

BOXN WAGONS

1

**Ministry of Railways
(Railway Board)**

**PUBLIC ACCOUNTS
COMMITTEE
1990-91**

FIRST REPORT

NINTH LOK SABHA



**LOK SABHA SECRETARIAT
NEW DELHI**

**FIRST REPORT
PUBLIC ACCOUNTS COMMITTEE
(1990-91)**

(NINTH LOK SABHA)

BOXN WAGONS

**MINISTRY OF RAILWAYS
(RAILWAY BOARD)**

**[Action Taken on the 122nd Report of Public Accounts
Committee (8th Lok Sabha)]**



*Presented to Lok Sabha on 23 August, 1990
Laid in Rajya Sabha on 23 August, 1990*

**LOK SABHA SECRETARIAT
NEW DELHI**

August, 1990 / Sravana, 1912 (Saka)

PAC No. 1290

(LOK SABHA)

BOX WAGONS

MINISTRY OF RAILWAYS
(RAILWAY BOARD)

Price : Rs. 10.00

(Action taken on the 11th Report of Public Accounts
Committee (Lok Sabha))



Printed in Lok Sabha on 22 August 1990
Laid in Rajya Sabha on 23 August 1990

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Corrigenda to the 1st Report (9th Lok Sabha) of
Public Accounts Committee presented to the
House on 23.8.1990

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(1990-91)

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(iii)

INTRODUCTION

I, the Chairman of the Public Accounts Committee, as authorised by the Committee, do present on their behalf this First Report on action taken by Government on the recommendations of the Public Accounts Committee contained in their 122nd Report (Eighth Lok Sabha) on BOXN Wagons.

2. The Committee have expressed serious concern over the delay in development of design of BOXN Wagons and have desired the Ministry to analyse reasons for the delay so as to make necessary improvements in their methodology.

3. The Committee have also impressed upon the Ministry of Railways to review the adequacy of the existing norms regarding commodity wise loading in BOXN Wagons and to ensure that these norms are followed both in letters and spirit.

4. The Report was considered and adopted by the Public Accounts Committee at their sitting held on 31 July, 1990. Minutes of the sitting form Part II of the Report.

5. For facility of reference and convenience, the recommendations of the Committee have been printed in thick type in the body of the Report and have also been reproduced in a consolidated form in Appendix I of the Report.

6. The Committee placed 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:
August 10, 1990
Sravana 19, 1912 (S)

SONTOSH MOHAN DEV,
Chairman,
Public Accounts Committee,

CHAPTER I

REPORT

This Report of the Committee deals with the action taken by Govt. on Committee's recommendations and observations contained in their 122nd Report (Eighth Lok Sabha) on Paragraph 8 of the Report of the C&AG of India for the year 1984-85, Union Govt. (Railways) on BOXN Wagons.

1.2 The 122nd Report which was presented to Lok Sabha on 18 April, 1988 contained 21 recommendations. Action taken notes have been received in respect of all the recommendations and these have been broadly categorised as follows:

- (i) Recommendations and observations which have been accepted by Govt.
Sl. Nos. 5, 6, 7, 12, 16 and 19
- (ii) Recommendations and observations which the Committee do not desire to pursue in the light of the replies received from Govt.
Sl. Nos. 2, 3, 4, 9, 10-11, 14, 17, 18, 20 & 21.
- (iii) Recommendations and observations replies to which have not been accepted by the Committee and which require reiteration:
Sl. Nos. 1, 8, 13 & 15.
- (iv) Recommendations and observations in respect of which Govt. have furnished interim replies:

-Nil-

1.3 The Committee will not deal with the action taken by Govt. on some of their recommendations.

Development of Design

(Sl. No. 1—Paragraph 1.8)

1.4 Commenting upon the inordinate delay in the approval of the design of BOXN wagon, the Committee had observed as under:

“The Committee note that as long back in March 1973 the RDSO had suggested that the inside body height of the wagon should range between 1950mm to 2000mm. It took 7 long years for the Railway Board and RDSO to finally approve the design. No satisfactory explanation has been given to the Committee for delay of this magnitude. This appears all the more strange in view of the sense of urgency displayed regarding manufacture and deployment of this wagon during the Sixth Plan period. The Committee deprecate inordinate delay in the approval of the design and would caution the Government to guard against such delays in

future. The procedure, practice and methodology involved in such a research and development project require critical analysis and review followed by laying down of norms necessary to obviate any delay not to speak of such inordinate delay as occurred in this case."

1.5 In their action taken note, the Ministry of Railways (Railway Board) have stated as follows:

"While noting the findings and recommendations of the Committee, it is mentioned that no undue delay took place in evolving and approving the design of BOXN wagons. The procedure, practice and methodology involved in this type of development are quite well set out. Within the overall procedure, steps necessary for each design project are not identical. The progress in case of each project is monitored from step to step till development is completed."

1.6 Observing that it took as many as 7 years for the Railway Board and RDSO to approve the design of BOXN wagons, the Committee had desired to be apprised of the specific reasons leading to such delays. They had also recommended for critical analysis of procedure & practice and methodology involved in such projects and for revision of norms so as to obviate such delays in future. The Committee are, however, surprised to find that in their reply the Ministry have taken the stand that no undue delay took place in evolving and approving the design of BOXN Wagons and that the practice, procedure and methodology involved in such type of development are quite well set out. The Committee deprecate the casual approach of the Ministry in dealing with the recommendation of the Committee who have not bothered to ascertain the reasons for delay that took place on this instant case and take corrective measures in this regard. The Committee would like to reiterate that delay of 7 years for development of a design whose manufacture was to be accorded priority is a matter of serious concern and the Ministry of Railways should analyse the reasons for the same and effect necessary improvements in their methodology to avoid such delays in future.

Spring failure in UIC Bogies

(Sl. No. 8—Paragraph 2.30)

1.7 Emphasising the need to reduce incidence of Spring breakages on account of over loading, the Committee had in para 2.30 of their 122nd Report recommended as follows:

"The Railways have pointed out that there were a number of causes for

the failure of UIC bogies under BOX wagons. The spring breakages have been attributed as the main cause leading to detachment of the wagon enroute. It is primarily due to very high overloading of BOX wagons upto 10-12 tonnes of excess loading. BOX wagons have more volumetric capacity of 68.59 cu.m. Since BOX wagon was meant to carry a variety of bulk commodities, it was not supposed to be filled with each and every commodity upto brim level. For heavier commodities, the top level would have to be kept lower than the brim depending upon the density of the item. For instance in case of coal, there is loading line about one metre below the brim upto which 56 to 57 tonnes of coal can be loaded within permissible limits. With availability of more volumetric capacity, the overloading was more liberal in BOX wagons. The Committee recommend that the Railways should review norms for commodity-wise loading in BOX wagons upto certain level and enforce them strictly so as to reduce incidences of spring breakages on account of over-loading."

1.8 In their action taken note, the Ministry of Railways (Railway Board) have stated as follows:

"Drawings issued by RDSO already specified painting of loading lines on BOX wagons for different commodities. At the time of POH, these loading lines are re-painted in accordance with Drawings. All commercial staff concerned with loading have been advised to observe the Commercial Manual provisions in this regard. A copy of the instructions is enclosed."

1.9 The Committee had desired that the Railways should review norms regarding commodity-wise loading in BOXN Wagons upto certain level and enforce them strictly so as to reduce the incidence of spring breakages on account of over loading of BOXN Wagons leading to the detachment of the wagons enroute. The reply of the Ministry is vague and evasive in as much as it merely states about the existing loading lines painted on BOX wagons for different commodities. No specific action has been taken on the recommendation of the Committee regarding the review of norms for commodity-wise loading. The Committee are not satisfied with the mere advice given to commercial staff concerned with the loading to observe the commercial manual provisions in this regard. The Committee reiterate their earlier recommendation and would like the Ministry to review if the existing norms are adequate and take steps to enforce these norms or revise them. The Committee would also like the Ministry to keep a strict watch so as to ensure that these norms are followed in letter and spirit, to avoid over-loading of wagons. The Committee would also like to be apprised of the steps taken in that regard.

Heavier UTS rails

(Sl. No. 13—Paragraph 3.5)

1.10 Commenting upon the production capability and requirements of heavier rails of higher UTS variety, the Committee had in Para 3.5 of their 122nd Report recommended as follows:

“The Committee have been informed by the Ministry of Steel & Mines (Department of Steel) in March, 1988 that 60 kg. rails are very much in the production capability of Bhilai Steel Plant. The firm long-term requirements of rails including that of 60 kg. 90 UTS rails were projected by the Ministry of Railways (Railway Board) to the Department of Steel/SAIL in February, 1987. The Committee deprecate that the Ministry of Railways (Railway Board) projected their requirements of heavier rails of higher UTS variety only in February 1987 while the standards for track were reviewed long ago. While the Committee would like to be apprised of the further developments in this regard they would also recommend that in future there should be a close coordination and cooperation between the various agencies and decisions agreements reached well in advance to ensure smooth and timely implementation of Projects.”

1.11 In their action taken note, the Ministry of Railways (Railway Board) have stated as follows:

“In our effort to maximise production of rails indigenously, especially in 90 UTS quality, a follow-up meeting was held in May, 1987 by Member, Engineering, Railway Board with the Steel Ministry, SAIL and Bhilai Steel Plant. In the meeting, SAIL promised to supply increasingly 90 UTS rails as per the year-wise programme indicated below:—

Year	Total production	Production of 90 UTS variety	Actual supply	
			Total supply	Supply of 90 UTS variety
1987-88	3.25 lakh t	70,000 t	3.10 lakh t	73,000 t
1988-89	3.50 "	1,10,000 t		
1989-90	4.00 "	1,50,000 t		
1990-91	4.25 "	1,80,000 t		

The Minister of State for Railways also pursued the matter in April 1988 with the Minister for Steel & Mines for stepping up the production of rails at the Bhilai Steel Plant and for switching over to 100% in 90 UTS variety.

No efforts have been spared by the Ministry of Railways to conserve

foreign exchange. Towards this end, with a view to curtailing import of MG rails and eventually to stop import of MG rails, the Ministry of Railways have encouraged a mini-steel plant at Pune in the private sector to produce MG rails.

It is true that Bhilai Steel Plant can produce 60 kg. rails, but the size of the bloom/ingot in this Mill has been designed to produce 52 kg. rails more optimally. In view of this, at present, Bhilai Steel Plant has been asked to meet the requirement of 52 kg. rails, which itself is more than their present full production capacity, the requirement of 60 kg. rails being met with by imports. Bhilai Steel Plant has indicated that they will be increasing their production gradually from the present level of 31 lakh tonnes to 425 lakh tonnes by 1990-91. When the production level goes beyond Indian Railways requirement of 52 kg. rails, they will be asked to roll 60 kg. rails also.

