were 42 per cent more than 100 years old as on 1st April 2007. Modern bridge testing laboratories have also not been provided in any of the zonal railways. Even after a lapse of four years after the formulation of Corporate Safety Plan, Railways have only awarded pilot projects for carrying out-(i) capacity assessment and condition monitoring of bridges, (ii) fatigue testing and residual life of bridges. On Northern Railway, South Western Railway and Southern Railway, pilot projects for under water inspection are still under process of finalisation. Maintenance of bridges has become all the more important in view of permitting the running of freight trains with the enhanced load.

68. On being asked about the year-wise number of distressed bridges rehabilitated/ rebuilt/strengthened since 2003-04 (pre CC enhancement phase), Railway Board stated as under:—

Year	No. of Distressed Bridges rehabilitated/rebuilt/strengthened
2003-04	175
2004-05	142
2005-06	38

Year	No. of Distressed Bridges rehabilitated/rebuilt/strengthened
2006-07	34
2007-08	29
2008-09	36
Total	454

69. Railway Board further revealed that there were 69 distressed rail bridges on the Indian Railways as on 01.04.2008 and out of this, target of rehabilitating 50 bridges was fixed for 2008-09. As on 01.04.2009, the number of distressed bridges on the Indian Railway system was 48. Out of this, 43 distressed bridges have been targeted for rehabilitation/rebuilding/strengthening during the current year *i.e.* 2009-10 and against this, a total of 5 distressed bridges have been rehabilitated/rebuilt/strengthened during the current year up to July, 2009.

#### X. INCORRECT RATIONALE FOR FIXATION OF LOWER CLASSES IN RESPECT OF CERTAIN COMMODITIES

70. With effect from 1 April 2005, Railway Board abolished the concept of charging weight on the basis of Minimum Weight Condition and introduced a system whereby all commodities were to be charged on the carrying capacity of the wagon used. However, in order to compensate for the increase in freight due to charging for weight not actually loaded in a wagon, the classification of certain commodities was lowered.

71. Audit reviewed the impact of abolition of the concept of charging freight at MWC and found that although the traders were getting the benefit of carrying higher quantity within a fixed freight by loading the wagons with more quantity that the MWC prescribed earlier, the Railway earnings per wagon were reduced by 54 per cent (turmeric) to three per cent (de-oiled cake) as compared with the freight that was realised at the pre-revised class prior to rationalisation. The over all financial impact of fixing the lower classes in respect of eleven commodities *viz*. Motor Car, Onion, De-oiled cake, Edible Oil, Timber, Paper, Tea, Milk Powder, Dry chillies, Turmeric and Cotton (full pressed) works out to a loss of Rs. 21.93 crore in the year 2005-06 alone.

72. Audit also observed that the freight rates charged in respect of Edible oils, Motor Cars and Tea at class 90 W2 did not even cover the cost of operations (haulage cost) and Railways were incurring losses ranging from 13 per cent for a distance of 500 kms to 24 per cent for a distance of 2000 kms. The impact of fixation of lower class at higher distances was much more.

73. However, Railway Board stated that the 11 commodities selected by Audit in the instant para are mostly very lightweight commodities generating low-revenue. Further, the extant freight structure is based on Main Commodity Heads comprising a group of similar commodities, which have been a particular class, by grouping them in one Main Commodity Head. It was but natural that certain adjustments in freight rates were necessary. The freight rate of a particular commodity in the group might happen to be lower after rationalization. Similarly the freight rate of another commodity within the

same Main Commodity Head may be higher after rationalization. But the net effect within a Main Commodity Head is that Railways' revenues are not lost rather there is an overall increase in revenues due to adjustment of freight rates within a Main Commodity Head.

74. Rebutting Audit observations, Railway Board reasoned that while fixing the rates of freight for lightweight commodities under the rationalizaton process, it was ensured that there should be no steep hike in the rates of these commodities and the traffic is not diverted to Road. The freight rates after rationalization were comparable with those prevailing prior to rationalization. They also cautioned that there would have been sharp increase in the freight rate of these commodities if the freight for these commodities after rationalization would have been charged on the basis of carrying capacity of 8-wheeler wagons and break even class of 100. There was a possibility of diversion of this traffic to road because of sharp increase in freight rates. Therefore, new classes LR1 to LR4 were designed to keep freight rates competitive for lightweight commodities yielding very low revenue.

75. On being asked to explain the reasons for operational losses incurred in respect of Edible Oils, Motorcars and Tea after the rationalization of freight, Railway Board conveyed their view as under:—

"It may be mentioned that the carrying capacity of BCN, BCNA and BCNAHS wagons was increased from 58t, 58.8t and 58.8t to 60 t, 63t and 61t respectively *w.e.f.* 27.04.05. This effectively increased the freight earning per wagon by 2 to 4 tonnes. Further, freight classes for such commodities were changed to Class LRI to LR5 *w.e.f.* 01.04.06. These classes correspond to Class 90, 80, 70, 60 and 50. Subsequently, Class LR5 has been abolished *w.e.f.* 01.11.06. At present, the lowest chargeable Class is Class LR4 which corresponds to the earlier Class 90W1. Thus, the lowest two classes after rationalization namely 90W2 and 90W3 no longer exist.

From the above it can be seen that subsequent to rationalization of freight rates in 2005 the classification of lowest rated commodities has been gradually increased from class 30 to class 60 by progressively abolishing the lowest classes. As part of Railways social service obligation, certain commodities of mass consumption such as sugarcane, fruits and vegetables, edible oils etc. are carried below cost of operation in order to contain their market prices.

In case of three commodities mentioned by Audit, namely Edible Oil, Motor Cars and Tea their freight per wagon as on date is more than their freight per wagon before rationalization."

#### XI. NON-PROVISION OF SEPARATE WAGON LOAD CLASS FOR THE HIGHEST CLASS COMMODITIES

76. For achieving savings in operational costs, Railway Board had introduced in January 1982 lower class for movement of traffic in trainloads instead of piece meal wagonloads. Prior to 1 April 2005, all commodities were assigned separate classes when booked as trainloads and wagonloads. However, with effect from 1 April 2005

commodities were assigned only train load class with the stipulation that when such commodities were to be booked as wagon loads the freight would be charged at the next higher class. There was no distinction of wagonload and trainload class however, for commodities placed in the highest class such as Petroleum, Oil and Lubricant (POL) products. The conditions for availing the benefit of trainload rates stipulate that the consignors have to indent and load a minimum number of wagons for a particular destination or a combination of two destinations. It also stipulates that benefit of trainload rates would be applicable only if the consignor loaded all the wagons supplied. Moreover, the traffic has to be booked from and to a station notified for handling full rake loads. Where these conditions are not complied with, the freight for all wagons in a rake has to be charged at wagonload rates. These conditions were framed with a view to encourage the consignors to offer train load traffic only at those stations which have adequate facilities so that Railway's marshalling costs could be curtailed and also to encourage the traders to load all the wagons to avoid empty movement.

77. Audit reviewed the impact of non-provision of separate wagon load class for commodities placed in the highest class and found that taking advantage of the fact that they would not be required to pay higher freight in case of non-compliance of conditions, laid down for availing the benefit of train load class rates, the consignors were not loading all the wagons supplied to them. As a result of this anomaly in the rules, freight in respect of rakes comprising 30,666 wagons where all the wagons were not loaded was charged at train load rates on eight zonal railways as no separate wagonload class was available.

78. Similarly, when the commodities placed in the highest class were booked from stations/sidings not notified for handling rake load traffic, the Railways were forced to charge only train load rates as wagon load class rates were not prescribed. The number of wagons loaded with commodities placed in the highest class by seven stations alone during 2005-06 was 22,148. Other commodities in similar circumstances earned higher freight of approximately five per cent. Using this as a guideline, the Railways have lost revenue of Rs. 4 crore by not providing a separate wagonload class.

79. Railway Board clarified the logic behind the non-provision of separate wagonload class for the highest-class commodities as under:—

"Under the extant general classification of goods, only three Main commoditity-Heads *viz.* Acids, Alcohols and POL products are classified at the highest class 240 (class 200 at present) for trainload. Out of this, POL products are mainly offered for trainload movements. Two other Main Commodity Heads *viz.* Alcohol and Acids are very low revenue-yielding Heads and the traffic is meager. The freight rates of POL products are so high that pipelines have been justified on the basis of heavy transportation costs by Railways. POL traffic is constantly being diverted to pipelines and to road by oil tanks. Railways are trying to retain the existing POL traffic by rail by way of reduction in freight rates of POL products are being charged at the highest class there seems little justification for charging a rate over and above the highest class for wagonload movement of POL products especially when the oil companies load all the fits wagons supplied in a rake. Only those tank wagons are not loaded which are found unfit for loading. If there is wagonload movement of tank wagons as a result of not loading the unfit wagons or some other justifiable reasons, there is not justification for charging a higher rate for wagonload movement (over and above the highest class).

In the light of above background, it is a well-considered decision not to prescribe a higher rate for wagonload movement for the commodities (mainly POL products) charged at the highest class. The decision is aimed at retaining the existing POL traffic.

In order to make transportation by rail more attractive as compared with other modes of transport and to retain the Railway's share of certain traffic, the classification of certain Petroleum products was lowered from class 280 to class 250 from 1 April 2003 and further to class 240 from 1 April 2005 resulting in an approximate reduction in freight rates by 10.7 per cent and 4 per cent respectively. However, the Railway's share has been declining year after year."

80. Railway Board further informed that the train load classification of commodities ranges (as per April 2009 freight revision) from Class-100 to Class-200. Wagonload class is generally one class higher than the trainload class. As there is no Class available beyond Class-200, the wagonload Class could not be given separately for the commodities placed in the highest Class-200.

81. Audit, while observing that the cases brought out in their Report were not of the tank wagons found unfit for loading, stated that they required charging at higher rate as the parties failed to load the fit wagons. This leads to a concern that non-provision of a separate wagon load class in case of commodities placed in the highest class can induce the consignors to leave certain wagons empty as they knew that they would not be required to pay higher freight. The Committee asked the logic behind and advantages of this policy. In their reply, Railway Board clarified in a note as under:

"POL products are the only traffic being moved at the highest class. The issue raised by Audit is a notional issue and has got no financial implication as explained below. The booking of wagonload traffic in the case of POL products is not possible as indent is always placed for standard rake size thereby attracting trainload rate. The trainload rate, in the eventuality of loading less than a standard size rake load is granted, in the following specific cases:—

- (a) When a customer has indented for a standard size rake but loads less than minimum number of wagons qualifying for trainload due to non-supply by Railways, trainload rate is charged on certification by Railway officer. In this case, the customer is not responsible for loading less than a rake since wagons supplied by Railways are less.
- (b) Similarly, at times customer indents for standard rake size, and loads all fit wagons which is less than prescribed minimum no. of wagons qualifying for trainload. This is because some of the wagons in a rake may be found defective and unfit for loading and this decision is corroborated by the

Railway technical staff. These wagons are not detached to maintain the integrity of rake. In such case, trainload rate is applied for reasons mentioned in para (a) above.

(c) As per extant rules, whenever a rake is supplied against a trainload indent, the freight for entire rake on trainload class is realized irrespective of the actual number of wagons loaded. Thus in case where customer does not load all the fit empty wagons supplied, freight at trainload class rate is charged on the entire rake including the wagons which have not been loaded.

However, as PAC has pointed it out, levy of additional charge on commodities moving at highest class is being processed in case train load conditions are not complied."

#### XII. IMPACT OF LOWERING THE HIGHEST CLASS TO 250 AND 240

82. The rail traffic in the highest class of commodities comes mainly from POL products. In order to make transportation by rail more attractive as compared with other modes of transport, the classification of certain petroleum products was lowered from class 280 to class 250 from 1 April 2003 and further to class 240 from 1 April 2005 resulting in an approximate reduction in freight rates by 10.7 per cent and 4 per cent respectively. The main objective of doing so was to avoid diversion of this traffic from rail to other modes of transport.

83. An Audit analysis of the total traffic moved by rail from 2002-03 to 2004-05 revealed that even after reducing the rates considerably, the Railway share of POL traffic reduced year after year while the share of other modes of transport particularly road kept increasing. In fact, the Railway's share of total POL traffic has come down from the level of 31 per cent in 2002-03 to 25 per cent in 2005-06 while the road share has increased from 14 per cent in 2002-03 to 23 per cent in 2005-06. This indicates that Railways were not able to retain their share of traffic even after lowering the rates.

84. Correspondingly, the quantum of Petroleum products traffic moved by rail decreased by 14.08 and 6.03 per cent during 2003-04 and 2004-05 respectively as compared to the traffic carried in 2002-03. The consequent decrease in earnings was to the extent of 15.21 and 2.62 per cent respectively. Overall earnings during 2003-04 and 2004-05 had thus decreased by Rs. 419.10 crore and Rs. 72.06 crore respectively as compared with the earnings of 2002-03 *i.e.* the year immediately preceding the year in which the reduction was effected.

85. Giving their views on the aforesaid Audit findings, Railway Board explained as under:—

"POL products are in demand all over the country even where rail-network is not available. There has been tremendous increase in the demand for POL products due to industrial growth and increased energy needs. POL products are transported by pipelines and by road. For this reason, POL traffic is not available to rail for transportation. Further rail links are not available everywhere. Special facilities for loading and unloading of tank wagons are needed. For this reason also, POL traffic is not available. It would be in the interest of Railways if the existing level of traffic of POL products is retained with the Railways. The POL traffic may not have increased due to reduction in rates of freight for POL products, but the fact remains that Railways have been able to retain, more or less the existing level of traffic which is an achievement in favour of Railways."

86. In fact, proliferation of pipelines as a preferred mode of carrying of POL products has continued unabated and a number of new pipelines have been added since 2002-03. The quantum of POL products (including LPG) transported through pipeline in Million Metric Tonne (MMT) since 2002-03 is given in the following table:—

Year	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Quantity (MMT)	32.55	35.88	35.84	34.74	36.85	46.31	52.50

87. Asked about the steps taken to retain rail traffic share of POL products, Railway Board submitted as under:—

"(a) Adjustments in freight rate for POL have been done keeping in view the diversion of POL traffic to pipeline. Freight Class of POL traffic has been brought down to Class 200 in the current financial year. Freight rates for POL products have been reduced by about 17% during the last three years by lowering the class from Class-240 to Class-200. This is expected to discourage the proliferation of pipelines over their medium density routes.

