The General Managers
All Zonal Railways

Sub.: Action Plan to Improve Availability and Productivity of BCN Rakes.

In order to improve the availability and productivity of BCN rakes a joint Action Plan has been formulated. Copy of the same is enclosed (Annex-I) for immediate implementation.

2. Railways should ensure provision of necessary infrastructure and other facilities as outlined in the Plan so that quality of examination/repair of train is not compromised.

3. The implementation of Action Plan should be monitored and monthly feedback (as per proforma enclosed—Annex-2) be submitted to this office by 10th of each month, for the information of the Board.

4. This has the approval of the Board (CRB, FC, MM, MT, ME, ML & MS).

Encls.: As above.

(G.C. Budhalakoti)
EDME(Frt.)

Copy to: EDTT(M)/Railway Board.
Action Plan to Improve Availability and Productivity of BCN Rakes

Indian Railways has set for itself a target of 875 MT in 2008-09, which is nearly 80MT over actual loading in the last year. To achieve this target, there is a need to improve the availability and productivity of covered wagons. All aspects for improving the availability and productivity have been examined in detail. An action plan has been formulated as detailed below. Implementation of this action plan will help in additional loading of nearly 5MT in the remaining period of the current financial year.

1. Deferment of POH of BCN type wagons:
   POH of all, air brake covered stock (BCN type), falling due for POH between October 2008 and March 2009, has been deferred by six months. Necessary instructions in this regards have already been issued to Zonal Railways vide letter No.2007/M(N)/951/45 dated 8.8.2008.

   The proposed deferment of POH of BCN wagons for six months shall result in additional loading of about 0.4 MT in this year on account of additional availability, of 2.3 rakes of BCN per day.

1.1 Deferment of phasing out plan of BCX stock upto 31.3.2009:
   Premature condemnation of BCX stock, as advised by Board under phasing out plan of vacuum brake stock, should be deferred upto 31st March 2009.

1.2 Removal of guard wagons of BCN in BTPN rakes:
   Guard wagon of BCN in BTPN rakes was at the level of 158 wagons as on 30.6.2008. This has now reduced to 49 wagons as on 25.9.2008. Currently guard wagons in BTPN rakes are unloading BOXN wagons. It is targeted to remove all BCN wagons in BTPN rakes by 31.10.2008 thereby generating additional four rakes of BCN stock. This is expected to result in additional loading of nearly 0.8 MT per year.

2. Reduction in ineffective and piecemeal fit of BCN stock:
   To reduce ineffective of wagons and to improve the availability, following action will be taken:

   a) Two placements/releases of wagons per day in/from ROH depot/sick line:
      i) There shall be two placements/releases per day, if required, of ROH and sick wagons in major sick lines/ROH depots. This will be monitored on day-to-day basis by DRM at Divisional level and CFTM/CRSE at Zonal level.

      ii) As far as possible, these wagons will be repaired /attended on same day. This may require additional unit exchange spares like bogies, wheels, brake equipments, coupler, draft gear, etc. These equipments will be arranged from the workshop as POH of BCN
wagons has been deferred by 6 months. CMEs to organize. The availability of maintenance spares (stock items) at ROH depot/sick line will also require improvement. GM may delegate necessary powers to Sr.DMEs for arranging out of stock/non-stock spares required for maintenance of wagons/ tools and equipments.

iii) To overcome shortage of staff, railways may outsource overhauling of sub-assemblies to OEMs. To work out documents/procedure, GMs may nominate a committee of Mechanical and Finance officer. Railways may also arrange facilities for illumination, welding, material handling and minor repairs through urgent purchase/hiring necessary equipments and services as well as spares from market. DRM to review the position weekly.

b) Reduction in piecemeal fit stock:
The piecemeal fit holding of Jumbo has come down from a level of 2721 wagons (31.3.2007) to 1064 wagons (25.9.2008). It is targeted to get this down further to a level of 950 wagons by 31.10.2008. TXRs will make all efforts to keep the ineffective of covered stock lower than targeted.

Zonal Railways to monitor the ineffective of BCN type wagons and reduce the same by 5% below the target.

3. Reduction of terminal detention for loading and unloading:
It is seen that detention for BCN stock at terminals for loading/unloading is generally more than 24 hours. It is seen that detention during release to departure of the rakes (which is within the control of Zonal Railways) is generally very high. The Zonal Railways should make conscious efforts to reduced overall detention to BCN stock for both loading and unloading. Detention of BCN rakes particularly high on ECoR, ER, SCR, SER & SWR. GMs should monitor and ensure that detention of BCN stock is reduced at least by 10% from the present level.

4. Reduction of detention for examination of rakes:
It is seen that on an average each rake gets detained for about 14 hours for examination. Out of this, about 3 hours detention is from arrival of train in yard to its placement on the nominated lines for examination, 4.5 hours for examination and remaining 6.5 hours detention is for departure of the train after release from examination. Vide Board’s letter No.2008/M(N)/951/13 dated 3.6.2008, Railways have been advised to analyze and identify causes for undue detention to freight trains for examination on their system and take appropriate measures to reduce time taken in each of these activities by 21.4%. Reduction by 21.4% would mean saving of about 1.7 hour detention per train examination. These instructions need to be monitored for implementation. This will be monitored by DRM on day-to-day basis. Weekly review shall be done at COM level.
5. **Introduction of BCNHL wagons:**
Prototype of new high capacity BCNHL wagons is almost complete. RDSO should complete prototype testing and approval of these wagons on top priority. Once prototype is approved, it should be possible to induct average two rakes per month of BCNHL wagons (consisting of 58 wagons per rake) in the system during this season.