It is stated that during 1987-88, in all 2 lakh tonnes of rails in 90 UTS variety were made available for track renewal works both from indigenous sources and from imports.

Periodic meetings are held among the officers of the Railway Board, Steel Authority of India and Bhilai Steel Plant to monitor the progress of production and technology upgradation."

1.12 Earlier the Committee were informed by the Ministry of Steel and Mines (Department of Steel) that 60 kg. rails were very much in the production capability of Bhilai Steel Plant. However from the Action taken reply of the Ministry of Railways it is noted that this plant is capable of only meeting the requirement of 52 kg. rails optimally and the Ministry have to depend upon imports to meet their requirement of 60 kg. rails.

In the absence of the production capability of Bhilai Steel Plant to manufacture 60 kg. rails, the Committee find that the railways are meeting their requirement through imports. The Committee deprecate the lack of awareness of and advance planning, on the part of SAIL and Bhilai Steel Plant about their production capacity. The Committee desire that the Ministry of Railways should impress upon the Steel Ministry the imperative need of manufacturing of 60 kg. rails, so as to avoid imports and to save the precious foreign exchange. The Committee are convinced that with the programme of modernisation and expansion of capacity, the demand for 60 kg. rails can be met by indigenous sources. This is all the more necessary in view of the prevailing need for saving scarce foreign exchange. The Committee would also like to be apprised of the outcome of periodic meeting which were held among the officers of Railway Board, SAIL & Bhilai Steel plant to monitor the progress of production and technology upgradation.

Utilisation of BOXN Wagons

(Sl. No. 15—Paragraph 5.12)

1.13 Commenting upon the lackadisaical approach of the Railways in dealing with problems of bulk consumers and taking unduly long time in settling the vital issues, the Committee had in para 512 of their 122nd Report recommended as follows:

“The Committee note that in 1982, the Ministry of Railways (Railway Board) introduced modified BOX Wagons called BOXN Wagons. Immediately after the introduction of BOXN Wagons in sizeable number, a number of representations were received from the bulk consumers such as Power Houses complaining about substantial shortages in the coal quantities received by them than the marked carrying capacity. They also expressed their difficulties over the introduction of BOXN Wagons which led to problems like Weighment, loadability of BOXN Wagons, loading and unloading time, unsuitability for finished steel products, modification of tippers and lack of infrastructural facilities for handling full rakes.

The Committee is perturbed to note that the Secretary of the Department of Coal wrote to the Chairman, Railway Board in June, 1986 four years after the introduction of BOXN Wagons, listing out the problems faced by the coal companies and according to him the Railways did not pay any attention to these problems. In their evidence before the Committee in December, 1986, the representatives of the Departments of Coal, Steel, Power and Electricity Boards stated that some of the problems still existed. The Committee are now informed that remedial measures have been taken and all difficulties that user sector had apprehended are being resolved. The Committee deprecate the lack of seriousness and promptitude which the Ministry of Railways (Railway Board) has demonstrated in dealing with the problems of the bulk users in time.

The Committee is of the opinion that the Railways had adopted a casual approach to these problems and have taken unduly long time in settling the disputes. Necessary investigations into the aforesaid complaints should have been carried out immediately when BOXN Wagons were pressed into commercial operation and at this stage, the Committee can only express the hope that the Railway Board would have taken suitable lesson from this sad experience and would be responsive and considerate to users and would not allow this lackadisaical approach in dealing with such vital issues in future.”

1.14 In their action taken note, the Ministry of Railways (Railway Board) have stated as follows:

“The observations of the Committee have been noted.”

1.15 Observing the problems faced by the coal companies and the consumers like power stations and the casual approach of the Railways in solving their problems, the Committee felt in 1988 that investigation into the complaints of the Coal companies and other bulk consumers like power stations should have been carried out immediately when BOXN Wagons were pressed into commercial operation and had hoped that the Ministry would be responsive and considerate to users in future.

However, the Committee are not satisfied with the reply of the Ministry. The Committee desire that urgent steps be taken to remove the grievances of bulk coal consumers like power stations and suitable administrative mechanism be evolved for the purpose. The Committee would like to be apprised within three months of the further action taken in this regard.

The Committee also noted that the Railway Research Institute has been set up to carry out research in various fields of technology and engineering. It is the view of the Committee that it is imperative that the Railway Research Institute should be engaged for such design studies and projects as they arise in the Railway system. The Committee also desire that the RRI should be engaged for such design studies and projects as they arise in the Railway system.

To assist in the work on the Railway, a new "Railway Research" has recently been created and allocation of funds thereunder. A Technology Development Plan has been prepared envisaging provision of improved rolling stock in RISO as well as development of excellence in Railway Research. Regular and frequent interaction with Universities and Institutes of advanced learning and application in the areas related to Railway Research and Development is being maintained both within and outside the country.

In order to have a proper appraisal of long term work and test effort in to fatigue, component etc. of track and vehicle systems the Study Group had set up in RISO. The Group was informed that a test track associated with a FAST Loop (Facility for Accelerated Service Testing) was being set up in Meghalaya and it was expected to be available within a span of about a year or so. It is indeed a sad circumstance that the Railway R & D has still not an exclusive test track without which

CHAPTER-II

RECOMMENDATIONS AND OBSERVATIONS WHICH HAVE BEEN ACCEPTED BY GOVT.

Recommendation

The Research, Designs and Standards Organisation (RDSO), an institution under the Ministry of Railways, carries out research, development and standardisation work in all the disciplines in the Railways. It also keeps the Indian Railways upto date in technical know-how relating to world-wide railway-oriented development and technology changes. The Committee is of the view that to keep pace with the fast moving changes in Science and Technology scenario in the world it is imperative that detailed knowledge of the latest developments in technology in the railway-related fields is acquired by RDSO and applied to the Indian Railways not only through technological quantum jumps but wherever possible through continuous incremental improvements. The Committee also desire that the RDSO should be equipped for upto date design activities and acquire the latest testing facilities on a short time bound programme.

[S.No. 5 (Para 2.27) of Appendix III to 122nd Report of PAC (1987-88)
VIII Lok Sabha]

Action Taken

To accelerate R & D work on the Railways, a new Plan-head "Railway Research" has recently been created and allocation of funds thereunder raised from Rs. 1 crore to Rs. 10 crores in 1987-88 and to Rs. 15 crores in 1988-89. A Technology Development Plan has been prepared envisaging provision of improved testing facilities in RDSO so as to develop it into a centre of excellence in Railway Research Regular and frequent interaction with Universities and Institutes of advance learning and applications in the areas related to Railway Research and Development is being maintained both within and outside the country.

[Ministry of Railways (Rly. Bds') O.M. No. 88-BC-PAC / VIII / 122,
dated 30.9.1988]

Recommendation

In order to have a proper appraisal of long-term wear and tear effects due to fatigue, corrosion, etc. of track and vehicle systems the Study Group during their visit to RDSO, Lucknow was informed that a test track associated with a FAST Loop (Facility for Accelerated Service Testing) was being set up at Mughalsarai and it was expected to be available within a span of about a year or so. It is indeed a sad commentary on the Railways R & D that it has still now no exclusive test track without which

no proper research of the vital features of the behaviour of railway vehicles and rail lines can possibly be carried out. The Committee recommend that the Ministry of Railways (Railway Board) should appreciate the further facilities needed and competence required to be built up and take suitable and expeditious steps to revamp and restructure RDSO so as to undertake upgradation of technology in consonance with the changes that are taking place elsewhere in the world; that RDSO be so organised that it will be able to absorb at faster pace technologies relevant to the needs of the Indian Railways and apply the relevant technology with competence and confidence and thereby minimise the dependence of Railway on foreign sources for supply of essential raw materials and components.

[S.No. 6 (Para 2.28) of Appendix III to 122nd Report of PAC (1987-88)
VIII Lok Sabha]

Action Taken

The observations regarding the non-availability of test track for RDSO are noted. Regarding strengthening of RDSO both from the point of manpower, resources and equipments, a Technology Development Plan has been recently prepared. The plan envisages upgradation of Research & Development work in RDSO so as to bridge the technology gaps that now exists between the Indian Railways and advanced railway system in developed countries. The plan provides for a time-bound programme for achieving technological break-through and instead of merely absorbing imported technology with or without suitable modifications as has been the case hitherto-fore the emphasis will be on importing state-of-art technology, developing know-how and know-why thereof and adopting the same on the Indian Railways. Also, investments are planned to develop RDSO into a centre of excellence in technology development. The plan also provides for quality improvement programme by prescribing higher technical qualifications for RDSO staff/officers in technical categories, improving staff/officers ratio, phasing out of technically non-qualified staff, streamlining the working procedure etc.

[Ministry of Railways (Railway Boards') O.M. No. 88-BC-PAC / VIII /
122, dated 30.9.1988]

Recommendation

The Committee are of the opinion that a perspective plan for research and development be drawn up for the next 10-15 years which should be reviewed every year in the light of performance and demand projections. It is imperative that serious and concerted efforts are made to acquire the latest technology from advanced countries, achieve breakthrough in know-how whenever necessary and to develop indigenous items at a faster pace

so that self-reliance effort should be made to ensure that time and money are not wasted on uncertain or obsolete technologies as has taken place in this case of BOXN wagons. RDSO should keep on examining and evaluating the existing state-of-art technology and direction of future technology developments in various disciplines of Railways on a long-term basis especially in production areas involving substantial investments of financial resources and a large volume of production.

[S.No. 7 (Para 2.29) of Appendix III to 122nd Report of PAC (1987-88)
VIII Lok Sabha]

Action Taken

The R & D activity on the Railways is primarily conducted in RDSO. A time bound plan for upgrading technology on the Indian Railways so as to bring it at par with the standard obtaining in advanced railway systems has been prepared. The plan provides for mission-oriented development of technology keeping in view the objectives set-out in the Railways' Corporate Plan. Regular interaction with the Universities and Centres/ Institutes of advance learning and application in the areas relevant to Railway Research both in India and abroad is being maintained by RDSO through seminars, conferences, workshops etc. so as to keep themselves abreast of the latest technological developments in the railway-related fields. It is hoped that in the next few years, substantial progress would have been made towards upgradation of equipments and test facilities in RDSO. It is also expected that within a decade or so Indian Railways will be able to offer indigenous generation of advanced technology in the identified key technology development areas, namely, locomotives, wagons, coaches and train-sets, heavy duty track structure and bridges, overhead equipments and traction distribution, and train control and signalling system.