(b) Conventional 4-wheeler wagons are being replaced by BTPN wagons, which have helped to reduce the transit time while carrying higher volumes at the same time. The procurement of new BTPN wagons has been prioritized to cater to the increased demand in the domestic market for maximum gains.

(c) Railway is planning to introduce new BTFLN wagons in a phased manner. These wagons are designed to have a higher payload over the conventional BTPN wagons thereby bringing down the unit cost of transportation for POL products.

Considering the growth in LPG traffic in the country, Railway is in the process of procuring 151 nos. of BTPGLN wagons meant to carry LPG."

#### XIII. INADEQUATE INVESTMENT ON INFRASTRUCTURE FOR REGAINING THE LOST RAIL TRAFFIC SHARE

88. Freight earnings constitutes 65 per cent of the total earnings of Indian Railways. But over the years, the Railways' share of the total transport share has come down *i.e.* from 53 per cent in the IV Five-year plan to 37 per cent in the IX Five-year plan. In this regard, Audit has observed that the expenditure under major plan heads, as an investment aimed at creating infrastructure for improved freight and passenger services, is not commensurate with the level of Railway earnings. Moreover, it was found that the amount provided through various funds created by Indian Railways for infrastructure development has not been utilized in full over the past years.

89. On being asked the reasons for this downfall in Railways' transport share, the Railway Board replied in a note as under:—

"In a growing and developing economy, Railways' share of the total transport share is bound to come down as the infrastructure for other modes of transport develops. In this connection, the high percentage of Railways' share of the total transport share in the earlier Plan periods can be explained by lack of development of adequate road and other transport modes infrastructure. With the road network developing substantially through heavy investment in the Golden Quadrilateral Project and the Prime Minister Gramin Sadak Yojana, road connectivity to the hinterlands has dramatically improved. It is also to be understood that Railways, unless it is through containers, does not provide a door to door delivery service whereas the road sector is able to cater to such services. Moreover, industries are nowadays getting located near the source of Raw material itself, which necessitates movements over very short distances for which the logistics works out favourably for road or other modes of transport. Previously, the entire Petroleum Traffic used to move by Rail or Road but with the proliferation of pipelines, which are economical to the Oil Comapnies, substantial movement of Petroleum Products is through this mode. In today's highly competitive environment, industries look for lower inventory costs and as such will not like to hold a rake load of inventory when they can get their lower requirement through road."

90. Explaining their position on the issue, the Chairman, Railway Board asserted during evidence as under:—

"...Actually these are not comparable figures when we are talking of road versus rail. The very fact that there is an increase in the road kilometer itself because after all the country was not having proper roads and therefore, road transport was not available. Today with the growth in the road sector, obviously the demand on the road sector has gone up. Therefore, when we are talking of total road traffic, I agree that it has gone up and it should go up because that is the sign of progress. Road traffic, which is comparable to us is therefore any traffic, which is around 500 kilometres or more. We have done an analysis by RITES and this shows that we are more or less quite okay in the carrying of the goods traffic because long distance traffic continues to be with the Indian Railways."

91. Railway Board also informed that a sound, safe and efficient modern infrastructure ensures smooth passenger as well as freight operations and at present a large number of activities are underway on the Indian Railways, which directly or indirectly aim at improvement in various aspects of freight operations and freight carrying capacity. The endeavour is a two-way exercise—one is upgradation of the existing infrastructure, which may improve the passenger as well as freight operations, and the other is provision of facilities, which are specifically aimed at creating infrastructure for improved fright operations. Projects relating to doubling and gauge conversion of existing lines, various capacity enhancement works under Traffic Facilities, electrification of lines, modern signalling and telecommunication systems/equipments, proper upkeep/renewal of rails, strengthening of bridges etc. fall in the first category, whereas acquisition of more rolling stock both wagons and locos and new rolling stock suitable for hauling heavier loads, computerized monitoring of freight operations, and freight train examination facilities at workshops etc. fall in the second category.

92. The Committee desired to know as to what percentage of the total budget was allocated for the improvement in freight carrying capacity of the Indian Railways during the first two years 2004-05 and 2005-06 and whether the allocated budget were utilized for the same. In their reply, Railway Board submitted in a note:—

"Since most of these activities being undertaken under various plan heads of the Demand No. 16—(Assets—Acquisition, Construction and Replacement) cater to both freight traffic and passenger traffic, it is difficult to isolate the quantum of funds allocated for either segment of traffic and segregate the

respective expenditure figures. However, for the appreciation of the Committee,
the expenditures incurred under the various plan heads, which cater to increasing
the freight haulage capacity are as under:

					( <i>Rs</i> .	in crore)
		2004-05			2005-0	5
	BE	RE	Actual	BE	RE	Actual
Gauge Conversion	840.28	1117.24	1183.22	690	1282.67	1323.59
Doubling	486	437.08	490.32	509.39	678.62	690.53
Traffic Facilities	307.76	331.4	279.3	487.59	415.51	374.13
Rolling Locos	3843.09	3510.86	3774.94	3713.95	3885.48	2197.86
Stock						
Programme Wagons	393.77	480.76	512.43	796.36	576.52	1001.31
Track Renewals	3570	3835.37	4125.25	3409	3636.13	3778.98
Bridge Works	538	430.73	390.26	761.5	487.96	410.58
Signalling &	830	963.43	819.16	1195.1	1172.28	1047.79
Telecommunications						
Electrification	126.49	143.63	116	103.5	70.46	73.35
Projects						

93. To a query as to what improvements in the existing physical infrastructure have been planned for regaining the lost railway traffic share, Railway Board stated as under:----

"Indian Railways has been expanding its network through New Lines, Double lines and Gauge Conversion works. Indian Railways has added/improved a total of 8639.3 route kilometers of track during the past six years' period, which includes 6508 route kilometers of track during the 10th Plan periods. The year-wise break-

Catetgory	New Lines	Gauge Conversion	Doubling	Total
2002-03	178	830	194	1202
2003-04	162.3	854	206	1222.3
2004-05	150	779	282	1211
2005-06	180	744	231	1155
2006-07	250	1082	386	1718
2007-08	156	1549	426	2131
Total	1076.3	5838	1725	8639.3

Railways propose to augment its BG track capacity by 15,500 kilometers, during the 11th Plan, including 2000 kilometers of new lines, 3500 kilometers of doubling and 10,000 kilometers of gauge converted track. The above works would help the Railways to carry its increasing traffic and also help in capturing new traffic."

"Indian Railways are continuously augmenting the capacity of the existing network through a series of small value but high returns works. These works form part of traffic facility plan head. As on date 665 traffic facility works costing around Rs. 5034 crores are in progress. The list of works is as under:—

(i)	Bye Pass (including 2 flyovers)	:	12
(ii)	Coaching facilities	:	62
(iii)	Crossing stations	:	67
(iv)	Goods shed upgradation works	:	140
(v)	Additional loops	:	150
(vi)	Yard remodelling	:	134
(vii)	Automatic Signalling	:	9
(viii)	Intermediate Block Signalling (IBS)	:	45
(ix)	Electrification (General+Sdg.)	:	19
(x)	Signalling	:	20
(xi)	FOB	:	1
(xii)	RPSR	:	3
(xiii)	Miscellaneous	:	3

A major portion of freight and passenger traffic on IR moves on what is called the High Density Networks, which are the routes connecting the four metros of Delhi, Mumbai, Kolkata and Chennai and Delhi-Guwahati. In 2007, IR prepared a Blue Print that identified the various works required on these key routes to augment the carrying capacity of these routes. The study has identified 124 different types of works on these routes costing over Rs. 20,000 crores. Currently these works are being taken up on priority by the Zonal Railways.

Railways have also realized the importance of carrying freight traffic on exclusive tracks to improve speeds and volumes. This is also important to relieve congestion on key routes. Railways have announced the construction of dedicated freight corridors on the Jawaharlal Nehru Port Trust (JNPT)—Tughalakabad (1483 Kms) and Dankuni-Ludhiana route (to be later extended to the deep sea port of Kolkata—805 kms.)

In addition to these two corridors, Railways has also ordered feasibility studies for constructing dedicated freight corridors along four other legs of the Golden Quadrilateral—(i) North-South (Delhi-Chennai); (ii) South-South (Chennai-Goa); (iii) East-West (Mumbai-Howrah); and (iv) South-East (Chennai-Kharagpur).

It is felt that with all the above focused efforts, Railways will be able to attract more and more traffic and will be able to regain most of its rail traffic share."

### XIV. MARKETING AND OPERATIONAL STRATEGIES

95. With the growth in economy, the gross output (commodities) to be transported has increased manifold. However, Audit has observed that the increase in Railways' loading as per cent of the total out put in respect of major commodities over a period of 3 years stood around 2 per cent only which does not appear to be significant. If the industries look for lower inventory cost, Railway should match its policy accordingly for retaining its transport share.

96. On being asked what steps have been taken for regaining their lost traffic share, Railway Board submitted that the following schemes/policy decisions were floated as freight marketing initiatives in 2005-06.

- (i) Wagon Investment Scheme (WIS)
- (ii) Liberalization of Siding Rules.
- (iii) Terminal Incentive-cum-Engine on Load Scheme (TILES)
- 97. And recently, the following fresh initiatives have been taken in this regard:-
- (i) Wagon Leasing Scheme (WLS)
- (ii) Liberalized Wagon Investment Scheme (LWIS)
- (iii) Terminal Development Scheme (TDS)

98. Continuing the process further, the Railways have launched a series of incentive schemes to make freight charges more competitive with the other modes of transport with a view to increasing the Railways' traffic share and earning capacity. Details of these schemes are given in *Annexure-II*. Besides, private container operators have been permitted to buy rake and move traffic.

99. The Committee desired to know steps taken by Railway Board to simplify their freight structure including tariffs and rules under the ongoing freight rationalization process so as to make rail traffic transparent and even more competitive with other modes of transport.

100. In their reply, Railway Board submitted that based on feedbak from Zonal Railways and Rail Customers, suitable modifications have been made in these Schemes to make them simpler and more attractive as highlighted their 'Rates Circular No. 62 of 2009' issued to General Managers of all Zonal Railways *vide* TCR/1078/2009/13 dated 10th November 2009. The procedure for availing benefits has been simplified as well as made more transparent. These Revised Schemes have been made effective from 1st January 2010. Important modification in these schemes is given below:—

### "Incentive Scheme for loading Bagged Consignments in Open & Flat wagons:

Normally, bagged consignment take a longer time to load in Open & Flat wagons and also need to be covered with tarpaulins. In addition to above, in some cases their loadability is also less. This Scheme aims to facilitate such loading in Open and Flat wagons. Earlier this scheme was applicable only in the cases of BOX 'N' wagons. Now all open and flat wagons have been covered under this scheme.

#### **Incentive Scheme for Traditional Empty Flow Direction:**

To generate additional traffic for loading in Traditional Empty Flow Direction across which traffic movement traditionally comprises predominantly of empty wagons and to achieve improved utilization of rolling stock, Inter-Zonal and Intra-Zonal Traditional Empty Flow Directions have been notified for grant of freight concession. The existing directions have been reviewed critically, and the revised empty flow directions are now more in synchronization with actual movement patterns.

### **Incentive Scheme for Freight Forwarders:**

This scheme has been further modified to encourage cargo aggregation and diversion of the traffic from raod to rail.

#### **Incentive Scheme for Incremental Traffic:**

This scheme is aimed at to generate additional business volumes. Schemes is granted based on average annual NTKMs during previous 2 years and is applicable for minimum distance of 100 kms. Now the scheme is being made applicable for the whole year in place of earlier permissible period of 3 months only during lean season.

Besides, various types of concessions are extended to different stream of traffic on need based to compete with other modes of transport. For instance, the levy of terminal charge and busy season charge has been exempted on automobile traffic carried in BCACM wagons for a period of three months (4.11.2009 to 3.2.2010).

Under Dynamic Pricing Policy, Ministry of Railways is keeping watch over the international market of export iron ore and has recently indexed the freight rates for export iron ore with the f.o.b. price of export iron ore."

#### XV. PROCUREMENT OF WAGONS

101. Wagon procurement in the Indian Railways is centralised and wagon acquisition, being need-based activity, is dependent upon the traffic needs and availability of the funds after taking into consideration the replacement of wagons due for condemnation etc. Targets for acquisition of wagons for a particular year are fixed on the basis of traffic projections as intimated by Planning/Traffic Transportation Directorate of the Railway Board. The process of procurement of wagons is taken care of by the Stores Directorate of the Railway Board, which functions under the control of Member Mechanical. The entire procurement of wagons is made through open tenders. There are 13 companies operating in the country for manufacturing wagons—6 companies in the public sector under the Department of Heavy Industries and another 7 companies in the private sector. In addition, 3 Railway workshops also manufacture wagons.

102. The planning and procurement of wagons is normally done for five-year plan period based on traffic projections and replacement of wagons due for condemnation. Any revision if required is carried out during the mid term appraisal. While the entire procurement is made through open tendering system, Railways have been following a system of distribution of 75 per cent of the quantity against the tender amongst all the established suppliers, 60 per cent of which is to PSUs and 40 per cent to private sector units as per the past performance and capacity of the firms. The remaining 25 per cent quantity is considered for ordering on competitive basis. The target of acquisition of wagons fixed for the X plan period as indicated in the Plan Document was 65000 Four Wheeled Units. A summarised position of the quantity ordered 2002-03 to 2005-06 on

PSUs and the private sector wagon manufacturing unit is mentioned in the following table:

					(In four w	vheeled units)
Particulars	Ordered quantity outstanding as on 1.4.2002	Quantity ordered during 02-03 to 05-06	Percentage to total quantity ordered	Quantity to be received during 02-03 to 05-06	Quantity received during 02-03 to 05-06	Orders pending as on 31.03.06
PSU	2922.5	28122.5	41.65	31045	19717.5	11327.5
Private Sector	2060	39397.5	58.35	41457.5	41457.5	0
Total	4982.5	67520	_	72502.5	61175	11327.5

103. Audit review of the quantity ordered and received during 2002-03 to 2005-06 revealed that although there was balance of 2922.5 Four Wheeled Units against the previous orders, Railway Board had placed further orders for supply of 28122.5 Four Wheeled Units (42 per cent of the total quantity) on PSUs. As against a total of 31045 Four Wheeled Units, PSUs supplied only 19717.5 Four Wheeled United (64 per cent). Specific kinds of wagons such as BOBSN, BOSTHS, BRHNEHS, BRNAHS and BBZI have not been supplied at all and there is a hundred per cent default against the supply of these wagons. Thus, the performance of the PSUs was below par as compared to the private sector suppliers.

104. Besides, it was noticed that although M/s Bharat Wagon Engineering Co. Ltd. (a PSU) had supplied only 477.5 four wheeled units (16 per cent) as against the ordered quantity of 2990 four wheeled units, the liquidated damages of Rs. 1.17 crore recovered from the defaulting PSU were waived and refunded. Despite erratic supplies and huge arrears in production, the Railway Board froze the previous orders and placed fresh orders on the PSU for manufacture of 1540 four wheeled units in October 2004. Further an unadjusted advance of Rs. 4.17 crore was allowed to remain with the firm without levy of interest.

105. Furthermore, despite the extension of such special benefits to the firm the supply against the fresh orders was also erratic as by the due date the firm had supplied only 485 four wheeled units (32 per cent). Thus the undue advantages in the shape of waiver of liquidated damanges and carry forward of unadjusted advance have proved futile and were not justified. Thus, the policy of favouring PSUs has worked against the best interests of the Railways leaving them with a shortage in a critical area of operations.

Name of wagon builder	200.	2003-04	200	2004-05	200	2005-06	200	2006-07	2007	2007-08	2008-09	60
	Order for the year	Actual supply										
BWEL/MFP	759	50	1172	90	373	136	498	237	393	183	366	112
BWEL/MKA	360	64	634	88	250	143	277	216	396	212	344	64
Braithwaite	1231	493	814	392	1151	472	1367	577	923	558	925	562
Burn/BP	1340	328	1162	294	847	225	849	435	881	433	830	216
Burn/Howarh	895	568	771	576	660	437	1052	673	1328	622	1364	371
B&R	294	128	320	144	176	113	209	66	239	120	597	62
Texmaco	1582	1222	2579	1568	2026	1614	2639	1930	3936	1437	3124	1783
Modern	565	437	1179	678	915	523	2425	688	2854	1003	2312	1333
HEI	1195	357	1779	1059	1442	670	2143	680	1463	884	1995	1174
BESCO	1065	841	1537	906	1443	720	2493	892	1805	1047	2996	1340
Titagarh	1097	808	1676	096	1445	872	1957	1081	2557	1074	3591	1468
Jessop	431	256	571	250	1039	188	1031	476	1014	521	895	352
Jupiter											100	72
Total	10814	5552	14194	7005	11767	6113	16940	7984	17789	8094	19430	8909

106. The wagon builder wise order and supply position during the last 6 years is as given in the following table:—

107. The dismal performance of wagon production and supply by the PSUs to the Indian Railways continued even in 2009-10 as given below:—

Wagon builder	Production in 2008-09	Production in 2009-10 (upto 31st August, 2009)
PSU wagon builders	1387	691
Private wagon builders	7522	4187
Total	8909	4878

108. In this regard, based on their monthly monitoring of wagon production, Railway Board informed the Committee that:—

- PSU units are still lagging behind despite all necessary assistance from Railways;
- (ii) Private sector units are giving priority to wagon orders placed by private parties in comparison to Railway orders because of better profitability; and
- (iii) Wagon builders are taking time in developing facilities to manufacture new design Stainless Steel wagons.

109. Railway Board further elucidated that all the Public Sector units, which were performing well in the past, have become sick with the result their productivity declined and created serious problem of shortage of wagons on Indian Railways in the year 2003-04. Since it was a matter of great concern, a series of meetings were held not only in the Ministry of Railways but also came up for discussion in a meeting taken by Hon'ble Prime Minister on 29.06.2004. In order to overcome this problem Ministry of Heavy Industries and Public Enterprises (Deptt. of Heavy Industry) came up with a revival package inter alia containing the demand for placement of orders by the Ministry of Railways on these units despite the fact that they were already having considerable outstanding orders on them. After due consideration of the proposal of the Heavy Industry, it was decided to place fresh orders on these units as a special case. The steps taken under revival package yielded positive results and the production of PSUs have improved by 47% in 2006-07 as against the production in the corresponding period of 2005-06. It is expected that the performance of these PSUs would further improve in coming years along with private sector units, which would help Railways to achieve its wagons production targets.

110. In view of the continued failure of the suppliers of wagons to the Indian Railways, the Committee asked whether any need is felt to amend the wagon procurement policy. The Committee were informed in this regard as under:—

"To examine the existing system of acquisition of wagons and to advise suitable suggestions for improvements, a high level Committee consisting of Additional Members of Railway Board, has been constituted. Further action on this issue would be taken after getting the Report of this Committee."

111. The Committee also asked whether it has ever been considered placing orders for wagons to only those units, which are satisfactorily accomplishing the production target and why fresh orders were placed to those units, which have already considerable outstanding orders on them. In their reply, Railway Board submitted as under:—

"The wagon orders against a wagon tender are placed on the basis of a wagon allocation formula given in the tender. As per the formula 75% weightage is given in to the performance of the wagon builders in the last five years and balance 25% weightage is for competitive prices. This formula ensures that performing firms will get bigger share than non-performing firms. To ensure that non-performing firms with large outstanding orders do not get further large orders, the wagon allocation formula was further refined in the year 2007-08 in which part of outstanding wagon order of a wagon builder is deducted from the wagon allocation."

## XVI. INJUDICIOUS NOTIFICATION OF STATIONS/SIDINGS FOR HANDLING FULL RAKE TRAFFIC

112. The Operating Department of the zonal railway notifies the stations, goods sheds and sidings for dealing with full and half rakes based on operational feasibility and local conditions prevailing on the zonal railways. Railway Board had issued instructions to zonal railways for notifying stations/siding on their Railways which had full rake/half rake handling facilities so that booking of traffic in rake loads was done only from and to such notified stations. These instructions were reiterated in October 2004. The zonal railways were also asked to augment the capacity of sidings to handle full rakes wherever there was adequate traffic justification.

113. The action taken by zonal railways for implementation of the directions of the Railway Board issued in October 2004 was reviewed. A test check of two stations on each zonal railway notified for handling full rake load traffic revealed that 18 goods sheds on Central, Eastern, North Central, North Eastern, South Eastern, East Coast, Western, North Western, South Western, Southern, East Central Railways notified for handling full rakes did not have adequate facilities as a result of which the rakes handled on these stations suffered detention ranging upto 54 hours per rake during the six months period from October 2005 to March 2006. The total detention suffered by 1,46,028 wagons was equal to 96,420 wagon days resulting in loss of earning capacity of Rs. 19.62 crore during these six months.

114. Similarly, review of records of 27 sidings which had been notified as full rake handling points for booking of outward traffic revealed the sidings were also not actually capable of handling full rake traffic, as a result of which 11,717 rakes placed for loading in these sidings suffered a total detention of 1,64,289 days. There was a consequential loss of earning capacity of Rs. 32.99 crore during the six months period from October 2005 to March 2006. Similar review of 26 sidings which were notified for handling full rake of inward traffic revealed that out of 15,55,030 wagons placed for unloading 11,22,342 wagons (72 per cent) suffered detention of 3,06,317 days resulting in loss of earning capacity of Rs. 62.11 crore during October 2005 to March 2006.

115. In this regard, Audit has pointed out that the notification of goods sheds and sidings for handling full rakes when they did not have adequate capacity and the

failure of the Zonal Railways to create these has resulted in loss to the Railways to the extent of Rs. 114.72 crore for a six-month period alone. Railway Board's explanation on the aforesaid Audit observations reads as under:—

"To cater to increase in loading, commensurate loading and unloading facilities have to be developed. The growth in loading on Indian Railways has been quite spectacular in the recent past. While the loading grew from 429.38 MT (1997-98) to 518.74 MT (2002-03), it jumped from 557.39 MT (2003-04) to 794.21 (2007-08). The additional loading generated would not have materialized but for the additional loading and unloading points that had been notified. Presently most traffic in railways is moving in block rakes whereas many of the facilities were capable of handling only half a rake. If half rake terminals are not notified/ upgraded to full rake sidings. Hence, in the interest of attracting/retaining traffic half rake points have been notified as rake handling points. In parallel, the Railways are also investing to upgrade the facilities at these sidings to full rake wherever justified and until then if additional traffic could be handled and retained, this is not to be viewed as loss to railways if long-term view is to be taken."

116. Asked to state the reasons for notifying stations having inadequate facilities as capable of handling full rakes, Railway Board replied as under:—

"Full rake handling points are notified by the Zonal Railways duly considering the physical unloading/loading capacity at each unloading/loading point. Facilities required primarily are spurs or single spur to handle a full rake, unloading/loading area, circulating area, approach road, etc. In this context, the Railway Board has noted that some freight terminals need improvement and has initiated action to provide basic amenities at rake handling points. Already, 97 Nos. of freight terminals have been identified for improvement to basic amenities and works have been sanctioned in the Pink Book at an approximate cost of Rs. 195.16 crore and are in progress. Further, another 48 Nos. of freight terminals have been sanctioned for improvement in the Pink Book 2007-08 at an approximate cost of Rs. 111.70 crore.

..... wagons are meant for loading freight generating traffic. Loading per se is a function of unloading. Revenue earning traffic has jumped from a level of 557.39 MTPA in 2003-04 to 728.1 MTPA in 2006-07 and is further targeted at a level of 785.0 MTPA in 2007-08. Unless and until adequate outlets are provided in terms of more numbers of loading/unloading points, such generation of freight traffic is not possible. Although facilities might not be up to the mark and might result in increased detentions, the price to be paid in terms of detention is absolutely negligible as compared to the sheer fact of carrying more traffic through which additional freight earnings are generated."

117. The Committee desired to know why the Zonal Railways have not taken any action for implementation of the directions of the Railway Board issued in

October, 2004 towards augmenting the capacity of sidings to handle full rakes wherever there was adequate traffic justification. Railway Board stated in a note as under:—

"Zonal Railways have taken necessary action towards augmenting the capacity of goods sidings to handle full rake wherever there are adequate traffic justifications. The Railway-wise details of such sidings, which were converted from half rake capacity to full rake capacity during the period 2003-04 to 2007-08 are given below:—

S.No. R	ailway	No. of Goods shed/siding converted to full rake
1.	South Eastern Railway	10
2.	South Central Railway	11
3.	South East Central Railway	15
4.	Southern Railway	6+12 (WIP)
5.	Central Railway	22
6.	East Central Railway	6
7.	North Eastern Railway	1
8.	Eastern Railway	6
9.	South Western Railway	8
10.	Northeast Frontier Railway	22
11.	West Central Railway	9
12.	East Coast Railway	13
13.	Western Railway	6
14.	North Central Railway	6
15.	Northern Railway	7
16.	North Western Railway	3

Top priority has been given by the Ministry of Railways for development of Terminal facility and other traffic facility works. These are monitored by the Zonal Railways on a regular basis."

118. In their vetted comments, Audit, however, remarked as under:---

"Out of total number of 792 traffic facility works appearing in Pink Book 2008-09, as many as 614 (including 304 on high density routes) were in progress as on 31st March, 2008. Against the 335 (165 number in high density routes) targeted for completion during the year, only 48, which include 20 on high-density routes, could be completed till 31st August, 2008."

#### XVII. DETENTION OF WAGONS AT EXCHANGE POINT/YARDS

119. To ensure efficient utilization of the available stock of wagons, it is crucial that wagons received in station yards for loading and unloading are immediately dispatched to destinations. Though the Railway Board had introduced long back the concept of direct placement and removal of wagons in sidings, a test check at 29 station yards/ exchange points of different sidings revealed that out of 13,613 rakes loaded by parties and placed at the exchange points for onward dispatch, 11,704 rakes (86 per cent) were

detained on various accounts such as non-availability of power, section clearance, non-availability of crew and delay in train examination etc.

120. Audit has, however, observed that these problems could have been overcome easily with better management by the zonal railways particularly the mechanical and operating departments. The total detention on these accounts during the six month period of October 2005 to March 2006, works out to 2,28,294 wagon days resulting in loss of earning capacity of Rs. 53.76 crore. On Northern, South Central, North Central, South Western, Central, Eastern, North Western, Northeast Frontier and East Central Railways, one hundred per cent of the rakes underwent detention before being taken for loading.

121. In this context, Railway Board stated that the concept of direct placement and removal of wagon in Sidings had been introduced long back. Wherever these placements are done directly, tariff is charged on through distance basis. However, when this is not possible due to traction change, freight tariff is charged up to a point and additional charges in the form of trip charges/shunting charges/placement charges, etc. are levied. Insisting that efforts are on to minimize the detentions to the extent operationally possible and the loss calculated by Audit is notional and unavoiable, Railway Board offered their views as under:—

"It is to be understood that the overall infrastructure of Railways in terms of available physically infrastructure *i.e.* available of loading/unloading points, locomotives and wagons has been less than the requirements. It is only in the last 3-4 years that steps have been taken to increase the capital investment required in the Railways. Railway operations at present are run on a scarcity resource scenario. It is inevitable that detentions will be caused at some point or the other due to lack of motive power *i.e.* locomotives. It is also to be understood that examinations to rolling stock will be necessitated for safety reasons. Bunching of rakes, which is inevitable in operations of this scale will lead to delay in examinations. The Railways have been improving their operations not only in terms of quantity of freight and passengers carried but also in terms of quality. The wagon turn round which is the prime indicator of Railway operations, has been steadily declining from 7.5 days in 2000-01 to 6.08 days in 2005-06."

### XVIII. UNDER UTILISATION OF WAGONS AT TRANSHIPMENT POINTS

122. When Railways have to carry goods from stations falling on Meter Gauge (MG) to stations falling on Broad Gauge (BG) or *vice versa*, they have to tranship the contents of MG wagons into BG wagons or *vice versa*. Since the wagons used on different gauges have different carrying capacities, the contents of one type of wagon cannot be adjusted in full into the other type of wagon. In order to make optimal utilisation of available capacity of wagons are transferred and loaded into other type of wagon to its full capacity and all the wagons in the rake are fully utilised.