[Ministry of Railways (Railway Board's) O.M. No. 88-BC-PAC/VIII/
122, dated 30.9.1988]

Recommendation

The indigenous production of rails at present is of 52 kg. rails both in medium manganese quality and 90 UTS variety, whereas the Railways propose to import 60 kg. rails to be laid on important routes. The Committee strongly feel that Government should prevail upon the Bhilai Steel Plant to make special efforts for the indigenous production of 60 kg. rails of 90 UTS variety. This step will go a long way in the adoption of latest technology relevant to the needs of the country, reduce dependance on import and save precious foreign exchange.

[S.No. 12 (Para 3.4) of Appendix III to 122nd Report of PAC (1987-88)
VIII Lok Sabha]

Action Taken

A meeting was held between the Minister of State for Railways and the Minister of Steel & Mines on 9.1.87 in which the Railways stressed the need for Bhilai Steel Plant completely switching over to the production of 90 UTS rails and provision of facilities like Vacuum De-gassing and On-line Ultrasonic testing facilities quickly. The Steel Authority of India promised to increase the production of 90 UTS rails gradually from year to year. During the year 1987-88, Bhilai Steel Plant supplied 70,000 tonnes 52 kg. rails in 90 UTS quality. For the year 1988-89, they have promised to supply one lakh tonnes of 52 kg. rails in 90 UTS quality and will gradually increase to 1.80 lakh tonnes by 1990-91.

To meet the shortfall in the supply of rails, *vis-a-vis* requirement in 1987-88, orders were placed for the import of 15,000 tonnes of 60 kg. head-hardened Rails and 1.25 lakh tonnes of 60 kg. UIC rails of 90 UTS quality. During 1988-89, it is proposed to import 1.4 lakh tonnes of 60 kg. rails in UTS quality and 1.5 lakh tonnes of 60 kg. rails in UTS quality and 1.5 lakh tonnes each in the years 1989-90, 1990-91. Railways have been importing BG rails in 90 UTS quality and they received 40,000 tonnes of 60 kg. 90 UTS quality, 15,000 tonnes of 60 kg. head-hardened quality and 80,000 tonnes of 52 kg. rails in 90 UTS quality during 1987-88.

The matter was also taken up by the Railway Minister with the Minister of State for Steel & Mines on 27.4.88 and the following specific points were brought to his notice:—

- a) **To step up production of rails at Bhilai:** Even after stepping up production from the present 3 to 3.25 lakh tonnes to 4.25 lakh tonnes by 1990-91, there would still be shortfall of 1.5 lakh tonnes per annum during the 8th plan for which additional capacity may be developed at Bhilai or at other Steel Plants.
- b) **Rails sections to Roll:** Bhilai to develop capacity to meet the major part of Railways requirements of 60 kg. & 52 kg. rails.
- c) **Quality of rails:** To instal a second bloom caster for changing over to 100% of 90 UTS quality rails.
- d) **Rolling of Longer rails:** To take action for rolling 26 M or longer rails.
- e) **Quality assurance processes:** To instal various quality assurance processes.

2. The Minister of Steel has advised in May 1988 that the matter was being looked into.

[Ministry of Railways (Rly. Bd's) O.M. No. 88-BC-PAC/VIII/122,
dated 30.9.1988]

Recommendation

According to the Ministry of Railways (Railway Board) meetings were held between RDSO, Tippler Manufacturers, Steel Plants and Port Trusts in October and December, 1982 for sorting out problems connected with the introduction of BOX 'N's. The BOX 'N' wagon was mainly intended to be used for transport of coal and iron ore, etc. These wagons were brought into service from October 1982 and they were in sizeable number in WCL collieries by the end of 1983. Meanwhile bulk orders to wagon builders for manufacture of 16,400 BOX 'N' wagons were placed in July 1982.

6260, 10,380 and 13,262 BOX 'N's were in use by the end of March 1985, March 1986 and March 1987, respectively. Once a policy decision had been taken to go in for BOX 'N' as early as 1982, and the concerned Departments had been apprised of the same, the Committee deprecate as to why move was not initiated by the Departments concerned to synchronise the required alterations and improvements. At present about 16,500 BOX 'N' wagons are in service. Simultaneous action which ought to have been initiated in time so that provision of infrastructural facilities such as modification of tippers by Power Houses and Steel plants, modification of weigh-bridges to enable weighing of BOX 'N' at certain colliery sidings and development of sidings fit to handle BOX 'N' rakes both at collieries as well as at unloading terminals could have been provided in time. Importance of necessary infrastructural and operational facilities cannot be over-emphasised. Economics and optimum utilisation of the transport capacity created in new BOX 'N' wagon hinged on development of these infrastructural facilities. The Committee desire that the Departments concerned should promptly provide these facilities wherever these are still lacking, within a time bound programme for intensive utilisation of assets created in BOX 'N' wagons and optimisation of Railways productivity. The Committee would like to be apprised of developments in this regard. They would also like the implementation of these measures to be closely monitored and controlled with appropriate interaction between the various agencies involved.

[S.No. 16 (Para 5.13) of Appendix III to 122nd Report of PAC (1987-88) VIII Lok Sabha]

Action Taken

The main users of BOX 'N' wagons, namely, coal industry, steel plants, power houses, ports receiving iron ore trains, cement plants etc. have been constantly associated from the very development stage for the requisite modification of facilities at the terminals, including tippers and weigh-bridges, as well as sidings. With the increasing influx of BOX 'N' wagons in the Indian Railways' fleet, more and more consumers have been identified and the procurement programmes have in no way been affected for want of the terminal and other ancillary facilities for the purpose.

It has already been submitted, vide the reply in the Action Taken Note on the Committee's Recommendation No. 5.14, that weighbridges have been modified to enable weightment of BOX 'N' wagons at a number of locations on South Eastern Railway and Eastern Railway, including Churcha, Bistrampur II, Bistrampur I, Duffman Hill, Bijuri, Korea No. 1, Korea No. 2, New Kusmunda No. 1 and New Kusmunda No. 2 on South Eastern Railway & Bina, Bachra, Sayal, Kusunda, Katras, Jarangdih, Dakra CHP, Amrit Nagar, Bowla, Pandra, Bhanora and Jhingurda on Eastern Railway.

Similarly, most of the major consumers inclusive of steel plants, ports and power houses have already carried out modification of tiplers to suit BOX 'N' wagons.

[Ministry of Railways (Rly. Bd)'s O.M. No. 88-BC-PAC / VIII / 122,
dated 20.7.1989]

Recommendation

According to Indian Railways Year Books 1980-81 onward during 1976-77 the tonnage lifted was 212.6 MT, an all time high. The subsequent years, however, witnessed a declining trend upto 1979-80 when it plummeted to just 193 M.T. As a result of the adoption of certain managerial decisions and operating innovations, it became possible to reverse the declining trend and from the year 1980-81 onwards the freight traffic witnessed steady growth.

[S.No. 19 (para 6.6) of Appendix III to 122 Report of PAC (1987-88)
VIII Lok Sabha]

Action Taken

The observations of the Committee have been noted.

[Ministry of Railways (Rly. Bd)'s O.M. No. 88-BC-PAC/VIII/122,
dated 30.9.1988]

CHAPTER III

RECOMMENDATIONS AND OBSERVATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN THE LIGHT OF THE REPLIES RECEIVED FROM GOVT.

Recommendation

The Committee are constrained to note that the Ministry of Railways (Railway Board) placed orders on Wagons builders in July 1982 committing the Government to a sum of Rs. 656 crores on procurement of wagons of a new design whose performance had not been evaluated by RDSO in utter disregard of an earlier decision taken in January 1978 by the Railway Board that a study of the behaviour of prototype wagons and the techno-economic study should be undertaken before commencement of bulk production. In the opinion of the Committee it was most imprudent on the part of the Railway Board to have placed order for wagons without necessary trials and gaining service experience. It is all the more regrettable that even detailed reasons leading to this decision were not recorded in writing. The Committee cannot but strongly express their dismay over this highly unsatisfactory state of affairs in a project of such huge magnitude. What is further disquieting is that the Railways placed order on wagon builders totally disregarding the advice of the RDSO. The Committee deprecate that a matter involving huge expenditure of 656 crores was handled in such a casual manner and would like the Government to draw a lesson from this sad experience and ensure that such serious lapses do not recur in future.

[S. No. 2 (para 2.7) of Appendix III to 122nd Report of PAC (1987-88)
VIII Lok Sabha]

Action Taken

The reasons for undertaking commencement of bulk production without going in for Techno-Economic Study and gaining service experience were explained to the Committee in answer to points arising out of evidence. The observations of the Committee that detailed reasons leading to this decision should have been recorded in writing is noted and instructions are being issued that in similar cases detailed reasons for a change in the decision should be recorded in writing.

While noting the other observations of the Committee, it is stated that no serious lapses occurred in this case. As explained in course of evidence and through written communications in answer to points arising out of evidence oscillation tests were duly conducted, impact tests were not

considered necessary, and the other tests were conducted subsequently; results of these other tests were not considered essential before ordering bulk production. With the pressure of traffic mounting, Indian Railways had necessarily to plan for maximising through-put on the existing routes with the least expenditure on augmenting line capacity and in the shortest possible time. BOXN wagons presented an ideal solution where the payload per train could be increased substantially. The anticipated increase in traffic, particularly coal traffic on saturated routes, made it urgent that Indian Railways acquired BOXN wagons in large numbers. There was no other alternative.

[Ministry of Railways (Rly. Bd.)'s O.M. No. 88-BC-PAC/VIII/122, dated 5-10-1988]

Recommendation

According to the Railways the decision taken in 1982 to order series production of BOXN wagons without waiting for the results of prototype trials and detailed techno-economic study was vindicated by subsequent achievements in traffic lifted. Sadly enough, experience of working of BOXN wagons has belied the expectations in regard to technical superiority of the design as has been discussed in the succeeding paragraphs:—

(a) After evaluation of the results the wagon was cleared in November 1981 for a speed of 75 kmph on track laid with 90 lb rails. This was far below the design parameter of 90 kmph laid down by the Railway Board in January 1981. Even after further trials in April 1982 on better maintained track the wagon was cleared for 90 kmph in empty condition only and it was found that in loaded condition it was not possible to permit a speed of over 75 kmph.

(b) There is an increase in the rail fractures on sections where BOXN loaded wagons are running even though it has not been possible to attribute the increase in the rail fractures entirely to the running of BOXN wagons on the route.

(c) In addition, para 2.33 of the Project Report on BOXN wagon specifically mentions that prototype testing and trials of the wagons to be produced will have to be comparatively more exhaustive as these would be a new concept, not tried out on Indian Railways before.

(d) The incidence of defects in bogies, air brakes, wheels etc. was very high on account of design deficiencies (bogies) poor quality supplies which did not lead themselves to simple solution.

(e) The wheel wear observed on the Casnub bogie is higher than that of the UIC Bogie. In July 1984, RDSO concluded that the wheel wear rate

in case of BOXN wagon with Casnub bogie would be twice as high than in the case of BOX wagon.

(f) The very fact that the Ministry of Railways have now decided to float a global tender for a modern bogie best suited to Indian conditions to meet its future traffic requirements is clearly indicative of imprudence in planning and implementation of a project of such a great importance and vast magnitude.

[S.No. 3 (para 2.25) of Appendix III of 122nd Report of PAC (1987-88)
VIII Lok Sabha]

Action Taken

(a) As indicated earlier in the Railway Board's reply to the questionnaire received from the Secretariat of the Public Accounts Committee the higher speed potential upto 90 kmph of BOXN wagon can be achieved with empty wagons as specified and existing track structure. The existing track structure is to be upgraded apart from higher tractive effort having to be provided to run trains at a higher speed of 90 kmph in the loaded condition.

(b) Increase in rail fractures on sections where BOXN loaded wagons are running cannot be attributed entirely to running of BOXN wagons. The traffic density on such routes has also increased tremendously. To control the incidence of rail fractures, which are generally attributable to the phenomenon of fatigue (dependent on the cumulative quantum of traffic carried, which is very heavy on most of the BOXN routes) the following steps have been taken:—

(i) Track renewals, on a programmed basis, with due priority for sections with higher incidence of fractures; (ii) Replacement of 90R (90 lb per yard) rail section with 52 Kg (i.e. 52 Kg/m or 105 lb per yard) or 60 Kg rail section, to obtain larger service life; (iii) Use of rails of higher ultimate strength of 90 Kg/mm² progressively, instead of 72 Kg/mm², (as with conventional medium manganese rail) to achieve a further increase in service life; (iv) Increase of ballast cushion, on a programmed basis, from 200 mm to 300 mm to enable the track to withstand the heavy density of traffic better.

(c) Oscillation test on prototype BOXN wagon as also loading and unloading trials were conducted before the bulk order for 16400 BOXN wagons were placed. Impact and squeeze load tests were not considered necessary as the BOXN wagon was shorter and sturdier than the BOX wagon. Since air brakes are superior to vacuum brakers there was no need to wait for the braking distance trials before placing bulk orders. As for the service trials it was not found practicable to wait for such tests in the context of the challenge posed to the Railways for lifting the projected originating traffic of about 309 million tonnes in 1984-85 against 220 million tonnes carried in 1980-81 and the concomitant need to substantially

increase through-put per train within the existing limitations of loop length and track structure with minimal inputs in infrastructure.

(d) & (e) The high incidence of defects in bogies, air-brakes, wheels etc., initially was in the nature of teething troubles which are liable to take place in any new design. These have been substantially reduced over the years and the performance has been satisfactory. The wheel wear rate has been improved substantially by modifications of the bogie design. It may be mentioned that every feature cannot be improved simultaneously in subsequent designs. While achieving the overall goal of improving reliability, there has to be trade-off somewhere.

(f) 19 nos. each of 9 different designs of freight bogies have been procured for trials not because of any fundamental shortcomings in CASNUB bogies used on BOXN wagons but as a step in the direction of further improvement than can be achieved with modern technologies available world-wide today. Improvement is a constant on-going process.

[Ministry of Railways (Rly. Bd)'s O.M. No. 88-BC-PAC/VIII/122,
dated 5-10-1988]

Recommendation

The Committee is of the opinion that it was not prudent on the part of the Railway Board to have ordered bulk production of BOXN wagons without knowing the complete results of all prototype trials. While endeavouring to achieve immediate and short term objectives the Government lost sight of the long term perspective. The Committee fails to understand how the Railway Board decided on standardisation of CASNUB bogie before its performance was tried out under the conditions in our country. The very fact that the Railway Board is now on the search for a different type of bogie (22.3t axle load) is indicative of the fact that their earlier decision was taken in haste and was erroneous and unsound. The Committee have no doubt that all these factors are such as could have been monitored and controlled had the Government not acted in undue haste but had taken decision only after considering in depth the full implications of issues involved in long term interests of the economy. The Committee is constrained to comment that such hasty action become necessary only because the railways had not moved expeditiously in finalizing, trying and approving the design of new wagon in the earlier years and had allowed a long time to pass through procrastination and lack of sense of urgency. The Committee hope that the Government would draw a lesson from this experience and will organise such future projects after taking adequate care and precautions. The Committee note that efforts are on to improve the performance of CASNUB bogie by carrying out modifications and also to improve the speed potential of the wagon. The Committee would like to urge that the Railway Board should monitor closely these efforts by RDSO in this

direction. The Committee would like to be apprised of further developments in this regard.

[S. No. 4 (para 2.26) of Appendix III to 122nd Report of PAC (1987-88)
VIII Lok Sabha]

Action Taken

While noting the Committee's opinion on the subject with due respect, it is mentioned that results of tests on prototype BOXN wagons available till that time were adequate to order bulk production. Performance of the wagons till date has brought about tremendous improvement in traffic throughput with very high degree of reliability.

Improvement and further development is a continuous process and, therefore, Railway Board are now engaged in a search for still better bogie for freight stocks. Similarly, constant efforts are on to keep improving the CASNUB bogie further. These efforts are being closely monitored by the Railway Board. The Committee will be apprised of further developments regarding steps taken to improve the CASNUB bogie in due course.

[Ministry of Railways (Rly. Bd)'s O.M. No. 88-BC-PAC/VIII/122,
dated 5.10.1988]

Recommendation

The Committee note that compulsory scrag testing of springs is done during overhaul of BOX wagon once in 4½ years. The preventive maintenance and periodic scrag testing the Indian Railways have adopted is based on practice of the Railway systems abroad. Since UIC bogies under BOX/BCX/BRH wagons employing laminated bearing springs, have to work under conditions much more arduous than in other countries in terms of track geometry and liberal overloading, the failure rate of the springs is high on the Indian Railways. The Committee note that the Railways did not change the Manual to provide for frequent scrag testing and preventive maintenance. The Committee suggest that norms for preventive maintenance and periodic overhaul should be reviewed so as to make such norms more appropriate under conditions obtaining in India and ensure that through their strict observance the wagons remain in proper working conditions.

[S.No. 9 (para 2.31) of Appendix III to 122nd Report of PAC (1987-88)
VIII Lok Sabha]

Action Taken

Scrag testing can be done on the springs only in a Workshop, it is not practicable to do this test other than when the wagon visits on a workshop for overhaul. Detailed instructions have been given to the workshops on maintenance action to be taken on springs.

[Ministry of Railways (Rly. Bd)'s O.M. No. 88-BC-PAC-VIII/122,
dated 5-10-1988]

ANNEXURE

**HIMMAT SINGH
MEMBER MECHANICAL**

**GOVERNMENT OF INDIA
MINISTRY OF TRANSPORT
DEPARTMENT OF RAILWAYS
(RAILWAY BOARD)**

D.O.No. 84/M (N)/951/51

New Delhi, dt. 29/31/1/86

My dear (CMEs, all Indian Railways),

Sub : SPRINGS FOR BOX BOGIES.

Currently Bogie Springs to Drawing No. WA/SN-6302 are being used on BOX Bogies on Indian Railways. In order to reduce breakage of top plates, the second plate has been extended and curved so as to support the top plate. The length of other plates has also been rationalised to current design practices.

2. Please find enclosed herewith RDSO's Drawing Sketch No. WD-86007-S/1 which superseeds existing drawing No. WA-SN-6302. All new procurement must be made to the new drawing only. Likewise, all Workshops undertaking BOX Spring repairs must follow the new drawing.

Yours sincerely,
Sd/-
(HIMMAT SINGH)

Encl : One drawing
SK. No. WD-86007-S/1

Shri
Chief Mechanical Engineer,

**INDIAN RAILWAYS
MAINTENANCE MANUAL FOR WAGONS**

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
RAILWAY BOARD**

5.7.4 Procedure for manufacture/repair, testing and Inspection of springs in workshops:—

- (i) The correct procedure for manufacture of laminated bearing springs has been prescribed in Board's letter No. 64/M (W)/814/43 dt. 12-3-64 and 3-6-68, RDSO's letter Nos. M&C/STS/2/1 dt. 26-3-75 and MW/II/Springs dt. 18.7.77(App. V) and IRS specification RS-68. The pamphlet "Laminated Bearing Spring Failures - Description, Classification and Reporting" issued by RDSO in 1969 with a corrigendum in 1972 contains useful information on the subject and should be consulted.
- (ii) All springs will first be given a scrag test and also their camber will be checked. Facilities for these two checks should be provided in the Lifting Shops so that springs which pass both these tests, need not be transported to the Smithy/Spring Shop. The springs that fail in either of these tests, should be taken to the Smithy/Spring Shop where they should be dismantled & each plate visually examined for presence of any surface defects such as cracks, corrosion, pits, dent marks etc. and those which are free from these defects should be hot re-set and put through the process of re-heat treatment (hardened and tempered) under controlled conditions. The defective plates, if any found, should be replaced by new ones, properly heat treated. The assembled spring should be given scrag and camber tests.
- (iii) Retempering of springs.
 - (a) For restoring lost temper, it is necessary to first re-harden the plates.
 - (b) Water Hardening The plates should be at a temperature of 810°C at the time of quenching. If in-resetting the plates to the required camber, the temperature drops below this limit, the plates should be re-heated. For quenching, the plate should be dipped edgewise taking care that the plate is kept horizontally. The plate or the quenching

medium should be kept vigorously agitated. The plate should be withdrawn when it has cooled down.