123. Audit scrutiny of records at four transhipment points over Western, Southern and Northeast Frontier Railways, however, revealed that contents of MG wagons were transshipped into BG wagons in such a manner that each BG wagon was underutilised

to the extent of 5 tonne to 23 tonne. As a result, 3,516 BG wagons were underloaded to the extent of 64,465.3 tonnes resulting in loss of earning capacity of Rs. 5.63 crore on account of underutilisation of full capacity of the wagons. The loss could have been avoided by loading the BG wagons to their full carrying capacity thereby using a lesser number of BG wagons.

124. In their defence, Railway Board cited the following limitations in transshipment due to technical factors:—

"Actual carrying capacity of 4 Metre Gauge Body Covered wagons is 138 tonnes (actual CC of MG BC wagon is 32 tonnes) and the actual carrying capacity of 3 Broad Gauge Body Covered N (8 wheeler) wagons is 135 tonnes (actual CC of MG BCN wagon is 32 tonne) in case of Food Grain. To get the optimum result and no loss of loading space in BG wagons for transshipping from MG to BG wagons, the ratio of MG wagons to BG BCN wagons is fixed as 4:3. The transshipment platform is designed in such a way that the MG/BG wagon's height is matched for easy movement for the labourers.

In the transshipment shed, space is given for every 4 MG BC wagons on the MG line and similarly, space is given for every 3 BG BCN wagons so that the doors of MG/BG wagons are matched in straight for easy movement of the labourers which will avoid crisscross movement. Labouers are engaged to do the transshipment for the entire lot at a time and the BG wagons are sealed once the 3 BG wagons are loaded from the 4 MG wagons."

125. Railway Board also informed that there were no unit wagons available on Southern Railway after condemnation of covered wagons such as CRT and CG wagons, which could have been utilized for this transshipment. Hence, under-utilisation of 7 tonnes in one BG BCN wagon in a lot of 3 BCN wagons is inevitable. Generally, transshipment is not encouraged. Since essential commodities such as Food Grain and Salt being produced in the MG station areas to be moved to the areas situated in the BG stations, the transshipment was undertaken at TPGY (Tiruchirappalli Goods Yard) with these constraints. Since December 2005, transshipment activities at TPGY ceased, as only small portion of MG sections were left over as Islands in Southern Railway.

126. Similarly, with regard to cases of wagon underutilization in North Eastern Frontier Railway, transshipment point, the main reasons why BG wagons cannot always be loaded after transshipment from MG to BG to full carrying capacities are as under:—

"(i) The main MG to BG transshipment consignment at Rangiya is sawn timber. Sawn timber is loaded under quota supervision by Special Investigation Team (SIT) under the aegis of Hon'ble Supreme Court, and also supervision of concerned forest officials both at the MG originating loading point and during transshipment from MG to BG at Rangiya SIT issues transit pass for the timber consignment on wagon basis. The MG wagons, after loading, are sealed by SIT and forest officials and transit pass is issued. The MG wagon loaded with Timber is to be transshipped in one BG wagon under SIT supervision at Transshipment point. The RR (Railway Receipt) is for one wagon only as is the Forest Transit Pass. Mixing of 2 or more MG wagons consignment in BG wagon is not permitted. This is to control illegal trafficking of timber and otherwise fear is that it may lead to illegal felling of trees. It may be appreciated that this would be a more serious loss to the national economy and the country as a whole.

(ii) Secondly, MG traffic is mostly piecemeal traffic for individual destinations. If one MG wagon consignment is not transhipped into the BG wagon early, the MG wagon will have to wait for numerous days to accumulate adequate BG load. This will lead to undue and avoidable detention to MG wagons and would lead to greater loss to the Railways along with creating scarcity of empty wagons for transhipment of essential commodities in this remote far-flung area. It is also pointed out that available MG wagon fleet is land-locked and efficient use of on hand MG wagons is essential in order to use the stock optimally, so that detention to stock in BG and MG is contained and thus making available essential commodities to such distant points served by Rangiya transhipment point."

127. Yet, Railway Board conceded that the transshipment, though necessitated in a multi-gauge scenario, is an inefficient system and the Railways have undertaken Project Unigauge to convert the entire network into a single gauge system thereby eliminating the problems of transhipment etc.

### XIX. WAGON MANAGEMENT

128. Audit review of the arrangements for sending the wagons for periodical overhauling, time taken by workshops in overhauling and removal of wagons turned out after overhauling revealed that South Eastern, Western, South Central, North Central, Southern, West Central, North Western and Northeast Frontier Railways had not taken prompt action to send the wagons due for periodical overhauling to Workshops and these were detained at the yards. During the six months period from October 2005 to March 2006 alone 30,344 wagons due for periodical overhauling were stabled in the yards and sent to Workshops after a total delay of 1,34,591 days resulting in loss of earning capacity of Rs. 27.39 crore.

129. It was also found that on receipt of wagons in the Workshops they could not be taken up for Periodic Over Hauling immediately due to capacity constraints and bunched supply. Though the detention on account of capacity constraints are genuine reasons and connot be avoided, Railways could have avoided the bunched supply to minimise detentions.

130. Fruther, most of the wagons undertaken for periodical overhauling ware not turned out within the prescribed period. The reasons for delays in periodical overhauling were attributed to shortage of material and staff as well as requirement of more days due to heavy corrosion repairs requiring modifications, denting and painting etc. During the six months period from October 2005 to March 2006 alone the Workshops had taken 1,04,671 wagon days over and above the time allowed resulting in loss of earning capacity of Rs. 21.30 crore. Despite the fact that there was a shortage of wagons in the Railway system, effective steps were not taken to minimise the time taken in periodical overhauling by ensuring timely supply of requisite material and staff etc.

131. Scrutiny of records also revealed that wagons turned out after POH were not sent for traffic use immediately. During the six months period from October 2005 to March 2006 alone a large number of periodically overhauled wagons were allowed to remain without use for a total of 81,434 days causing loss of earning capacity of Rs. 16.57 crore.

132. In their comments, Railway Board stated that the detention of wagons prior to sending them for POH was because they have to wait for wagons to accumulate for forming a rake. It was also stated that excessive time taken in POH was on account of requirement of heavy repair in some cases. The reply is not acceptable to Audit because wagons due for POH were allowed to remain in yards for abnormally long periods. For instance, in the six-months period reviewed, 440 wagons were sent to the Wagon Repair Shop, Guntapalli after delays ranging from 25 to 300 or more days. Similarly, in respect of 56 wagons, the workshop had taken excess time ranging from 25 to 100 days in POH as against the norms laid down by the Railways themselves. Thus, detaining wagons for such long periods is neither economical nor conforming to the instructions in force.

133. The Committee called for explanation from the Railway Board with regard to the aforesaid Audit findings. They replied as under:

"Audit had pointed out that some of the wagons udnertaken for Periodic Overhauling (POH) were not turned out within prescribed period. As such, there is not period prescribed for POH of wagons. However, Railways attempt to achive average POH time between 5-8 days in their workshops. While examining the issue, Audit has taken cognizance of complete repair time of wagons and then compared the same with POH cycle time which has led to the conclusion that wagons have been detained in the workshops during POH, which is not the case.

...Wagon maintenance comprises of Periodical Overhaul (POH), Routine Overhaul (ROH) and Yard Examination. All wagons are marked and attended for POH and ROH in time as per schedule. As on 31 March 2005, Indian Railway had a wagon fleet of around 4.61 lakh four wheeler units comprising covered, open high sided, open low sided and other types of wagons. Regular and periodical maintenance/overhauling of wagons is necessary to keep them fit for traffic use. Railways undertake regular maintenance and periodical overhauling in a time bound manner and as per well laid down schedules at wagon sick lines and workshops. As mentioned in the Indian Railway year book (2004-05), there were arrears in periodical overhauling of BG wagons (5.8 per cent) and MG wagons (7.9 per cent)."

134. The Committee asked whether any review of the arrangements for sending the wagons for periodical overhauling, time taken by workshops in overhauling and removal of wagons turned out after overhauling has been done in the recent past. Railways Board stated as under:

"On each Zonal Railway, a mechanism exists for monitoring the progress of sending the wagons for periodic overhaul, time taken by the workshops in

voerhaul and removal of the wagons turned out after overhauling has been done. This exercise is a continuous ongoing exercise and is spread over all the workshops and yards over Indian Railways. Considering well laid down procedures already exists, no specific exercise was considered necessary to review the arrangements for the above purpose.

Ministry of Railways, (Railway Board) confines its activities to mainly lay down the maintenacne policies. The day-to-day operations and monitoring of movement of ineffective of wagons is largely done by zonal Railways. It may not be possible to provide the data pertaining to hundreds of yards and all wagon handling workshops in a meaningful way. However, the results of the existing systems, which are in place are reflected in the overall figures for Indian Railways for figures of wagon ineffictive percentage which indicates the total nos. of wagons as percent of holding which remain out of use on account of various maintenance activities in open line depots and maintenance workshops.

It has been ensured that the total wagons, which remain out of use for various maintenance related activities including waiting for repairs, inspection for condemnation and other reasons remain at the permissible level."

135. On being asked about the measures taken to avoid lapses in wagon maintenance, Railway Board submitted in a note that:

"Continuous and sustained investments have been made through yard remodeling, workshop modernization and other related works. These investments are made to achieve several objectives like improvement in carrying capacity, reduction in wagon turn around, improved wagon mobility, improvement in quality and reduced maintenance time etc. To exactly apportion the investment for each of these objectives is however not feasible due to complexities involved."

136. Railway Board also apprised the Committee that they have rationalized their maintenance practices in the last three years. Concept of intensive examination has been gradually replaced with premium examinations wherein the rakes are examined only after a period of twelve days. This has greatly helped in reducing the number of examinations being performed on the Indian Railways system thereby greatly reducing the ineffective time of the wagon fleet.

137. In this regard, Audit has pointed out that Railway Board has stipulated pattern to be followed by Zonal Railways for the examination of freight trains and all rakes are required to be offered for examination within the validity of Brake Power Certificate (BPC). However, reports of movement of trains on invalid BPC in violation of Board's instruction continue to be received from zonal railways. In August 2008, 795 trains were reported to be running with invalid BPC. Inadequate care in monitoring the movement of CC rakes and not returning these rakes to base depots is causing depletion of stock of these rakes. It has also been seen that some times loaded wagons are being offered for BPCV instead of in empty condition.

138. Asked what action was being taken by Railway to arrange for supply of vital items required for repair to rolling stocks so that the wagons are turned out by workshops in the prescribed time frame, Railway Board replied:

"The procurement planning and material supplies for all vital items including items required for repairs of rolling stock are dealt with utmost priority. Item-wise stock, supply and issues to workshops are ensured and monitored regularly at all levels and all times availability of all such vital items are ensured by all Railway Units. Whenever items needed for POH/repairs are not available in Stores Depot, such items are being made available by means of Depot transfers of material, emergency purchases & local purchase, etc. Thus ensuring 100% availability of items needed."

139. However, as informed by Railway Board, as against the total number of 20,1933 fit wagons on the Indian Railways, as many as 9,748 wagons are lying sick as on 09.11.2008. During the current year, the ineffective percentage of wagons is around 2.65 per cent, which includes wagons undergoing scheduled maintenance (Periodical overhaul/Routine overhaul/Repair). According to Railway Board, this is within the target of 4 per cent set up by Railway Board.

### PART-II

#### **OBSERVATIONS AND RECOMMENDATIONS**

1. Indian Railways with a vast network of 63,465 route kilometers, are the principal mode of transportation for long haul freight movement in bulk and they play a crucial role in the socio-economic development of the nation. During the year 2004-05, the Railways carried around 600 million tonne of freight comprising 64 per cent of the total revenues earned by them. Being a derived demand, Railway transportation is directly dependent on the growth of six major infrastructure industries in the country viz. electricity, coal, steel, crude petroleum, petroleum refinery products and cement to which the majority of railway customers belong. However, the Railways' share of the total transport share had come down from 53 per cent in the Fourth Five-year plan to 37 per cent in the Ninth Five-year plan. The Report of the Working Group on Railway Programmes for the Tenth Five-year plan lays down detailed freight operational and marketing strategies for achievement of projected freight targets. The achievement of these targets largely depend on the manner in which the Railways reshape their policies and strategies not only to regain the lost share in freight traffic but also to provide value for money to customers in terms of better facilities and improved services.

2. Since certain anomalies had crept into the freight structure over the years, due to *ad-hoc* changes in the freight rates, the Ministry of Railways felt the need for rationalization of the freight structrue. In order to bring transparency in tariffs and rules by removing these anomalies/ambiguities and to simplify and make rail traffic more competitive with other modes of transport, the Railways have initiated the process of rationalization of the freight structure in 2002-03. According to the Ministry of Railways, the rationalization of freight structure is an ongoing process and is being carried out as and when the need is felt. The Railway Board have claimed that the replacement of the erstwhile voluminous Goods Tariff with a simple Goods Tariff has been appreciated by customers as well as field staff and the Indian Railways have registered unprecedented growth in freight loadings and earning as against total freight loading of 3,81,241 million tonnes and earning of Rs. 27,617.96 crore in 2003-04, the Railways loaded 538226 million tonnes and earned Rs. 53433.40 crore during 2008-09.

3. The Committee's examination of the Freight and Wagon Management policy effected by the Railway Board since 2002-03 and other relevant issues has revealed several deficiencies/shortcomings. These *inter-alia* include permitting running of trains loaded with enhanced quantity without complying with the conditions laid down for protecting track and rolling stock; continued trend of illegal overloading even after permitting enhanced loading of wagons, as a result of which, there have been increased incidences of rail fractures, weld fractures and defects in wagons and locomotives; while rationalizing the freight structure, the transportation charges for eleven commodities were reduced by 3 to 54 per cent and in respect of three such

commodities—Edible Oils, Motorcars and Tea—even the haulage cost could not be recovered due to reduction in the rates. The Committee's examination has also revealed that non-provision of wagonload class for commodities placed in the highest class has abolished the provision of charging higher freight in case of non-compliance with conditions laid down for availing the benefit of concessional trainload rates. As a result, while the parties get the benefit of concessional rates even without compliance of all conditions, the Railways have lost the operational benefits gained through bulk movement. Further, lowering of class of petroleum products has not resulted in achieving the intended benefit of increasing the Railways' share of petroleum traffic and instead, such earnings had decreased by 15 per cent in the eyar 2003-04 and 2.62 per cent in year 2004-05. It was also noticed that though wagon supply by the Public Sector Undertakings was not as per target and schedule, further orders for sizeable quantities were placed on them resulting in huge backlog of supplies and in the process, hampering Railways' freight operations. In addition to this, many fit wagons were detained at stations/sidings/exchange points/yards for want of adequate handling capacity thus denying the Railways from their optimal utilization. Consequently, the Railways suffered, as per Audit estimates, a total loss of earning of Rs. 168.48 crore during the six month period from October 2005 to March 2006. Further, Board Gauge wagons were underutilized during transhipment resulting in loss of Rs. 5.63 crore. It was also found that wagons due for periodical overhauling underwent prolong detention at various stages resulting in loss of earning capacity to the tune of Rs. 65.26 crore. These shortcomings/deficiencies are dealt with at length in the succeeding paragraphs.

4. The Committee note that the carrying capacity (CC) of a wagon is based upon the load that the axles of the wagon can carry. Prior to November 2004, the wagons were allowed to be loaded up to CC+2 tonne where the permissible axle load was taken as 20.32 tonne. From November 2004 onwards, the loading was permitted up to CC+4+2 tonne. In May 2005, as a pilot project, the Railway Board permitted running of these wagons loaded up to CC+8+2 tonne on sixteen identified iron ore routes in order to increase throughput. Subsequently, wagons loaded with coal up to CC+6+2 tonne were also allowed to run on nominated coal routes. However, no detailed scientific and engineering study on the technical feasibility of the enhanced wagon loding was carried out through any independent accredited agency and this important decision of increasing wagon carrying capacity beyond the prescribed limits *i.e.* upto CC+8+2T was taken solely based on the field experience gained after running freight wagons for years and in-house research and development work done by the Research Design and Standards Organization (RDSO). The Committee's examination has revealed that this questionable decision of the Ministry of Railways challenges the conventional/prevailing system of assessing weight bearing limit of tracks and had led to large scale premature damages to tracks, bridges and rolling stock belying the Railway Board's contention that no appreciable adverse effect has been noticed. Though the Railway Board admitted that actual consequences of the enhanced loading on tracks and wagons would be clearer when more results become available in due course which may span over 30 years, the Committee are of the considered view that for any impact assessment of such nature and duration, it is not always easy to arrive at any reliable result as various external issues or stimuli are certain to affect the

process. The Committee are, therefore, constrained to observe that until the Railway Board complete their ongoing impact analysis of enhanced loading on rail infrastructure and the results prove beyond doubt that their venture is risk free, the decision of enhanced loading remains a risky venture fraught with latent physical damage to rail infrasturcture which even poses rail safety concerns. The Committee cannot but conclude that this decision of the Ministry of Railways to enhance the carrying capacity of wagons is aimed at short-term revenue gains at the cost of longterm damages to the railway infrastructure. The Committee feel that CC of wagons should have ideally been enhanced only after undertaking a proper scientific evaluation and detailed feasibility study. They would also like to caution the Railway Board to desist from taking indiscreet actions which may cause injudicious harm to rail infrastructure in future.

5. The Railway Board implemented a pilot project on enhance loading with the objective of carrying more tonnes per wagon thereby increasing the throughput on congested routes and reduucing the unit cost of operations to effect saving on locomotives, additional wagons, staff and paths to move additional trains. However, the Committee find that in a series of *ad hoc* decisions that were taken in haste, the Railway Board permitted enhanced loading on more routes in several stages. Initially, the Railway Board permitted running of freight trains loaded up to CC+8 tonne with an additional loading tolerance of 3 tonne on certain specified routes mostly dedicated freight routes as a pilot project for one year effective from 15.05.2005. The commodities permitted to be loaded under this arrangement were ores, gypsum, limestone, dolomite, etc. Later, some CC+6 routes were also notified for loading of E&F grade coal, inferior grade coal, washed coal, and washery middling in addition to ores, gypsum, limestone and dolomite up to CC+6 tonne. The Pilot Project was gradually enhanced and more routes have been included in the project and in addition to BOXN wagons, other wagons were also included in the project. Cement, grain, sugar etc, were also included in permitted commodities list in addition to iron ore, coal and other heavy minerals. Subsequently, CC+6 routes have been universalized and all BG routes of Indian Railways except a few have been notified as CC+6 routes. In defence of such questionable and risky decisions, the Railway Board pleaded that as capacity additions in the Indian Railways have long gestation periods, the quantum increase in the freight loading could be made possible only through a major strategy of increasing the axle load. The Committee are not convinced by this approach of the Ministry of Railways particularly when the enhanced loading was effected without the matter being subjected to a thorough scientific and engineering study and more routes were arbitrarily brought under the pilot project without any assessment of their impacts. Against this backdrop, the Committee do not consider the decision to enhance carrying capacity of wagons much above the originally permissible carrying capacity as a prudent, safe and technically sound way of augmenting earning capacity of the Railways. While expressing serious concern over this uncertain step, the Committee desire that the Railways Board should avoid pursuing a reckless policy of expanding enhanced CC routes until favourable impacts of the existing pilot project are established.

6. The Committee note that while giving their green signal for enhancing wagon load, the RDSO had, based on their studies, called for greater control on over loading and increasing number of Wheel Impact Load Detectors (WILD) instruments alongwith

other factors to increase the track life. RDSO had also recommended for providing additional springs in suspension and Association of American Railways (AAR) approved grease in axle box bearings of wagons. In addition, the Railwa Board in March and May 2005 also clarifed that the enhanced loading may be permitted subject to the fulfilment of certain conditions. However, Audit review of eleven and six selected routes, where enhanced loading of iron ore and coal was permitted respectively, had revealed that in almost all the Railway Zones, the pilot projects of permitting the wagons loaded up to CC+8+2 tonne and CC+6+2 tonne were commenced even without fulfilling the prescribed conditions of installation of Wheel Impact Load Detectors (WILD), instrumentation of bridges, installation of in-motion weighbridges and provision of Wheel Impact Load Detectors. Even though eleven in-motion weighbridges were slated to be installed on East Coast Railway, only one was installed as of September 2006. Similarly, on South Central Railway only five out of the stipulated nine weighbridges could be installed. Worse stiff, not a single Wheel Impact Load Detector was provided on any of the Railways during the same period. In this regard, the Railway Board contended that the installation of wheel Impact Load Detectors (WILD) instrumentation of bridges installation of in-motion weighbridge was not a prerequisits for starting the Pilot Project. The Committee do not agree with the Railway Board's view in the matter as it is contradictory to the recommendations of the RDSO for greater control on overloading and increasing the number of WILD instruments. The Committee cannot but deplore the Railway Board in fulfilling the prerequisite conditions before permitting enhanced loading which is a major systemic failure/lapse. They, therefore, would like the entire issue be looked into afresh and take immediate corrective measures. The Committee also urge upon the Railway Board to accord the highest priority henceforth on fulfilling the prerequisite conditions of wagon CC enhancement *i.e.* installation of all the requisite devices/ instruments like WILDs, weighbridges, other essential mechanical devices/ instruments etc.

7. In terms of RDSO's conditions and the clarifications issued by the Railway Board in March and May 2005 in the matter of permitting enhanced loading, installation of Wheel Impact Load Detectors and in-motion weigh bridges are considered essential for monitoring the impact of enhanced loading. By December 2008, a total of 9 WILDs have been installed and tender for procurement of further seven systems was under finalization by Central Organisation for Modernisation of Workshops (COFMOW). Besides, the Railway Board also planned to incorporate WILD in Online Monitoring of Rolling Stock (OMRS) system and another indent for procurement of 25 Nos. of Acoustic Bearing Detector and WILD for Online Monitoring of Rolling Stock was under finalization. The Committee are distreassed to find that this position remained unchanged till December 2009, obviously indicating that no specific action plan has been implemented for expeditions installation of WILD on all identified vulnerable routes. Further, the Committee's examination has revealed that since 2004 greater emphassis has been given on checking overloading after surprise checks detected overloading to a great extent. Accordingly, power was delegated to General Managers to sanction expenditure up to Rs. 15 lakh on installation of weighbridges. In the same year, all Zonal Railways were directed to review the availability of weighbridges and chalk out an action plan for providing electronic in motion weighbridges at originating points as also at other convenient locations where weighment was operationally feasible. As a result, 42 weighbridges were made available by 2005 and another 48 and 24 weighbridges were commissioned during 2006 and 2007 respectively. Subsequently, the Railway Board constituted a committee during 2008-09 to draw up a blueprint indicating all the locations on Indian Railways where electronic in-motion weighbridges need to be provided. In spite of this, the position of installation of weighbridges remained dismal till date as against 84 and 69 weighbridges planned for installation during 2008 and 2009 respectively, only 11 and 8 weighbridges could be commissioned and surprisingly, as a remedial measure, the Railway Board have merely reissued a set of old instructions recently asking all Zonal Railway to commission entire planned/proposed weighbridges within the next six months besides mandating provision of in-motion weighbridges in all new private sidings having outward traffic. What disturbs the Committee most is the fact that the same instructions were issued in 2008 by the Railway Board without yielding any tangible results. The Committee note that even after 5 years of enhanced loading, the Railways have miserably failed to commission the requisite numbers of WILDs and in-motion weighbridges despite their importance in monitoring the impact of enhanced loading to the rail infrastructure, which is anything but regrettable. In order to protect costly and vulnerable rail infrastructure from damages, the Committee recommend that it should be made obligatory for all the Zonal Railways to install and commission all the pending WILDs and weighbridges on priority basis and any laxity in the matter should be dealt with sternly. The Committee would like to be apprised of the details of precise action taken, year-wise and zone-wise, in this regard.

8. The Committee are constrained to observe that illegal and clandestine overloading beyond the permitted enhanced limits is rampant on Indian Railways and in fact such illegal overloading was found to the extent of 1 tonne to 5.70 tonne on an average. This means that the wagons are loaded to the extent of 24.49 tonne per axle as against the permitted axle load of 22.82. The Committee's examination has revealed that the widespread illegal overloading has not only led to increased axle damages but also had serious implications on the maintenance of track and rolling stock thereby threatening safe running of trains specially in the cases of wagons carrying loose and moisture sensitive commodities whose weight tends to get increased due to rain, moisture, etc. In facing this grave challenge, the Committee to their utter surpirise found that the Railway Board have been relying upon visual examinations of wagons as a means of checking overloading. This is an over simplistic and unreliable method of preventing illegal overloading. The Committee are afraid that the Railways have failed to pursue installation of weighbridges on the designated routs on urget basis thereby making detection of clandestine overloading even harder. The Committee feel that a much improved performance in the prevention of wagon overloading can be achieved if the Railway Board emphasize on taking a more focused action for augmenting their technical surveillance through weighing instruments. They desire that the Railway Board should take urgent measures in this direction to prevent all forms of illegal and clandestine overloading at least now. In this context, the Committee urge the Railway Board to ensure complete computerization and networking of their weighing and freight collection operations to help prevent overloading and leakage of freight charges. Since moisture sensitive goods carried in open wagons tend to gain undesirable weight due to natural precipitation of otherwise, the Committee deisre that the Railway may explore taking steps like putting moisture proof covers on these railway wagons to minimize much during transit.

9. The Committee note that punitive charges are imposed by the Railways as a deterrent for illegal overloading of wagons. For collecting such charges, two types of situation "A' & ;B" have been categorized in the Railways (Punitive charges for overloading of wagon) Rules, 2006, In situation 'A' where the aggregated payload in a rake does note exceed the combined permissible carrying capacity (PCC) of the rake, it is assumed that there is no mala fide intention on the part of rail user. However, on the ground that overloading of individual wagon endangers the safety, lenient punitive charges have been prescribed. This is 2 times of the applicable freight Class. Even in this situation, if overloading exceeds more than a limit, punitive charges levied is 3 times of the highest freight Class. In situation 'B' where the aggregated payload in a rake exceeds the combined permissible carrying capacity (PCC) of the rake, it is assumed that rail user may have mala fide intention. Considering that overloading of wagons in this case not only endangers the safety but causes leakage of revenue also, stringent punitive charges have been prescribed, which is up to 5 times the highest freight Class. However, no separate data for punitive charges collected in respect of situations 'A' and 'B' and the route wise statistics of such punitive charges collected are being maintained by the Railway Board. The Committee are of the view that lack of clarity in data collection in respect of these situations hampers impact analysis and cost benefit assessment of overloading rampant in the Railways. In order to analyse and understand better all the causes and attended risks of illegal overloading, the Committee desire that the Railway Board should maintain a comprehensive data clearly indicating note wise, loading station wise and situation wise cases of overloading noticed and the amount of punitive charges so collected.

10. The Committee's examination has revealed that out of 34,29,869 wagons weighed during April to September 2008, as many as 3,38,966 wagons were found illegally overloaded with an average overloaded weight of 1.49 to 4.18 tonnes, which translates into a total punitive charge of Rs. 159.75 crore. The Committee also noticed that there was no let up in the prevalence of overloading as can be gauged from the fact that out of 63,18,292 wagons weighed during the period—1st October 2008 to 31st July 2009, a large number of 4,86,111 wagons were found carrying 13,03,731 tonnes of overloaded commodities at an average of 2.82 tonnes per wagon with a combined punitive charge of Rs. 164.66 crore. This situation proves beyond doubt that despite collecting punitive charges as a deterrent for illegal overloading of wagons, the problem is still persisting on a large scale on the Indian Railways. In view of these facts, the Committee are skeptical of the Railway Board's claim that the levy of punitive charges is the most effective tool to discourage overloading. The Committee are of the opinion that overloading of wagons on the Indian Railways is a mammoth and complex problem, which cannot be effectively tackled by mere levying of punitive charges and fines. Moreover, in such a scenario, the income earned through penalities or fines would not be able to compensate for the huge infrastructure losses caused to the Railways due to overloading. The Committee, therefore, desire that the Railway Board should strive more to take preventive steps rather than collecting punitive charges as a deterrent to overloading. In this direction, the Committee would urge the Railway Board to follow a policy of zero tolerance and should take stern action against unscrupulous elements behind illegal overloading of Railway wagons. The Committee would like to be informed about the precise steps taken by the Railway Board in the matter.