- (c) Oil hardening - The plate should be at a temperature of 840°C to 870°C. The dipping of the plate should be done in the same manner as for water. The quenching medium would be quenching oil of an approved brand. The oil temperature should be prevented from rising abnormally by a water jacket in which water should be freely circulated. Aeration of the quenching oil would help in keeping down the temperature and also in keeping the oil in a state of agitation.
- (d) Tempering - The tempering, the correct temperature is even more important than hardening. A salt/lead bath maintained between 370°C to 420°C for water hardening quality and between 450°C to 500°C for oil hardening quality spring steel would ensure plates being tempered uniformly.
- (e) Temperature control - Hardening and tempering furnace should be provided with automatic pyrometric control to ensure correct hardening and tempering temperature.
- (f) Rolled eye - It should be ensured that there is a minimum gap of 2 mm between the rolled end and the upper surface of the top plate. This is necessary to prevent the end bearing hard against the top plate when the spring is deflected, See Fig. V6.
- (g) Indentations - The malpractice of cold hammering of spring plates as a result of which indentations are left should be seriously avoided as the indentations are potential stress raisers.

(iv) Scrag Test

- (a) Measure camber.
- (b) Press the spring home 6 times.
- (c) Re-measure camber. The loss of camber must not exceed half the thickness of the top plate.
- (v) Load Deflection test - At least 5% of C & W springs must be subjected to load deflection test.

Recommendation

Full speed potential of BOXN wagons in loaded condition can be achieved only after the track structure of the concerned routes are further upgraded to heavier than 52 Kg. rails i.e. minimum 60 Kg. rails which is the next standard section after 52 Kg. rails, continuously welded. CAS-

NUB bogies fitted under BOXN wagon is based on design of the American three-piece bogie running on the American Railways for several decades despite its faster wheel wear propensity. In order to achieve higher speed potential and check in the rise of the incidences of rail wear and wheel wear, instructions have been issued that priorities may be accorded to use of 90 UTS rails on high density routes and BOXN routes.

The Project Report on BOXN wagon submitted by RDSO in September, 1974 specifically pointed (Para 2.31 and 4.23 of the Project Report) out that the work of introducing 60 Kg. track on these routes (17 selected routes for BOXN wagons) should, therefore, commence straightaway and should be phased for completion over the Corporate Plan period i.e. by 1988-89. In January, 1981, the Ministry of Railways (Railway Board) decided that all open wagons in the 1981-82 RSP should be ordered as BOXN wagons. Bhilai Steel Plant is the sole supplier of rails to the Railways. Dialogue with Bhilai Steel Plant for production of higher UTS rails started as late as in 1982 and specifications were finalised in 1985.

3.3 The Committee are unhappy over the manner in which the Ministry of Railways (Railway Board) have proceeded in the matter for production/replacement of rails with 90 Kg./mm sq. UTS. Consequent on the introduction of BOXN wagons in October, 1982, and its acquisition year by year, BG open wagon fleet composes of about 25% BOXN wagons at present (1987) whereas replacement of existing rails by those of requisite standard is painfully slow, even though such replacement was recommended more than ten years back. Only K.K. Line (445 Km) has been relaid with new rails of 90 UTS.

As estimated in the Corporate Plan (1985-2000) freight traffic to be carried by the Railways by 2000 AD is expected to go up from 220 MT in 1980-81 to 600 MT in 2000 AD i.e. around three times. To handle such a growing profile of rail-borne traffic freight trains with much heavier trailing load would be necessary. The Railways propose to run on a selected number of high density and coal routes trains of even 7,500 to 9000 tonne trailing loads. Most of the 17 routes selected for running of BOXN wagons fall in Groups A and B nominated for operation of high speed passenger trains at 160/130 Km./h. Much of the rail traffic-both high passenger traffic as well as high density freight traffic using the same tracks is not considered desirable. The overuse of these dense traffic tracks reduced the general reliability of the Railway operational system. For this, the railway track would have, therefore, to be considerably strengthened and modernised. The Railways have also claimed that "there is no increase in rail fractures on rails of higher poundage." Track was already overdue for replacement and there is a limit beyond which the rails cannot be allowed to wear out without jeopardising safety. Most of the Railway system abroad have already adopted heavier rail sections with higher UTS of 90 Kg/mm sq. which are wear-resistant and have longer service life. As the track modernisation programme involves substantial investment of financial

resources and a large volume of production, the Committee consider that renewal of tracks should be straightaway done with rails of 60 Kg/m section with UTS of 90 Kg/mm sq. This will not only ensure general reliability and improve productivity of the Railway system but will be also vital to safety and long-term economy.

[S. Nos. 10 & 11 (Paras 3.2 & 3.3) of Appendix III to 122nd Report of PAC (1987-88) VIII Lok Sabha]

Action Taken

A Task Force comprising officers of Railway Board, RDSO, SAIL and Bhilai Steel Plant was constituted in September 1982 for the development of 90 UTS rails, for our heavy density routes. In the several meetings the task force had, Railways urged SAIL to develop rails equivalent to UIC 860 Grade 90 'A' (now 900'A') which calls for killed quality steel, in a time-bound manner, SAIL had problems in developing killed-steel as their plant was equipped only for production of semi-killed steel rails. SAIL developed manufacture of semi-killed micro alloy steel rails and insisted that these be tried in the field to assess their suitability. It was decided to try those rails on Eastern and S.E. Railways for a total length of 10 Km. Simultaneously, laboratory tests were also to be conducted alongwith field trials. SAIL were also to arrange to have the rails tested on the circular test track in USSR.

Bhilai Steel Plant rolled about 2000 tonnes of micro-alloy steel (semi-killed steel) in 1983-84. RDSO were of the firm opinion that with semi-killed steel the homeogeneity cleanliness, extent of inclusion etc. are adversely affected with wide scatter of various parameters. Since the technique of micro-alloy rails with semi-killed steel was yet to be established and to get the results of the service trials of the rails already produced by Bhilai Steel Plant and laid on two Railways were likely to take a number of years, Railways made it clear to SAIL that our objective was for producing 90 UTS rails with killed quality steel only. A provisional specification for production of high strength rails (90 kg/ mm² min UTS) for immediate adoption till proper facilities were developed at Bhilai Steel Plant, was drafted in June 1985.

Further, in the year 1986-87, Bhilai Steel Plant produced 25,000 tonnes of 90 UTS rails and in the year 1987-88, they produced 70,000 tonnes of 90 UTS rails.

Directives were issued in September '85 that in the matter of using 90 UTS rails, first preference should be given to routes which are identified for operation of BOXN rakes. Also, in the revised track standards issued in March '87 the use of 60 Kg. 90 UTS rails was prescribed for Group A, B, C and D routes of BG having traffic density of over 20 and 52 kg 90 UTS rails in respect of sections having traffic density between 10 and 20 as well as in respect of Group 'A' route. In respect of sections having traffic density between 10-20 use of 60 kg 90 UTS rails was prescribed if concrete

sleepers are used in Group A,B,C and D routes of Broad Gauge. The use of 60 kg 90 UTS rails is not considered desirable from technical point of view on other BG routes.

[Ministry of Railways (Rly. Bd)'s O.M. No. 88-BC-PAC/VIII/122, dated 30.9.1988]

Recommendation

The average number of wagons stabled during the period October, 1982 to March, 1985 was 786 per month. This stabling, however, have increased to more than 2000 for March, 1986 every month till August 1987 leading to idle investment of about Rs. 100 crores at present day cost of wagon in one month alone. In the opinion of the Committee this is clearly indicative of faulty planning of wagon production. Moreover the phenomenon of stabling has been continuing right from the day the manufacture of BOXN wagons was commenced. Once the production targets were fixed it was the responsibility of the Railway Board to ensure procurement and supply of matching components to wagon builders for timely wagon production. The Committee deprecate that the Railway Board have taken four years to realise and that too after entailing considerable losses in idle investment, to gear up their planning mechanism as a part of their efforts to streamline the wagon production. The Committee hope that this step would yield better results and would like to be apprised of the impact of these measures in eliminating stabling of wagons. The Committee would like to know whether the Railway Board had imposed penalty on any supplier for delayed supply of inputs which caused stabling.

[S. No. 14 (Para 4.5) of Appendix III to 122nd Report of PAC (1987-88)
VIII Lok Sabha]

Action Taken

The series production of BOXN wagons from Industry started from September, 1982 with most of the components viz. wheelsets, cartridge bearings, HT couplers imported.

2. Before introduction of BOXN wagons, Railways were manufacturing conventional wagons only which had vacuum brakes and roller bearings. The wheelsets of these wagons were also produced indigenously by Durgapur Steel Plant. The new design BOXN wagon required development and supplies of the following new components:—

- i) Cartridge bearings;
- ii) Special wheelsets to suit these bearings;
- iii) Air brakes;
- iv) Cast steel bogies;
- v) HT couplers; and
- vi) Corten steel.

3. In the initial stage of production except air brakes, and bogies, other components were imported. However, the endeavour of the Indian

Railways right from the beginning was to develop adequate capacity to manufacture the above components meeting the stringent technical requirements, indigenously, so that our dependence on imports is reduced.

4. Orders for the development of the components, were placed on the indigenous suppliers who had indicated phased manufacturing programme initially with larger import components to be reduced gradually. As usual, in case of indigenous development, there are certain teething troubles some of which are illustrated below:—

- i) In case of cartridge bearings, the development of adopters to required standard specifications took longer time.
- ii) Similarly, the phased indigenous manufacture of some components of bearings took fairly long to develop.
- iii) D.S.P. who were the traditional suppliers of the wheelsets for conventional wagons could not change over to the new design wheelsets. W&AP, Bangalore was to manufacture and supply the wheelsets required for these wagons. The production had also suffered initially on account of inadequate availability of water and power supply and thereafter for some other reasons... The production of this Plant could stabilise only in 1986-87.

5. In addition to the problems of development, there were drastic changes in the quantum of wagons to be manufactured and the distribution of types of wagons due to frequent changes and allocation of funds by the Planning Commission. Illustrated below are some of the typical cases of this nature.

- i) For 1985-86, 5000 FWs were initially planned which were increased to 12,000 FWs in October, 1985.
- ii) During 1986-87, initial planning was for 15,000 FWs which was increased to 20,000 FWs in January, 1986.

6. The mid term review of 1985-86 had an adverse affect on availability of free supply items for 1986-87 as the buffer were eaten up and part supply meant for 1986-87 was also consumed before fresh supplies planned for 1986-87 could materialise.

7. These mid term changes in the planning of wagons upset the entire planning of inputs as the components manufacturers were unable to gear up to the increased production at short notice, to meet the entire requirement as expected and the imports as usual had a longer lead, thereby the free supply inputs could not be made available in adequate quantities inspite of best efforts.

8. As brought out in para 2.1 above, the stabling was mainly on account of delayed development of indigenous components of cartridge bearings including adopters and wheelsets.

9. The main supplier of cartridge bearings was M / s. National Engineering Industries, Jaipur, from whom token L.D. was recovered due to belated supplies.