11. The Committee note that as a consequence of CC enhancement of wagons, a plethora adverse impacts like increase in rail fractures and weld fractures had severely hit railway tracks on Central and South Eastern Railway. Large scale glued joint failures, switch expansion joints and points and crossing failures were seen on almost all the routes and there has also been increase in case of spring failures centre buffer couplers (CBC) failures and body damages to wagons. While the increase in spring failure on South Eastern Railway was 9.65 per cent, the same was 76.84 per cent on South Western Railway. Similarly, the increase in CBC failure was to the exent of 11.87 per cent and 16.49 per cent on South Eastern and Southeast Central Railways respectively. Further, there was also increase in reports of cases of stalling of trains, serious failure of certain locomotive components such as Cylinder Heads, Brake Blocks, Dynamic Grid Separator and Element, Power Contractor Tip and CBC Knuckles. To compound this grim scenario, there had been 45.6 per cent increase in train parting cases, 7.7 per cent increase in hot axles, 11.32 per cent increase in the body under frame damage and 11 and 23 per cent increase in bogie and spring defects respectively following running of wagons with increased axle load during 2005-06 as compared with those of 2004-05. The Railway Board, however, allayed these findings stating that no appreciable adverse impacts have been noticed during periodical reviews till date. Besides, they informed the Committee that impact assessments of the enhanced loading are underway though they may take another 30 years. In this regard, the Member (Engineering), the Railway Board during evidence stated that the deterioration of tracks with the heavier axle loads would be a little faster. The Committee further note that as a consequence of enhanced loading, the Ministry of Railways placed speed restriction of 30 kms. per hour on 90R rail track structure to ensure safety even though the maximum permitted speed for goods train running on such tracks is 60 kmph on Central and South Eastern Railways. This unwittingly may create more traffic congestion thereby nullifying the so-called advantages of the enhanced loading. The Committee apprehend that the aforementioned physical and infrastructural damages caused by the enhanced loading to the Railways' core assets would eventually suck out a large portion of the increased freight earnings. The Committee, therefore, express their reservations that the enhancement of carrying capacity of wagons is certain to prove costly to the Railways and the claims for having achieved a quantum jump in freight earnings, from an amount of Rs. 26,231.45 crore during 2002-03 to Rs. 53,433.40 crore in 2008-09 may simply turn out to be a case of unrealistic projection. The Committee would urge upon the Railway Board to be more vigilant, farsighted and realistic in their vision and approach and take due note of the adverse impacts of the enhanced loading with a view to ensuring expeditious solutions to any crises that may emerge therefrom.

12. The Committee note that while Special Railway Safety Fund (SRSF) amounting to Rs. 464.48 crore and Rs. 227.06 crore remained unutilized during the financial years 2005-06 and 2006-07 respectively, unspent SRSF to the tune of Rs. 597.78 crore accumulated during the financial years 2001-02 to 2007-08, was surrendered

in 2008-09 by the Railway Board. In the light of the adverse impacts of enhanced loading like rail and weld fractures, damages to wagons and other rolling stock as well as the ongoing track renewal projects and other rail safety issues, the Committee feel that this fund ought to have been fully and more productively utilized, which would not only take care of adverse impacts but also help in maximising the overall operational performance and freight earnings of the Railways. The Committee, therefore, desire that the Railways should come up with a concrete persepective plan accompanied by matching follow up action to ensure proper and judicious utilization of SRSF with the core idea of augmenting/strengthening the infrastructure of the Indian Railways.

13. The Indian Railways network comprises about 1,27,768 bridges and out this, 42 per cent of bridges were more than 100 years old as on 1st April 2007. As per the Railways' policy, rehabilitation/rebuilding/strengthening of bridges, which takes about 3 to 4 years time, is undertaken on the basis of their physical condition as certained during regular inspections carried out in the field. Certain bridges, which may show signs of deterioration of physical condition indicating need for rehabilitation etc., are classified as distressed bridges and each year, targets are fixed for rebuilding/ rehabilitation of distressed bridges depending on the number of bridges available for rebuilding/strengthening on Railways. The Ministry of Railways have stated that they accord the highest priority to completion of distressed bridges for which instrumentation work constitutes a crucial component. The Committee, however, find that the Railway Zones were rather slow in carrying out instrumentation/identification and rehabilitation of the distressed bridges resulting in huge accumulation of distressed bridges needing rehabilitation. The Ministry of Railways have Informed the Committee that the task of instrumenation has been assigned to such specialized agencies as Structural Engineeering Research Centre, Chennai, Indian Institute of Science, Bangalore and Central Road Research Institute, New Delhi, Notwithstanding these measures, the Committee note with concern that the progress is rather slow and only 59 numbers of bridges have been instrumented in the first round. The Committee also note that though distressed bridges numbering 122,88,75 and 69 were identified and sanctioned for rehabilitation on zonal railways during the years 2005-06, 2006-07, 2007-08 and 2008-09 respectively, the numbers of these bridges actually rehabilitated during the corresponding periods were only 38, 34, 29 and 36. The main contributory reasons advanced by the Railway Board for the slow pace in rehabilitating the distreassed bridges are non-availability of engineering restrictions/traffic blocks/ access road, difficult working conditions, non-availability of good agencies to take up isolated or difficult works. The Committee do not find the reasons given by the Ministry of Railways convincing and would like the Railways to make an honest introspection to diagnose the factors that contributed to this malady. The Committee also find that even after a lapse of four years subsequent to the formulation of Corporate Safety Plan, the Railways have only managed to award pilot projects for carrying out capacity assessment and condition monitoring of bridges, fatigue testing and residual life of bridges although proper maintenance of bridges has become imperative in the aftermath of enhanced loading of wagons. Thus, the duration of 3 to 4 years to complete rehabilitation of the identified distressed bridges has proved to be too long to give the desired results. The Committee, therefore, recommend that the Railways should make earnest efforts to complete proper instrumentation and identification of all the identified distressed bridges within a fixed time frame and ensure their timely rehabilitation to prevent any possible collateral damage. Further, the maximum period of rehabilitating a distressed bridge may be reduced from the current period of 4 years from the date of identification to 2 years.

14. The Committee note that post rationalization of the freight structure, the Railways have been incurring operational losses in transporation of eleven commodities i.e. Motor Car, Onion, De-oiled Cake, Edible Oil, Timber, Paper, Tea, Milk Powder, Dry Chilies, Turmeric and Cotton (full pressed). The estimated losses on these commodities worked out to Rs. 21.93 crore in the year 2005-06 alone. In respect of three commodities i.e. Edible Oils, Motorcars and Tea, the Railways were incurring losses ranging from 13 per cent (for a distance of 500 kms.) to 24 per cent (for a distance of 2,000 kms.). Consequently, the freight rates for these three commodities did not even cover the haulage cost. The Ministry of Railways informed the Committee that these goods were carried below their operational cost with the intention of containing the market prices of essential commodities of mass consumption, which is one of their social obligations. The Committee, however, feel that classification of 'motorcar' as an essential commodity is erroneous on the part of the Railways in view of its nature and utilization and thus it is not acceptable that the Government have to shoulder transportation cost. Further, the Committee's examination has revealed that the cause for the loss incurred in respect of transporting these three commodities had its roots in the abolition of charging freight at Minimum Weight Condition and subsequent introduction of a system whereby all commodities were to be charged on the carrying capacity of the wagon used. Under this system, the classification of certain commodities was lowered in order to compensate for the increase in freight due to charging for weight not actually loaded in a wagon. This allowed certain traders to carry higher quantity within a fixed freight load by loading the wagons with more quantity than the minimum weight condition prescribed earlier and the process the Railways' earnings per wagon were reduced by 54 per cent (in the case of turmeric) to 3 per cent (in the case of de-oiled cake) as compared with the freight that was realised at the pre-revised class. Since the Railways, notwithstanding their social obligation, have to be economically viable in the face of stiff competition from other modes of transportation, the Committee urge upon the Ministry of Railways to remove the aforesaid anomaly in the feight structure emanating from abolition of charging freight at Minimum Weight Condition. They further desire that while transporting any commodity/goods by the Railways, the transportation and haulage cost incurred should invariably be recovered at least.

15. With a view to achieving savings in operational costs, the Railway Board introduced lower class movement of traffic in trainloads instead of piece meal wagonloads in Junuary 1982. Prior to 1 April 2005, all commodities were assigned separate classes when booked as trainloads and wagonloads but with effect from 1 April 2005, commodities were assigned only train load class with the stipulation that when such commodities were to be booked as wagon loads the freight would be charged at the next higher class. As per this arrangement, the classification of certain Petroleum products was lowered from class 280 to class 250 from 1 April 2003 and further to class 240 from 1 April 2005, resulting in an approximate reduction in freight rates by

10.7 per cent and 4 per cent respectively. Further, no distinction has been maintained between wagonload and trainload class for commodities placed in the highest-class viz. Acids, Alcohols and POL products. This resulted in an undue advantage to the consignors in that they were not required to pay higher freight charge even for not loading all the wagons supplied to them. As a result of this anomaly, freight in respect of rakes comprising 30,666 wagons, where all the wagons were not loaded, was charged at trainload rates on eight zonal railways. Similarly, when the commodities placed in the highest class were booked from stations/sidings not notified for handling rake load traffic, the Railways were forced to charge only train load rates as wagon load class rates were not prescribed. The number of wagons loaded with commodities placed in the highest class by seven stations alone was 22,148 during 2005-06. In this regard, the Committee have been informed by the Ministry of Railways that due to high freight rates, transportation of the commodities placed in the highest class 240 (200 at present) viz. Acids, Alcohols and POL products is being constantly diverted to pipelines and roadways which are more consumer friendly in nature and the arrangement was done for lowering the classification of POL products to retain the Railways' traffic share. However, despite effecting such significant reduction in freight charges for POL products, the Railways' traffic share in respect of these commodities has plummeted over the years, from 31 per cent in 2002-03 to 25 per cent in 2005-06 while that of roadways increased from 14 per cent in 2002-03 to 23 per cent in 2005-06. Similarly, transportation of POL products through pipelines registered a significant increase, first in 2003-04 and then in 2006-07 and 2007-08. Correspondingly, the quantum of Petroleum products traffic moved by rail decreased by 14.08 and 6.03 per cent during 2003-04 and 2004-05 respectively as compared to the traffic carried in 2002-03. The consequent decrease in earnings was to the extent of 15.21 and 2.62 per cent respectively, which led to decline in the Railways overall earnings by Rs. 419.10 crore and Rs. 72.06 crore during 2003-04 and 2004-05 respectively as compared with that of the immediate preceding year i.e. 2002-03. These factors have primarily caused a decline in Rail Coefficient of POL products with the possibility of mounting losses in future. Keeping in view such stiff and escalating competition faced by the Indian Railways in their freight operations, the Committee desire that the Railways should go for a paradigm and strategic shift in their freight management in such a way that either better and economical means and ways of transporting POL products are evolved or the Railways' freight operation is focused on their core and more remunerative areas/commodities.

16. The Committee note that in a rapidly growing and developing economy like ours, the Railways' share of the total transport share is bound to register a declining trend due to its operational limitations and increasing availability of other easier and competitive modes of transportation like roadways, pipelines etc. For regaining their lost traffic share, the Railway Board have been taking various measures by way of investment aimed at creating infrastructure for improved freight and passenger services. At present, a large number of activities such as introduction of new lines, gauge conversion track renewals, track doubling, bridge works, electrification projects, signaling & telecommunications works etc. are underway on the Indian Railways, which directly or indirectly aim at improving various aspects of freight operations and

freight carrying capacity so as to provide a safe, sound and efficient modern infrastructure, which ensures smooth passenger and freight operations. Further, the Railways have targeted augmentation of Broad Gauge track capacity by 15,500 kms. during the XI Five-year Plan. However, the Committee are constrained to note that the investment under major plan heads aimed at creating infrastructure for improving freight and passenger services over the years is not commensurate with the buoyancy level of the Railways' earnings. To illustrate, the Railways reportedly achieved a jump in their freight earnings from an amount of Rs. 26,231.45 crore during 2002-03 to Rs. 53,433.40 in 2008-09 but no proportionate amount has been invested for railway infrastructure development as the actual expenditure incurred under the various plan-heads meant for increasing the freight haulage capacity like Gauge Conversion, Track Doubling, Traffic Facilities, Rolling Stock Programme, etc. remained almost static during 2004-05 to 2005-06. As a result, capacity augmentation over the existing facilities was very poor and was marked by fluctuations of marginal declines and increases continually from the years 2002-03 to 2006-07. This lack of growth in the Railways' infrastructure had perhaps a causative role in the reduction of the Railways' share of the total transport share from 53 per cent in the IV Five-year Plan to 37 per cent in the IX Five-year plan. The Committee consider such an inadequate investment on Rail infrastructure to be a serious handicap on the part of the Railway Board, which may deprive them of achieving the required pace of acceleration both in passenger and freight operations and earnings thereof. In such a scenario, the Railways need to invest heavily on their infrastructure development for furthering their performance and achievement and more especially in the post freight rationalization and CC enhancement phase marked by deterioration in railway infrastructure. The Committee, therefore, urge the Railways to poor their resources and infuse adequate funds for infrastructure renewal/up gradation to enable the railways in creating the required rail infrastructure for scaling further heights in their performance. It is needless to mention that the upgradation of physical infrastructure should be adequately complemented by a series of innovative and competitive marketing strategies to further consolidate the Railways' performance and achievements in freight operations.