10. The other component was shortage of wheelsets, which were being supplied by our own plant, hence question of recovery of any L.D. from them did not arise. This was in addition to imports.

11. Subsequently stabling also occurred on account of shortage of couplers. The contracts are still to be finalised and L.D. is proposed to be imposed.

12. The indigenous industry has since developed adequate capacity to meet the requirement of all the free supply components and in 1987-88, whatever was planned initially, was not modified drastically during the course of the year whereby the planning could be done better. This has borne fruits and the stabling of wagons which stood at a peak of 3030 vehicle units as on 1.1.1987 came down to 995 wagons as on 1.1.1988 and has further come down to 466 on 1.4.1988. All these wagons are expected to be destabled by July, 1988. In fact, in 1987-88, the availability of free supply items was adequate and the entire number of BOXN wagons could have been destabled earlier but suffered on account of the following:—

(i) Strike in public sector units in December and January'88.

(ii) Physical inability of these units to destable larger number of wagons.

13. As regards the future planning of wagons orders and procurement of matching components it is stated that off take of wagons is decided only after actual allotment of funds; even though planning is done for a longer period, commitments are entered only after the position of final funds allotment is known.

14. Regarding number of wagons stabled as on 1.1.88, the figure of 995 given in para 12 above is correct.

15. Regarding recovery of token L.D. from M/s. N.E.I., Jaipur, it has been confirmed from the Northern Railway that the contract has been with recovery of token L.D.

This has been seen by Audit who have made the following observations :—

“It is not clear from the reply whether an integrated view of capacity available for wagon production and other accessories required for wagons like wheelsets, cartridge bearings, air-brakes, High Tensile Couplers etc. had been made. If this was the case such imbalances might not have arisen leading to a situation of stabling wagons and blocking of funds”

MINISTRY OF RAILWAYS (RAILWAY BOARD)'S COMMENTS
ON AUDIT OBSERVATIONS:—

“It is not correct that an integrated view with regard to availability of Free Supply Components for BOXN wagons was not taken. Right from the time the decision was taken to manufacture BOXN wagons, planning was made to ensure timely and adequate supply of such components. However, an account of teething trouble in indigenous development of such items, coupled with upward mid-term review specially in 85-86, availability of components did not match with the production of BOXN till around mid '87, whereafter the position has stabilized and the phenomenon of stabling of wagons has ceased to exist from mid '88 onwards”.

[Ministry of Railways (Rly. Bd)'s O.M. No. 88-BC-PAC/VIII/122,
dated, 15.9.1989]

Recommendation

The Committee also note that the designed loadability of 58 tonnes of coal in BOXN wagons was possible only with heap loading. The Coal India Ltd. has pointed out that such loading did not take into consideration the incidence of coal falling enroute. According to Railway's own survey, the short receipt of coal by the consumer was to the extent of 5.1% though the extent of shortage attributable to spillage and pilferage could not be excluded. In any case the shortage is a significant loss to the nation. The Committee would like this aspect to be investigated with a view to taking appropriate remedial measures with due promptitude. They would also like to be apprised of further development in this regard.

Further, there is at present no weighment facility for BOXN wagons; the modifications to existing weigh-bridges or installation of new weigh-bridges are stated to have been taken up. The Committee are surprised how the Railway Board could embark upon such a venture, viz. introduction of a new type of wagon, without considering its effects on the consumers and the measures which they would be required to take including the loading time required therefor.

[S. No. 17 (Para 5.14) of Appendix III to 122nd Report of PAC
(1987-88) VIII Lok Sabha]

Action Taken

The carrying capacity of BOXN wagon is 58.3 tonnes. This is achieved in all coal fields except Korea & Rewa where coal is of lighter density. Railways conducted test weighments in these coal fields and weight for charge has been fixed separately for each colliery. In certain collieries heap loading is necessary to achieve the loadability fixed and in such cases the height of the heap above the brim of the wagon has also been fixed. Guide bars are provided at loading points to ensure

that heap loading is done to the extent prescribed. The prescribed carrying capacity and height for different collieries are given below:—

Colliery Siding	Min. chargeable wt. in tonnes			Dt. of revision	Prescribed ht. above the brim upto which coal is to be loaded
	Run-of-Mine Coal	Slack Coal	Steam Coal		
Duman Hill	—	57	57	1.6.86	50 Cm.
Bisrampur II	—	—	52	1.6.86	50 Cm.
Bisrampur I	—	CC	—	1.6.86	40 Cm.
Churcha	—	CC	57	1.6.86	40 Cm.
Bijuri	—	57	56	1.6.86	40 Cm.
Bijuri Ballast Siding	CC	—	—	1.6.86	7 Cm. below brim
Korea II	—	CC	CC	1.6.86	40 Cm.
Korea I	—	CC	57	1.2.87	50 Cm.
Lajkura	—	CC	CC	1.5.87	Below brim
All other collieries	CC	CC	CC		

(CC-Marked carrying capacity 58.3 tonnes)

Apart from prescribing the heights mentioned above, it has also been laid down that loading should be done in trapezoidal fashion. Experience has shown that with movement, the coal settles down in the gaps between the wagon walls and the heap and there is no spillage on this account.

2. Shortage of coal at destination is generally due to pilferage enroute and underloading.

3. Difficulty was experienced in weighing BOXN wagons on the existing weighbridges at the collieries because of the shortest length of the wagon. Weighbridges at the following colliery sidings have been modified to enable weightment of BOXN wagons.

South Eastern Railway:

Name of siding

4. Duman Hill
5. Bijuri
6. Korea No. 1
7. Korea No. 2
8. New Kusmunda No. 1
9. New Kusmunda No. 2

Eastern Railway:

- | | Name of siding |
|-----|-----------------------|
| 1. | Bina |
| 2. | Bachra |
| 3. | Sayal |
| 4. | Kusunda |
| 5. | Katras |
| 6. | Jarangdih |
| 7. | Dakra CHP |
| 8. | Amrit Nagar |
| 9. | Bowla |
| 10. | Pandra |
| 11. | Bhanora |
| 12. | Jhingurda |

3.1 At a meeting taken in August 1986 the then Union Minister of Energy had directed Coal India Limited to instal electronic weighbridges on a crash programme basis. Installation of electronic weighbridges is being planned in a phased manner at other locations.

[Ministry of Railways (Rly. Bd)'s O.M. No. 88/BC-PAC/VIII/122, dated 21.11.1988]

Recommendation

According to the Ministry of Railways (Railway Board), during the 4 years period after introduction of BOXN wagons, the BG bogie open wagon fleet (composed of 22% BOXN wagons and 78% BOX wagons) increased by 20.4% whereas revenue NTKMs increased by 50 per cent.

[S.No. 18 (Para 6.5) of Appendix III to 122nd Report of PAC (1987-88)
VIII Lok Sabha]

Action Taken

The information furnished by Railway Board in Jan. 1988 was provisional. The correct position is that during the 4-year period after introduction of BOXN wagons, the BG bogie wagon fleet (composed of 21% BOXN wagons and 79% BOX wagons) increased by 27.7% whereas revenue NTKMs increased by 49.5%.

[Ministry of Railways (Rly. Bd)'s O.M. No. 88-BC-PAC / VIII / 122,
dated 30.9.1988]

Recommendation

The more important managerial decision and operating innovations included segregation of wagons fitted with roller—bearings and centre buffer couplers from the conventional type of wagons, organising of separate rakes for movement of bulk commodities like foodgrains, fertilisers, cement and coal, identification of over aged and unfit wagons and their condemnation, introduction of end-to-end running of through goods trains from the originating station to the terminating station by-passing intermediate marshalling yards, movement of close circuit rakes to meet the demands of major customers, disciplined management, intensive monitoring of freight movement, use of BOXN type wagons, conceptual shift from wagon loads to train loads to optimise use of rolling stocks and freight operations, utilisation of high capacity wagons, more modern locomotives and installation of improved signalling devices. All these measures have cumulatively contributed to the higher level of efficiency and better mobility.

[S.No. 20 (Para 6.7) of Appendix III to 122nd Report of PAC (1987-88)
VIII Lok Sabha]

Recommendation

The Committee is of the opinion that achievement of the Railways in the movement of freight traffic as claimed by the Railways is not mainly due to introduction of BOXN wagons only.

[S.No. 21 (Para 6.8) of Appendix III to 122nd Report of PAC (1987-88)
VIII Lok Sabha]

Action Taken

The introduction of BOX 'N' wagons on the Indian Railways was a major break-through in substantially improving the freight operations,

specially the coal loading as would be seen from the following table:-

Year	Total coal loading in million tonnes	%age increase in coal loading	Population of BOX'C'	Population of BOX'N'	Total BOX population	%age increase in BOX population
1	2	3	4	5	6	7
1984-85	102.3	+1.46%	51149	6260	57409	+4.6%
1985-86	111.68	+9.45%	50948	10380	61328	+6.8%
1986-87	117.84	+5.5%	50747	13263	64010	+4.3%
1987-88	127.10	+7.9%	50747	16853	67600	+5.6%

Other managerial decisions mentioned by the Committee had been taken in the early eighties and have contributed to the consistent better performance by all the railways in the recent years. The introduction of BOX'N' type was an added new feature to the system. It helped in substantially increasing the pay loads of coal trains within the existing loop-lengths and thereby eased the pressure on line capacity on saturated coal routes. This factor, therefore, stands out in the improvement achieved and requires due recognition.

[Ministry of Railways (Rly.Bd)'s O.M. No. 88-BC-PAC / VIII / 122, dated 30.9.1988]

CHAPTER IV
RECOMMENDATIONS AND OBSERVATIONS REPLIES TO
WHICH HAVE NOT BEEN ACCEPTED BY THE COMMITTEE AND
WHICH REQUIRE REITERATION

Recommendation

The Committee note that as long back in March 1973 the RDSO had suggested that the inside body height of the wagon should range between 1950 mm to 2000 mm. It took 7 long years by the Railway Board and RDSO to finally approve the design. No satisfactory explanation has been given to the Committee for delay of this magnitude. This appears all the more strange in view of the sense of urgency displayed regarding manufacture and deployment of this wagon during the Sixth Plan period. The Committee deprecate inordinate delay in the approval of the design and would caution the Government to guard against such delays in future. The procedure, practice, and methodology involved in such a research and development project require critical analysis and review followed by laying down of norms necessary to obviate any delay not to speak of such inordinate delay as occurred in this case.