17. Wagons play an important role in the Railways' day-to-day freight operations especially in the post CC enhancement phase. As a policy matter, the Indian Railways placed 60 per cent of their tendered orders to public sector undertakings and remaining 40 per cent to private sector units. The Committee are, however, concerned to note that procurement of wagon fleet by the Indian Railways has been severely crippled by the failure of both the public sector and private sector wagon manufactures/suppliers in adhering to their delivery schedules. It is a matter of concern that wagons numbering as many as 2,922.5 and 2,060 were pending delivery by 6 public sector undertakings and private manufacturing units respectively as on the 1st April 2002. Despite this, orders for another 28,122.5 and 39,397.5 wagons were placed on the public sector undertakings and the private manufacturers during 2002-03 to 2005-06. Subsequently, the PSUs failed to deliver as many as 11,327.5 wagons whereas the private sector manufacturers have delivered all the wagons due from them. The Committee have been informed that all the Public Sector units, which were performing well in the past, turned sick and their productivity, declined which created shortage of wagons on Indian Railways

in the year 2003-04. Under revival package for sick PSUs, certain steps are reportedly taken with some positive results, which raised the wagon production by 47 per cent in 2006-07 as compared with that of the corresponding period in 2005-06. However, the Committee find that PSUs are still lagging behind in wagon production and they could supply only 755 wagons as against 3,264 wagons supplied by private sector in 2008-09. Though the Railways have an obligation to support the Government owned PSUs for their revival by infusing investments and placing orders, delay in delivery of ordered wagons by these suppliers seriously affects the operational performance of the Railways not only in terms of quantity of freight and passenger carried but also in terms of quality of service provided. The Committee are, therefore, of the view that the Indian Railways, as a commercial entity, is duty bound to maintain their commercial interests and operational readiness lest their performance would dip further. The Committee would, therefore, like the Railway Board to enter into special arrangements with the Ministry of Heavy Industries and the concerned PSUs to progressively clear the pending wagon orders within a reasonable time frame failing which the Railways should not shy away from adopting a strict plicy of placing wagon procurement orders only on those companies/manufacturers which have a proven track record of timely fulfilling/honouring wagon delivery schedule. The Committee trust that proactive steps would be taken by the Railway Board to coordinate with the PSUs for not only achieving faster wagon production but also for ensuring timely delivery of wagon as per the operational needs of the Railways.

18. The Committee note that on account of injudicious notification of stations/ sidings for handling full rake traffic and absence of appropriate action taken by zonal railways for implementation of the relevant directions issued by the Railway Board in October 2004, 71 goods sheds were notified for handling full rakes even though they did not have adequate facilities for the task. Eventually, this injudicious notification caused protracted detention of as many as 18,37,483 wagons/rakes handled on these stations during October 2005 to March 2006 resulting in a loss of 5,67,026 wagon days with possible earning capacity of Rs. 114.72 crore. This gives an unmistakable impression that they Railway Board had failed to speed up development/creation of terminal facility and other traffic facility works in tune with the increasing demand arising from wagon CC enhancement or otherwise. The Committee have been informated by the Ministry of Railways that top priority is now given for development of terminal facility and other traffic facility works and the same are being monitored by zonal railways. However, the Committee note that nothing concrete has been achieved as yet as out of total number of 792 traffic facility works appearing in Pink Book 2008-09, as many as 614 works (including 304 on high density routes) were still in progress as on 31st March 2008. Further, against the 335 (165 number in high density routes) targeted, works for completion during the year, only 48, which include 20 on high-density routes, could be completed till 31st August 2008. The Committee regret to observe that the main contributory reason for the slow completion of the works is non-adherence by zonal railways to the directions issued by the Railway Board in October 2004 regarding capacity augmentation of sidings. Wonderstruck as to how the Railway Board allowed the zonal railways to violate or ignore instructions issued by them without any censure, the Committee desire that the Railway Board should put in place henceforth a strict policy for ensuring scrupulous enforcement of directives issued by them. The Committee would also like the Railway Board to augment their efforts for speedy and proper upgradation of terminal facilities and half rake terminals as per the requirement level so that they do not cause further revenue loss and instead catalyse railways' infrastructure growth for meeting emerging needs of the Railway Traffic.

19. The Committee are dismayed to note that one hundred per cent of the rakes underwent detention before being taken for loading on Northern, South Central, North Central, South Western, Central, Eastern, North Western, North East Frontier and Central Railways. Audit test check at 29 station yards/exchange points of different sidings has revealed that out of 13,613 rakes loaded and placed at the exchange points for onward dispatch, 11,704 rakes (86 per cent) were detained on various accounts such as non-availability of power, section clearance, non-availability of crew and delay in train examination etc. thereby denying possible freight earnings of Rs. 53.76 crore during a six-month period of October 2005 to March 2006. The Committee feel that this loss could have been prevented had the zonal Railways displayed better managerial skills and the Railway Board exercised adequate monitoring. The Committee have been informed by the Ministry of Railways that it is only during the last 3-4 years that steps have been taken to increase the capital investment required in the Railways and railway operations at present are run on a scarcity resource scenario. The Committee do not accept the plea that resource crunch is the cause for detention of Railway wagons given the fact that huge unspent funds are lying with them under SRSF and DRF. As the lack of additional facilities in sidings/goods sheds for berthing of rakes, loading/unloading of rakes had an adverse effect on early/ timely release of wagons that had led to unnecessary detentions and loss in earning potential of wagons, the Committee recommend that adequate number of loading and unloading points complete with other facilities and amenities required primarily for increasing load handling and wagon removing capacity of the sidings/exchange points/ yards should be set up and operationalised with a view to enhancing generation of freight traffic by avoiding detention of wagons.

20. Audit scrutiny of records at four transshipment points over Western, Southern and Northeast Frontier Railways has revealed that contents of Meter Gauge (MG) wagons were transshipped into Broad Gauge (BG) wagons in such a manner that each BG wagon was underutilised to the extent of 5 tonne to 23 tonne. As a result, 3,516 BG wagons were under-loaded to the extent of 64,465.3 tonne resulting in loss of possible earning capacity of Rs. 5.63 crore on account of underutilisation of full capacity of the wagons. The Committee have been informed that actual carrying capacity of 4 MG BC wagons is 138 tonnes (actual CC of MG BC wagon is 32 tonnes) while that of 3 BG BCN wagons is 135 tonnes (actual CC of MG BCN wagon is 32 tonne) in case of Foodgrain. Accordingly, to get the optimum utilization of loading space in BG wagons for transshipping from MG to BG wagons, the ratio of MG wagons to BG BCN wagons is fixed as 4:3. Whilst acknowledging that under utilization of 7 tonnes in one BG BCN wagon in a lot of 3 BCN wagons is inevitable due to technical restrictions, the Committee are of the opinion that the prevailing method of transshipment on a multi-gauge rail networks in different railway zones across the country has proved to be an ineffective system of rail transportation besides being inimical to the Railways' objective of augmenting smooth freight operation for enhancing freight earnings. In this regard, the Committee welcome the Railways' decision to undertake Project Unigauge, which aims to convert the entire Railway network into a single gauge system across the country for removing the problems of tansshipment etc. currently affecting the Railways' freight operations. The Committee would encourage the Railway Board to pursue the Project Unigauge with a pragmatic approach and complete its implementation within a specified time frame. As for the cost, while a major portion of this expenditure can be financed from the enhanced profit earned by the Indian Railway in the recent years, the Committee would urge the Railway Board to take necessary steps for optimizing revenue generation from their huge assets including land and other resources/infrastructure spread across the country. Till the completion of the project, the Committee desire that certain operational arrangements may be explored for eliminating/minimizing underutilization of wagons during transshipment.

21. The Committee note that as per the Indian Railway Year Book (2004-05) there were arrears in the periodical overhauling of BG wagons (5.8 per cent) and MG wagons (7.9 per cent) and further during six-months period from October 2005 to March 2006 alone, 30,344 wagons which were due for periodical overhauling were stabled in the yards and sent to Workshops after a total delay of 1,34,591 days with an earning capacity of Rs. 27.39 crore. The Committee find that even after receipt of wagons in the workshops, they could not be taken up for POH immediately due to capacity constraints and bunched supply. Besides, most of the wagons undertaken for periodical overahuling were not turned out within the prescribed period. The Ministry of Railways have attributed the reasons for delays in this regard to shortage of material and staff, prevalence of serious damages requiring major repairing/modifications, denting and painting etc. The Committee regret to note that the Ministry of Railways have not taken any effective steps to minimise the time taken in periodical overhauling by ensuring timely supply of requisite material and staff etc. Further, the repaired wagons were also not sent for use immediately after overhauling resulting in loss of a total of 81,434 days with possible earning capacity of Rs. 16.57 crore. The Committee also note that there was prolonged detention of wagons due for POH in yards for abnormally long periods of as many as 1,34,591 days, which adversely affected the operational cpability of the Indian Railways. In this regard, the Committee have been informed by the Railway Board that there is no prescribed period as such for periodic overhauling of wagons and the Railways have been attempting to achieve within a period of 5 to 8 days in their workshops. In the Committee's view, thisis nothing short of a serious lapse on the part of the Railway Board especially when their records depict losses attributable to this account. The Committee also find that as against the total number of 2,01,933 fit wagons on the Indian Railways, as many as 9,748 wagons are lying sick as on 09.11.2008 and during the year 2009-10, the ineffective percentage of wagons is around 2.65 per cent, which is numerically more than 5,6095 wagons. This makes it clear that the existing arrangement needs to be improved in so far as ensuring availability of a speedy and transparent system of repairing and maintaining Railway wagons is concerned. The Committee do not consider this practice conducive for preserving operational readiness of the Indian Railways' wagons fleet and, therefore, recommend that the Railway Board should take effective steps for ensuring periodic inspection of their wagons with a purpose of identifying/categorizing them into different types of repairing/periodic overhauling job. The Committee also note that reports of movement of trains on invalid Brake Power Certificate in violation of Board's instruction continue to pour in from zonal railways and in August 2008, 795 trains were reported to be running with invalid BPC. From this scenario, it is evident that scarcity of wagon spare parts has gravely affected wagon-overhauling job. The Committee would like the Railways to enter into an effective arrangement with their spare parts so that timely, smooth and speedy overhauling of damaged wagons is positively achieved and delays obviated.

NEW DELHI;

### **GOPINATH MUNDE**

26 April, 2010 6 Vaisakha, 1932 (Saka) Chairman, Public Accounts Committee.

Name of Commodity	2003	2003-2004	200	2004-05	2005	2005-06	2006-07	07
Commodity	NTKMS	Earnings	NTKMS	Earnings	NTKMs	Earnings	NTKMs	Earnings
	(in	(Rs. in	(in	(Rs. in	(in	(Rs. in	(in	(Rs. in
1	Million)	Crores	Million)	Crores	Million)	Crores	Million)	Crores
Coal	157256	11646.43	161906	13134.41	170440	14432.96	191542	15886.61
% increase/	(10.96)	(1.44)	(2.96)	(12.78)	(5.27)	(9.89)	(12.38)	(10.07)
decrease over last								
year								
Raw Material to								
steel plants	14194	1139.38	15843	1302.20	17406	1691.26	16872	1899.59
% increase/	(6.16)	(11.69)	(11.62)	(14.29)	(9.87)	(29.88)	(-3.07)	(12.32)
decrease over last								
year								
<b>Pig Iron and</b>								
finished steel								
from steel plants	14212	1390.26	14149	1402.66	18655	1825.46	22394	2259.26
% increase/	(7.22)	(-0.50)	(-0.44)	(0.89)	(31.85)	(30.14)	(20.04)	(23.76)
decrease over last								
year								
Iron Ore for								
Export	13702	962.64	18945	1548.60	20980	2226.14	19845	2516.30
% increase/	(59.42)	(52.42)	(38.26)	(60.87)	(10.74)	(43.75)	(-5.41)	(13.03)
decrease over last								
vear								

ANNEXURE-I [Referes to Paragraph 4 of this Report] 60

Cement % increase/ decrease over last	26349 (6.17)	2185.18 (7.21)	28888 (9.64)	2334.93 (6.85)	32830 (13.65)	2824.02 (20.95)	41094 (25.17)	3649.10 (29.22)
year Foodgrains % increase/decrease	61930 (-3.10)	3192.13 (8.98)	62597 (1.08)	2965.21 (-7.11)	55103 (-11.97)	3005.64 (1.36)	47851 (-13.16)	3071.46 (2.19)
over last year Fertilizers % increase/ decrease over last	20212 (-10.59)	1192.26 (-2.30)	21713 (7.43)	1192.61 (0.03)	26707 (23.00)	1569.07 (31.57)	25473 (-4.62)	1792.07 (14.21)
year Mineral Oil (POL) % increase/ decrease over last	18219 (-5.19)	2428.30 (11.85)	21024 (15.40)	2682.54 (10.47)	24281 ( <i>15</i> .49)	3069.36 (14.42)	24719 (1.80)	3037.57 (-1.04)
year Other Goods % increase/ decrease over last	55167 (20.72)	3266.57 (18.37)	62333 (12.99)	3926.07 (20.19)	73194 (17.42)	4890.78 (24.57)	91203 (24.60)	6961.25 (42.33)
year Total % increase/ decrease over last	381241 (7.94)	27403.15 (4.47)	407398 (6.86)	30489.23 (11.26)	439596 (7.90)	35534.69 (16.55)	480993 (9.42)	41073.21 ( <i>15.59</i> )
year Misc. Goods Earnings % increase/ decrease over last		214.81 (-21.42)		289.17 (34.62)		752.28 (160.15)		643.31 14.49)
Grand total		27617.96 (4.20)		30778.40 (11.44)		36286.97 (17.90)		41716.52 (14.96)

# (b) Details of Revenue Earning Freight Traffic for 2007-08<sup>#</sup> and 2008-09 (Provisional)

	200	07-08	2008-09	
Name of Commodity	NTKMs	Earnings	NTKMs E	Earnings*
(	in millions)	(Rs. in crores)	(in millions)	(Rs. in crores)
Coal	208488	17567.20	213575	erores)
% increase/decrease over last year	(8.85)	(10.58)	(2.44)	
Raw Material to Steel plants except iron ore	7856	762.09	7625	
Pig Iron and finished steel:				
(i) from steel plants	21232	2294.73	21888	
% increase/decrease over last ye	ar (-5.19)	(1.57)	(3.09)	
(ii) from other points	3838	332.71	3433	
(iii) Total	25070	2627.44	25321	
Iron Ore				
(i) for export	27580	4167.32	22741	
% increase/decrease over last ye	ar (38.98)	(65.61)	(-17.55)	
(ii) for steel plants	10834	1244.86	9843	
(iii) for other domestic users	15654	1777.80	18394	
(iv) Total	54068	7189.98	50978	
Cement	43207	3900.41	47348	
% increase/decrease over last year	(5.14)	(6.89)	(9.58)	
Foodgrains	46865	3212.67	44497	
% increase/decrease over last year	(-2.06)	(4.60)	(-5.05)	
Fertilizers	25808	1896.16	35048	
% increase/decrease over last year	(1.32)	(5.81)	(35.80)	
Mineral Oil (POL)	23405	2936.41	24867	
% increase/decrease over last year	(-5.32)	(-3.33)	(6.25)	
Container Service-				
(i) Domestic containers	4801	292.00	8303	
(ii) EXIM containers	18296	1182.14	27737	
(iii) Total	23097	1474.14	36040	

# Since the figures of 2007-08 are based on the revised commodity group as modified from October, 2007 the details for this period are furnished separately. Except for Coal, Pig iron and Finished Steel from Steel plants. Iron ore for export, Cement, Foodgrains, Fertilisers and Mineral oil (POL), these figures are not comparable with previous years due to revised Commodity groups.

\* Commodity-wise earnings and misc. goods earnings for 2008-09 are not available at present.

	200	07-08	2008-09	)
Name of Commodity	NTKMs	Earnings	NTKMs	Earnings*
	(in millions)	(Rs. in crores)	(in millions)	(Rs. in crores)
Other Goods	63507	4858.99	52927	,
Total	521371	46425.49	538226	
% increase/decrease over last year	(8.39)	(13.03)	(3.23)	)
Misc. Goods Earnings		1009.41		
% increase/decrease over last year		(56.92)		
Grand Total		47434.90		53433.40
		(13.71)		(12.65)

**ANNEXURE II** 

## Freight Incentive Schemes launched in the recent past by the Ministry of Railways

[Refers to Paragraph 98 of this Report]

- (a) **Incentive Scheme for Incremental Traffic**—This Scheme aims to generate additional business volumes during Lean Season.
- (b) Long Term Special Incentive Scheme—This Scheme enables General Managers to grant concessions in freight. Such concessions are granted primarily to divert traffic from competing modes to rail. This Scheme is also used if it is the considered assessment of the Zonal Railway that an existing traffic would divert away from rail unless such concessions in freight are granted.
- (c) Incentive Scheme for Traditional Empty Direction (Private Sidings)—The main objective of this policy is to generate additional traffic from any private siding for loading in Inter-Zonal Traditional Empty Flow Direction (as well as Intra-Zonal Empty Flow Directions, wherever notified by Zonal Railways) across which traffic movement traditionally comprises predominantly of empty wagons in order to achieve improved utilization of the rolling stock.
- (d) Incentive Scheme for Traditional Empty Flow Direction (Goods shed)—The main objective of this policy is to generate additional traffic from any Railway owned Goods sheds and siding for loading in Inter-Zonal Traditional Empty Flow Direction (as well as Intra-Zonal Empty Flow Directions, wherever notified by Zonal Railways) across which traffic movement traditionally comprises predominantly of empty wagons in order to achieve improved utilization of the rolling stock.
- (e) **Incentive Scheme for Freight Forwarders**—The Scheme aims to facilitate cargo aggregation and thereby expand the commodity basket on Railways.
- (f) Incentive Scheme for Freight Forwarders in Traditional Empty Flow Direction—The Scheme aims to facilitate cargo aggregation, expand the commodity basket and reduce empty running of wagons on Railways.
- (g) **Incentive Scheme for Two-Leg Traffic**—Special Composite rates are offered to customers offering return traffic in covered wagons. Customers are able to move traffic in block rakes as well as cargo aggregated into a Block rake size.
- (h) Incentive Scheme for Loading Bagged Consignments in BOXN—Normally, bagged consignments take a longer time to load in BOXN wagons and also need to be covered with tarpaulins. This Scheme aims to facilitate such loading.

- (i) Incentive Scheme for Lump Sum Special Rates and SLA—Promote medium to long term business arrangements between corporate entities and Railways incorporating a structure of lump sum freight rates based on the total receipt of raw material, dispatches of finished and intermediate products and freight earning received by railways.
- (j) **Incentive Scheme for Traffic on MG and NG Systems**—The Scheme aims to make use of idle assets to promote higher business volumes by delegating higher flexibility to Zonal Railways.

## **APPENDIXI**

# MINUTES OF THE EIGHTH SITTING OF THE PUBLIC ACCOUNTS COMMITTEE (2008-2009) HELD ON 8TH OCTOBER, 2008

The Committee sat from 1130 hrs. to 1300 hrs. on 8th October, 2008, in Committee Room No. 'C', Parliament House Annexe, New Delhi.

## PRESENT

Sardar Tarlochan Singh — In the Chair

MEMBERS

### Lok Sabha

- 2. Shri Vijay Bahuguna
- 3. Shri Khagen Das
- 4. Shri Shailendra Kumar
- 5. Shri Bhartruhari Mahtab
- 6. Shri Brajesh Pathak
- 7. Prof. M. Ramadass
- 8. Shri Rajiv Ranjan 'Lalan' Singh
- 9. Shri Tarit Baran Topdar

Rajya Sabha

- 10. Shri Raashid Alvi
- 11. Shri B.K. Hariprasad
- 12. Shri Shanta Kumar
- 13. Prof. P.J. Kurien
- 14. Dr. K. Malaisamy

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### Secretariat

- Shri S.K. Sharma \_\_\_\_ Secretary
- Shri Gopal Singh Director \_\_\_\_
- 3. Shri M.K. Madhusudhan
  - Deputy Secretary-II \_\_\_\_

# Officers of the Office of the C&AG of India

- Shri Vinod Rai C&AG of India
- 2. Ms. Meera Swarup Pr. Director of Audit (Railways)

Deputy Secretary-II \_\_\_\_ Shri Sanjeev Sharma

#### Representatives of the Ministry of Railways (Railway Board)

1.	Shri K.C. Jena	-	Chairman, Railway Board
2.	Ms. Sudha M. Chobe	-	Financial Commissioner
3.	Shri S.K. Vij	-	Member Engineering
4.	Shri Sukhvir Singh	-	Member Electrical
5.	Shri R.K. Rao	-	Member Mechanical
6.	Shri S.S. Khurana	-	Member Staff
7.	Shri Shri Prakash	-	Member Traffic

2. At the outset, it was informed by the Secretariat that Hon'ble Chairman, Prof. Vijay Kumar Malhotra has indicated his inability to attend the sitting due to his preengagements. Accordingly, the Committee elected Hon'ble Sardar Tarlochan Singh to chair the sitting under Rule 258(3) of *Rules of Procedure and Conduct of Business in Lok Sabha*. The Acting Chairman welcomed the Members and Audit Officers to the sitting of the Committee. He informed the Members that the sitting has been convened to take oral evidence of the representatives of the Ministry of Railways (Railway Board) on the Chapter I of C&AG's Report No. 6 of 2007, Union Government (Railways—Performance Audit) relating to Performance Audit of "Freight and Wagon Management on Indian Railways".

3. Thereafter, the Officers of the C&AG of India briefed the Committee on specific points arising out of the aforesaid subject.

4. Then the representatives of the Ministry of Railways (Railway Board) were called in to tender oral evidence before the Committee. The Acting Chairman read out contents of the Direction 58 by Speaker regarding confidentiality aspects of the proceedings of the Committee.

5. The Chairman, Railway Board after introducing his colleagues to the Committee, gave a brief background of the genesis and implementation of schemes pertaining to Freight and Wagon Management on Indian Railways. He elucidated on various queries relating to the Audit findings as raised by the Acting Chairman and the Members. To certain queries, for which the witnesses could not give satisfactory replies, the Acting Chairman directed the representatives of the Ministry to furnish the requisite information as desired by the Members in writing, at the earliest, particularly in regard to:

- (i) flaws in the rationalization of freight structure in the Indian Railways;
- (ii) lack of scientific study on collateral damages to the rolling stock, rail tracks, bridges, etc., as an impact of enhancement of carrying capacity (CC) of wagons and concerns about passenger/railway safety and losses arising therefrom;
- (iii) delay in installation of weighbridges and Wheel Impact Load Detectors (WILD) on vulnerable routes which are essential for monitoring the enhanced loading of wagons;
- (iv) deficiencies in identifying distressed bridges and their rehabilitation;

- (v) huge financial losses due to adoption of incorrect rationale for fixation of freight classes and charges thereon;
- (vi) injudicious detention and under utilisation of wagons leading to huge financial loss; and
- (vii) deficiencies in wagon procurement by the Indian Railways.
- 6. A copy of the verbatim proceedings of the sitting has been kept on record.

The Committee then adjourned.

# **APPENDIX II**

# MINUTES OF THE FIRST SITTING OF SUB-COMMITTEE-III OF THE PUBLIC ACCOUNTS COMMITTEE (2009-2010) ON "FREIGHT AND WAGON MANAGEMENT ON INDIAN RAILWAYS" HELD ON 12TH NOVEMBER, 2009

The Sub-Committee-III of the Public Accounts Committee sat on Thursday, the 12th November, 2009 from 1400 hrs. to 1445 hrs. in Room No. '62', First Floor, Parliament House, New Delhi.

#### PRESENT

Kunwar Rewati Raman Singh — Convenor

Secretariat

- 1. Shri Raj Shekhar Sharma Director
- 2. Shri Sanjeev Sharma Deputy Secretary

## Representatives of the Office of the Comptroller and Auditor General of India

Ms. Divya Malhotra —	Principal Director	(Railway Board Audit)
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REPRESENTATIVES OF THE MINISTRY OF RAILWAYS (RAILWAY BOARD)

1.	Shri S.S. Khurana —	Chairman, Railway Board and Ex-Officio Principal Secretary to the Government of India
2.	Ms. Sowmya Raghavan —	Financial Commissioner, Railways & Ex-officio Secretary to the Government of India
3.	Shri Shri Prakash —	Member Traffic, Railway Board & Ex-officio Secretary to the Government of India
4.	Shri Rakesh Chopra —	Member Engineering, Railway Board & Ex-officio Secretary to the Government of India
5.	Shri Praveen Kumar —	Member Mechanical, Railway Board & Ex-officio Secretary to the Government to India.
6.	Shri A.K. Goyal —	Member Staff, Railway Board and Ex-Officio Secretary to the Government of India.

2. At the outset, the Convenor, Sub-Committee-III of the Public Accounts Committee (2009-10) welcomed the representatives of the Office of the C&AG of India to the first

sitting of the Sub-Committee. Thereafter, the Audit Officers and the Secretariat briefed the Sub-Committee on the various issues concerning Chapter I of Report of the C&AG of India for the year ended March 2006, Union Government (Railways—Performance Audit) No. 6 of 2007 relating to 'Freight and Wagon Management on Indian Railways' and the Ministry's explanations thereon.

3. Then, the representatives of Ministry of Railways (Railway Board) were called in and they briefed the Sub-Committee on the recent initiatives of the Railway Board for streamlining the Freight and Wagon Management on Indian Railways. The representatives also explained on the various issues and concerns raised by the Sub-Committee. To certain queries, which the representatives of the Ministry could not give immediate clarification or explanation, the Sub-Committee directed the representatives to furnish written information/replies at the earliest with a view to facilitating expeditious finalization of the Report on the subject.

A copy of the verbatim proceedings has been kept on record.

The Committee then adjourned.

# **APPENDIX III**

## MINUTES OF THE ELEVENTH SITTING OF THE PUBLIC ACCOUNTS COMMITTEE (2009-10) HELD ON 26TH APRIL, 2010

The Committee sat on Monday, the 26th April, 2010 from 1530 hrs. to 1650 hrs. in Committee Room 'C', Ground Floor, Parliament House Annexe, New Delhi.

### PRESENT

Shri Gopinath Munde — Chairman

### MEMBERS

### Lok Sabha

- 2. Shri Anandrao Vithoba Adsul
- 3. Shri Khagen Das
- 4. Shri Naveen Jindal
- 5. Shri Satpal Maharaj
- 6. Shri Bhartruhari Mahtab
- 7. Dr. K. Sambasiva Rao
- 8. Shri Yashwant Sinha
- 9. Shri Aruna Kumar Vundavalli

## Rajya Sabha

- 10. Dr. K. Malaisamy
- 11. Shri N.K. Singh

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### Secretariat

- 1. Shri Raj Shekhar Sharma Director
- 2. Shri M.K. Madhusudhan Additional Director
- 3. Shri D.R. Mohanty Under Secretary

## Representatives of the office of the comptroller and auditorGeneral of India

- 1. Ms. Rekha Gupta Dy. CAG Central (RC)
- 2. Shri R.B. Sinha Director General (Report Central)
  - Ms. Usha Sankar Director General (Autonomous Bodies)
  - Shri Gautham Guha Director General of Audit (Defence Services)
- 5. Shri P.K. Kataria Pr. Director of Audit, Report Central (RC)

6.	Shri K.R. Sriram	—	Pr. Director of Audit, Report Central (Economic & Services Ministries)
7.	Shri R.G. Viswanathan	—	Pr. Director of Audit (Scientific Departments)
8.	Shri C.M. Sane	—	Principal Director of Audit (Air Force & Navy)
9.	Shri H.K. Dharmadhekari	_	Pr. Director (State Report Audit)
10.	Shri Rajvir Singh	_	Accountant General (Audit) Delhi
11.	Ms. Divya Malhotra	_	Pr. Director of Audit (Railways)

2. At the outset, the Chairman, PAC welcomed the Members of the Committee and the Audit Officers to the sitting of the Committee. The Chairman, then apprised the Committee that out of the eleven draft Reports slated for consideration, eight have been finalized by Sub-Committee V. Thereafter, the Committee took up the following draft Reports for consideration and adoption:

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(ix) Draft Report on **''Freight and Wagon Management of Indian Railways'** (Ministry of Railways) based on Chapter I of C&AG Report No. 6 of 2007 (Railway—Performance Audit).

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3. After some deliberations, the Committee adopted the above-mentioned draft Reports with some modifications and authorized the Chairman to finalise these Reports in light of the suggestions made by the Members and the consequential changes arising out of the factual verification by the Audit and present the same to Parliament.

4. The Chairman thanked the Members for their cooperation and active participation in the Committee's deliberations. He also thanked the PAC Secretariat and the Audit Officers for the assistance rendered to the Committee in the examination of the subject and finalization of the Reports.

5. The Members of the Committee thanked the Chairman for his guidance in the smooth conduct of the meetings of the Committee.

The Committee then adjourned.

GMGIPMRND-2533LS(5)-24-08-2010.