[S.No. 1, Para 1.8 of Appendix III to 122nd Report of PAC (1987-88)
VIII Lok Sabha]

Action Taken

While noting the findings and recommendations of the Committee, it is mentioned that no undue delay took place in evolving and approving the design of BOXN wagons. The procedure, practice and methodology involved in this type of development are quite well set out. Within the overall procedure, steps necessary for each design project are not identical. The progress in case of each project is monitored from step to step till development is completed.

This has been seen by Audit.

[Ministry of Railways (Rly. Bd)'s O.M. No. 88-BC-PAC / VIII / 122,
dated 5.10.1988]

Recommendation

The Railways have pointed out that there were a number of causes for the failure of UIC bogies under BOXN wagons. The spring breakages have been attributed as the main cause leading to detachment of the wagon enroute. It is primarily due to very high overloading of BOX wagons upto 10-12 tonnes of excess loading. BOX wagons have more volumetric capacity of 68.59 cu.m. Since BOX wagon was meant to carry a variety of

bulk commodities, it was not supposed to be filled with each and every commodity upto brim level. For heavier commodities, the top level would have to be kept lower than the brim depending upon the density of the item. For instance in case of coal, there is loading line about one metre below the brim upto which 56 to 57 tonnes of coal can be loaded within permissible limits. With availability of more volumetric capacity, the overloading was more liberal in BOX wagons. The Committee recommend that the Railways should review norms for commodity-wise loading in Box wagons upto certain level and enforce them strictly so as to reduce incidences of spring breakages on account of over-loading.

[S.No. 8 para 2.30 of Appendix III to 122nd Report of PAC (1987-88)
VIII Lok Sabha]

Action Taken

Drawings issued by RDSO already specify painting of loading lines on BOX wagons for different commodities. At the time of POH, these loading lines are re-painted in accordance with Drawings. All Commercial staff concerned with loading have been advised to observe the Commercial Manual provisions in this regard. A copy of the instructions is enclosed.

[Ministry of Railways (Rly.Bd)'s O.M. No. 88-BC-PAC / VIII / 122, dated
20.12.1988]

ANNEXURE

GOVERNMENT OF INDIA (BHARAT SARKAR)
MINISTRY OF RAILWAYS (RAIL MANTRALAYA)
(RAILWAY BOARD)

No. 85/M(ND)/204/14Pt.II

New Delhi

dated 12.1988

The General Managers (Comml.)
All Indian Railways.

SUB: *Precautions to be observed while loading in wagons.*

The Public Accounts Committee in para 2.30 of their 122nd Report, have observed that in order to reduce the rate of incidence of spring breakages on account of overloading in BOX wagons, the norms prescribed should be enforced.

2. In this connection, attention is drawn to para 1508 of Indian Railway Commercial Manual Vol. II which is reproduced below for ready reference:

“1508. Other precautions to be observed while loading in wagons:

(a) Wagons must be evenly loaded so that the load bears equally on all springs. No overloading beyond the marked, increased or restricted carrying capacity is to be allowed.

(b) If weighing facilities are not available at the station, whether the wagons is excessively or unevenly loaded should be checked by a visual inspection of springs and axle guards of the wagon. Loadlines marked on wagons are also helpful in ensuring that loose commodities like coal, ballast, etc, are not overloaded.

3. Instructions may please be issued to staff concerned to ensure that the provisions contained in the Manual reproduced above are strictly complied with.

4. In order to discourage overloading of wagons, it is also necessary that tariff provisions in regard to the levy of freight charges at rates specified in the tariff when wagons are found overloaded, are strictly enforced.

5. Instructions may please be issued to all concerned and receipt of this letter acknowledged.

Sd/-

(R. Aravamudhan)
DY. Director, Traffic Commercial(R)
Railway Board.

**Action taken notes on Recommendations contained in the 122nd Report of
PAC—BOX‘N’ Wagons.**

Para No.	Brief Subject	Board's Remarks
2.30	<p>The Railways have pointed out that there were a number of causes for the failure of UIC bogies under BOX wagons. The spring breakages has been attributed as the main cause leading to detachment of the wagon enroute. It is primarily due to very high overloading of BOX wagons upto 10-12 tonnes of excess loading. BOX wagon has more volumetric capacity of 68.59 cu.m. Since BOX wagons was meant to carry of a variety of bulk commodities, it was not supposed to be filled with each and every commodity upto brim level. For heavier commodities, the top level would have to be kept lower than the brim depending upon the density of the item. For instance in case of coal, there is loading line about one metre below the brim upto which 56 to 57 tonnes of coal can be loaded within permissible limits. With availability of more volumetric capacity, the overloading was more Liberal in BOX wagons.</p>	<p>Drawings issued by R.D.S.O. already specify painting of loading lines on BOX wagons for different commodities. At the time of POH these loading lines are repainted in accordance with Drawings. All Commercial Staff Concerned with loading have been advised to observe the Commercial Manual provisions in this regard. A copy of the instructions is enclosed.</p>
	<p>The committee recommend that the Railways should review norms for commodity-wise loading in BOX wagons upto certain level and enforce them strictly so as to reduce incidences of spring breakages on account of overloading.</p>	

Recommendation

The Committee have been informed by the Ministry of Steel & Mines (Department of Steel) in March, 1988 that 60 Kg rails are very much in the production capability of Bhilai Steel Plant. The firm long-term requirements of rails including that of 60 kg, 90 UTS rails were projected by the Ministry of Railways (Railway Board) to the Department of Steel/SAIL in February, 1987. The Committee deprecate that the Ministry of Railways (Railway Board) projected their requirements of heavier rails of higher UTS variety only in February 1987 while the standards for track were reviewed long ago. While the Committee would like be apprised of the further development in this regard they would also recommend that in future there should be a close coordination and cooperations between the various agencies and decisions/agreements reached well in advance to ensure smooth and timely implementation of Projects.

[S.No. 13, para 3.5 of Appendix III to 122nd Report of PAC (1987-88)
VIII Lok Sabha]

Action Taken

In our effort to maximise production of rails indigenously, especially in 90 UTS quality, a follow-up meeting was held in May, 1987 by Member, Engineering, Railway Board with the Steel Ministry, SAIL and Bhilai Steel Plant. In the meeting, SAIL promised to supply increasingly 90 UTS rails as per the year-wise programme indicated below:—

Year	Total production	Production of 90 UTS variety	Actual supply	
			Total supply	Supply of 90 UTS variety
1987-88	3.25 lakh t	70,000 t.	3.10 lakh t	73, 000 t
1988-89	3.50 "	1,10,000 t.		
1989-90	4.00 "	1,50,000 t.		
1990-91	4.25 "	1,80,000 t.		

The Minister of State for Railways also pursued the matter in April 1988 with the Minister for Steel & Mines for stepping up the production of rails at the Bhilai Steel Plant and for switching over to 100% in 90 UTS variety.

No efforts have been spared by the Ministry of Railways to conserve foreign exchange...Towards this end, with a view to curtailing import of MG rails and eventually to stop import of MG rails, the Ministry of

Railways have encouraged a mini-steel plant at Pune in the private sector to produce MG rails.

It is true that Bhilai Steel Plant can produce 60 kg rails, but the size of the bloom / ingot in this Mill has been designed to produce 52 kg rails more optimally. In view of this, at present, Bhilai Steel Plant has been asked to meet the requirement of 52 kg rails, which itself is more than their present full production capacity, the requirement of 60 kg rails being met with by imports. Bhilai Steel Plant has indicated that they will be increasing their production gradually from the present level of 3.1 lakh tonnes to 4.25 lakh tonnes by 1990-91.. When the production level goes beyond Indian Railways requirement of 52 kg rails, they will be asked to roll 60 kg rails also.

It is stated that during 1987-88, in all 2 lakh tonnes of rails in 90 UTS variety were made available for track renewal works both from indigenous sources and from imports.

Periodic meetings are held among the officers of the Railway Board, Steel Authority of India and Bhilai Steel Plant to monitor the progress of production and technology upgradation.

[Ministry of Railways (Rly.Bd)'s O.M. No. 88-BC-PAC /VIII - 122,
dated 30.9.1988]

Recommendation

The Committee note that in 1982, the Ministry of Railways (Railway Board) introduced modified BOX wagons called BOX N wagons. Immediately after the introduction of BOX N wagons in sizeable number, a number of representations were received from the bulk consumers such as Power Houses complaining about substantial shortages in the coal quantities received by them than the marked carrying capacity. They also expressed their difficulties over the introduction of BOX N wagons which led to problems like weightment, loadability of BOX N wagons, loading and unloading time, unsuitability for finished steel products, modification of tippers and lack of infrastructural facilities for handling full rakes.

The Committee is perturbed to note that the Secretary of the Department of Coal wrote to the Chairman, Railway Board in June, 1986 four years after the introduction of BOX N wagons, listing out the problems faced by the coal companies and according to him the Railways did not pay any attention to these problems. In their evidence before the Committee in Decemeber 1986, the representatives of the Departments of Coal, Steel, Power and Electricity Boards stated that some of the problems still existed. The Committee are now informed that remdial measures have been taken and all difficulties that user sector had apprehended are being resolved. The Committee deprecate the lack of seriousness and promptitude which the Ministry of Railways (Railway Board) has demonstrated in dealing with the problems of bulk users in time.

The Committee is of the opinion that the Railways had adopted a casual approach to these problems and have taken unduly long time in settling the disputes. Necessary investigations into the aforesaid complaints should have been carried out immediately when BOX N wagons were pressed into commercial operation and at this stage, the Committee can only express the hope that the Railway Board would have taken suitable lesson from this sad experience and would be responsive and considerate to users and would not allow this lackadissical approach in dealing with such vital issues in future.

[S.No. 15(para 5.12) of Appendix III to 122 Report of PAC(1987-88) VIII
Lok Sabha]

Action Taken

The observations of the Committee have been noted.

[Ministry of Railways (Rly.Bd)'s O.M. No. 88-BC-PAC / VIII / 122, dated
30.9.1988]

CHAPTER V

RECOMMENDATIONS AND OBSERVATIONS IN RESPECT OF WHICH GOVT. HAVE FURNISHED INTERIM REPLIES

-NIL-

New Delhi;

SONTOSH MOHAN DEV

Chairman

August 10, 1990

Public Accounts Committee

Sravana 19, 1912(S)

APPENDIX I

STATEMENT OF CONCLUSIONS/RECOMMENDATIONS

Sl. No.	Para No.	Ministry/ Deptt. concerned	Recommendations/conclusions
1	2	3	4
1.	1.6	Ministry of Railways (Railway Board)	<p>Observing that it took as many as 7 years for the Railway Board and RDSO to approve the design of BOX N wagons, the Committee had desired to be apprised of the specific reasons leading to such delays. They had also recommended for critical analysis of procedure & practice and methodology involved in such projects and for revision of norms so as to obviate such delays in future. The Committee are, however, surprised to find that in their reply the Ministry have taken the stand that no undue delay took place in evolving and approving the design of BOX N Wagons and that the practice, procedure and methodology involved in such type of development are quite well set out. The Committee deprecate the casual approach of the Ministry in dealing with the recommendation of the Committee who have not bothered to ascertain the reasons for delay that took place on this instant case and take corrective measures in this regard. The Committee would like to reiterate that delay of 7 years for development of a design whose manufacture was to be accorded priority is a matter of serious concern and the Ministry of Railways should analyse the reasons for the same and effect necessary improvements in their methodology to avoid such delays in future.</p>
1.9		Ministry of Railways (Railway Board)	<p>The Committee had desired that the Railways should review norms regarding commodity-wise loading in BOX N Wagons upto certain level and enforce them strictly so as to reduce the incidence of spring breakages on account of over loading of</p>

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4

BOX N Wagons leading to the detachment of the wagons enroute. The reply of the Ministry is vague and evasive in as much as it merely states about the existing loading lines painted on BOXN wagons for different commodities. No specific action has been taken on the recommendation of the Committee regarding the review of norms for commodity wise loading. The Committee are, not satisfied with the mere advice given to commercial staff concerned with the loading to observe the commercial manual provisions in this regard. The Committee reiterate their earlier recommendation and would like the Ministry to review if the existing norms are adequate and take steps to enforce these norms or revise them. The Committee would also like the Ministry to keep a strict watch so as to ensure that these norms are followed in letter and spirit, to avoid over-loading of wagons. The Committee would also like to be apprised of the steps taken in that regard.

3

1.12

Ministry
of Rail-
ways
(Railway
Board)

Earlier the Committee were informed by the Ministry of Steel and Mines (Department of Steel) that 60 Kg. rails were very much in the production capability of Bhilai Steel Plant. However from the Action taken reply of the Ministry of Railways it is noted that this plant is capable of only meeting the requirement of 52 Kg. rails optimally and the Ministry have to depend upon imports to meet their requirement of 60 Kg. rails.

1

2

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4

In the absence of the production capability of Bhilai Steel Plant to manufacture 60 Kg. rails, the Committee find that the railways are meeting their requirement through imports. The Committee deprecate the lack of awareness and advance planning, on the part of SAIL and Bhilai Steel Plant about their production capacity. The Committee desire that the Ministry of Railways should impress upon the Steel Ministry the imperative need of manufacturing of 60 Kg. rails, so as to avoid imports and to save the precious foreign exchange. The Committee are convinced that with the programme of modernisation and expansion of capacity, the demand for 60 Kg. rails can be met by indigenous sources. This is all the more necessary in view of the prevailing need for saving scarce foreign exchange. The Committee would also like to be apprised of the outcome of periodic meeting which were held among the officers of Railway Board, SAIL and Bhilai Steel Plant to monitor the progress of production and technology upgradation.

4. 1.15 Ministry of Railways (Railway Board)

Observing the problems faced by the coal companies and the consumers like power stations and the casual approach of the Railways in solving their problems, the Committee felt in 1988 that investigation into the complaints of the Coal companies and other bulk consumers like power stations should have been carried out immediately when BOXN Wagons were pressed into commercial operation and had hoped that the Ministry would be responsive and considerate to users in future.

However, the Committee are not satisfied with the reply of the Ministry. The Committee desire that urgent steps be taken to remove the grievances of bulk coal consumers like power stations and suitable administrative mechanism be evolved for the purpose. The Committee would like to be apprised within three months of the further action taken in this regard.

PART II

MINUTES OF THE 5TH SITTING OF THE PUBLIC ACCOUNTS COMMITTEE HELD ON 31ST JULY, 1990 IN COMMITTEE ROOM NO. 50, PARLIAMENT HOUSE

The Committee sat from 1500 hrs. to 1730 hrs.

PRESENT

Shri Sontosh Mohan Dev—*Chairman*

MEMBERS

2. Shri G.M. Banatwalla
3. Shri Nirmal Kanti Chatterjee
4. Shri P. Chidambaram
5. Shri Mallikarjun
6. Prof. Gopalrao Mayekar
7. Shri Kailash Meghwal
8. Shri Shantilal Purushottamdas Patel
9. Shri Janardhana Poojary
10. Shri Amar Roypradhan
11. Shri T. R. Balu
12. Shri H. Hanumanthappa
13. Shri Sunil Basu Ray
14. Shri Vishvajit P. Singh
15. Shri Rameshwar Thakur

SECRETARIAT

Shri G. S. Bhasin — *Deputy Secretary*

REPRESENTATIVES OF AUDIT

- | | |
|--------------------------|-------------------------------|
| 1. Shri R. Parameswar | — Dy. C.A.G. |
| 2. Shri S. Sounderrajan | — Addl.Dy. CAG |
| 3. Shri S.B. Krishnan | — Pr. Director (Report) |
| 4. Shri T. Sethumadhawan | — Pr. Director (Direct Taxes) |
| 5. Shri K. Krishnan | — Director (-do-) |
| 6. Shri K. Jayraman | — Dy. Director (Rlys.) |

7. Shri A.K. Menon — *Director General of Audit, Defence Services*
8. Shri Baldev Rai — *Pr. Director of Audit, Air Force & Navy*
9. Shri R.P. Singh — *Director (Report) Office of DGA DS New Delhi.*

2. The Committee considered the following draft Report and adopted the same subject to certain modification and amendments as indicated in Annexures I*, II* and III.

(i) *** **

(ii) *** **

(iii) Draft Report on action taken on the 122nd Report of PAC (8th Lok Sabha) regarding BOXN Wagons.

(iv) *** **

3. *** **

4. With regard to the draft Report adopted by the Committee as per Para No. 2 above, the Committee authorised the Chairman to finalise these draft Reports in the light of verbal changes and minor modifications / amendments arising out of factual verification by the Audit and present the same to the House.

5. *** **

6. *** **

The Committee then adjourned.

* Not appended.

Annexure III

AMENDMENT/MODIFICATIONS MADE BY THE PUBLIC ACCOUNTS COMMITTEE IN THEIR DRAFT 122ND REPORT (8TH LOK SABHA) RELATING TO BOXN WAGONS

Page	Para	Line	For	Read
5	1.9	16 to 20	'would like to criticallynorms'	would like the Ministry to review if the existing norms are adequate and take steps to enforce these norms or revise them.
5	1.9	20	The Committee would	The Committee would also
5	1.9	22	so that there is no	to avoid
11	1.15		Substitute the existing	Para No. 1.15 as follows: "1.15 Observing the problems faced by the coal companies and the consumers like power stations and the casual approach of the Railways in solving their problems, the Committee felt in 1988 that investigation into the complaints of the Coal companies and other bulk consumers like power stations should have been carried out immediately when BOXN Wagons were pressed into commercial operation and had hoped that the Ministry would be responsive and considerate to users in future.

However, the Committee are not satisfied with the reply of the Ministry. The Committee desire that urgent steps be taken to remove the grievances of bulk coal consumers like power stations and suitable administrative mechanism be evolved for the purpose. The Committee would like to be apprised within three months of the further action taken in this regard."

LIST OF AUTHORISED AGENTS FOR THE SALE OF LOK SABHA
SECRETARIAT PUBLICATIONS

Sl. No.	Name of Agent	Sl. No.	Name of Agent
ANDHRA PRADESH		UTTAR PRADESH	
1.	M/s. Vijay Book Agency, 11-1-477, Mylargadda, Secunderabad-500 361.	12.	Law Publishers, Sardar Patel Marg, P.B. No. 77, Allahabad, U.P.
BIHAR		WEST BENGAL	
2.	M/s. Crown Book Depot., Upper Bazar, Ranchi (Bihar).	13.	M/s. Madimala, Buys & Sells, 123, Bow Bazar Street, Calcutta-1.
GUJARAT		DELHI	
3.	The New Order Book Company, Ellis Bridge, Ahmedabad-380 006. (T. No. 79065)	14.	M/s. Jain Book Agency, C-9, Connaught Place, New Delhi, (T. No. 351663 & 350806)
MADHYA PRADESH		15.	M/s. J.M. Jaina & Brothers, P. Box 1020, Mori Gate, Delhi-110006 (T. No. 2915064 & 230936).
4.	Modern Book House, Shiv Vilas Place, Indore City. (T. No. 35289).	16.	M/s. Oxford Book & Stationery Co., Scindia House, Connaught Place, New Delhi-110001. (T. No. 3315308 & 45896)
MAHARASHTRA		17.	M/s. Bookwell, 2/72, Sant Nirankari Colony, Kingsway Camp, Delhi-110 009. (T. No. 7112309).
5.	M/s. Sunderdas Gian Chand, 601, Girgaum Road, Near Princes Street, Bombay-400 002.	18.	M/s. Rajendra Book Agency, IV-DR59, Lajpat Nagar, Old Double Storey, New Delhi-110 024. (T. No. 6412362 & 6412131).
6.	The International Book Service, Deccan Gymkhana, Poona-4.	19.	M/s. Ashok Book Agency, BH-82, Poorvi Shalimar Bagh, Delhi-110 033.
7.	The Current Book House, Maruti Lane, Raghunath Dadaji Street, Bombay-400 001.	20.	M/s. Venus Enterprises, B-2/85, Phase-II, Ashok Vihar, Delhi.
8.	M/s. Usha Book Depot, 'Law Book Seller and Publishers' Agents Govt. Publications, 585, Chira Bazar, Khan House, Bombay-400 002.	21.	M/s. Central News Agency Pvt. Ltd., 23/90, Connaught Circus, New Delhi-110 001. (T. No. 344448, 322705, 344478 & 344508).
9.	M & J Services, Publishers, Rep- resentative Accounts & Law Book Sellers, Mohan Kunj, Ground Floor, 68, Jyotiba Fuele Road Nalgaum, Dadar, Bombay-400 014.	22.	M/s. Amrit Book Co., N-21, Connaught Circus, New Delhi.
10.	Subscribers Subscription Services India, 21, Raghunath Dadaji Street, 2nd Floor, Bombay-400 001.	23.	M/s. Books India Corporation Pub- lishers, Importers & Exporters, L-27, Shastri Nagar, Delhi-110 052. (T. No. 269631 & 714465).
TAMIL NADU		24.	M/s. Sangam Book Depot, 4378/4B, Murari Lal Street, Ansari Road, Darya Ganj, New Delhi-110 002.