6. **Segregation of BCN/BCNA type of wagons and enhancing speed:**

6.1 In order to derive benefit of higher rake throughput of BCNA type wagons and enhance speed of BCN train, BCN/BCNA type wagons shall be segregated in the following combinations:

<table>
<thead>
<tr>
<th>Group A</th>
<th>BCN + BCNM1</th>
<th>(41 wagons per rake)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group B</td>
<td>BCNA + BCNAM1 + BCNAHS + BCNAHSM1</td>
<td>(43 wagons per rake)</td>
</tr>
</tbody>
</table>

Around 200+ rakes have already been segregated in the combination of Group - B.

To upgrade speed of segregated rakes, following conversion of wagons should be taken on top priority:

<table>
<thead>
<tr>
<th>SN</th>
<th>Wagon type</th>
<th>To be converted to</th>
<th>Final speed of converted wagon (KMPH)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BCN</td>
<td>BCNM1</td>
<td>Empty: 80</td>
</tr>
<tr>
<td>2</td>
<td>BCNA, BCNAM1 &amp; BCNAHS</td>
<td>BCNAHSM1</td>
<td>Empty: 100</td>
</tr>
</tbody>
</table>

*CC+6+2t

Note: Implementation of other technological inputs in bogie like AAR approved grease, CCSB (PU design) etc. approved by Railway Board and issued by RDSO may also be ensured on converted rakes.

However, in view of deferment of POH of BCN stock by six months, it would not be possible to undertake this work in workshops. Therefore, zonal railways should plan conversion in open line on top priority. All the CC rakes of BCN type wagons should be converted for higher speed as mentioned above on priority. GM may assist in emergent procurement of material/out sourcing for conversion.

6.2 **RDSO to organize following within next two months:**

a) Examine feasibility of issuing provisional speed certificate of wagons loaded with CC+8 of at 65kmph and issue speed certificate accordingly.

b) Organize oscillation trials of these wagons (BCNM1, BCNAM1 and BCNAHSM1) with CC+8 loading and decide final speed potential.

c) Also organize oscillation trials of BCN wagons with bogie of BCNAHSM1 with CC+6/CC+8 loading to find out increase in speed potential in loaded/empty condition.
7. Increase in number of Close Circuit rakes for cement loading (Cluster System):

In order to enhance availability of close circuit rakes of BCN for cement loading, four circuits have been identified. Detailed instructions for operation and maintenance of close circuit rakes in these circuits are given as below:

7.1 Circuit-1

| Satna- WCR (Mother Base) |
| Gonda- NER |
| NRPA- ECR |
| I.KO- NR |
| GMC- NCR |

This circuit will primarily serve Satna Cement cluster and loading of Jumbo rakes from WCR into NR NER, NCR & ECR. In this circuit, close to 8.5 rakes/day at all the loading points in the circuit are expected to materialize. Moreover, in this circuit after unloading empties primarily moved back to WCR.

30 rakes will be approximately required in Satna base. However, other 4 points apart from Satna do not have ROH facilities. CC rakes have to be formed from off ROH/POH wagons only. Hence, 15 rakes each in this circuit will be inducted from NR (from Ambala) and Satna.

7.2 Circuit-2

| Vadodara- WR (Mother Base) |
| Madar NWR |
| SSB NR |
| BTI NR |
| Ratlam WR |

This circuit will primarily serve Ajmer and Chanderia Cement cluster and loading of Jumbo rakes from NWR into NR & WR and foodgrain from NR to NWR and WR and loading of salt, fertilizers, cement from WR to NR and NWR and WR. In this circuit, close to 11 rakes/day at all the loading points in the circuit are expected to materialize. Moreover, in this circuit after unloading empties primarily move back to NWR and WR.

40 rakes will be approximately required in Vadodara base. However, Vadodara does not have ROH facilities and CC rakes have to be formed from off ROH/POH wagons only. these will be inducted from NR (from Khanalampura) and Vatva(WR). 20 rakes each will be inducted from Vatva(WR) and KJGY (NR).

7.3 Circuit-3

| Vijayawada SCR(Mother Base-1) |
| Jolarpet SR (Mother Base-2) |
| Whitefield SWR |
| Podanur SR |
| Erode SR |


This circuit will primarily serve Jaggapetta Cement cluster and foodgrain movement from SCR to SR and SWR and loaded/empty movement from SR and SWR back to SCR. In this circuit, close to 31 rakes/day at all the loading points in the circuit are expected to materialize. Moreover, in this circuit after unloading empties primarily move back to SCR.

Although 120 rakes will be approximately required in this circuit, infrastructure capacity does not exist to maintain so many rakes at the 2 Mother bases. Therefore, initially 30 rakes can be based at Vijayawada and 20 at Jolarpet. Subsequent increases can be made duly seeing the performance and infrastructure augmentation at these locations. This will take care of a loading of approximately 10 rakes per day.

7.4 Circuit-4 BSIP- SECR (Mother Base-1)
NMP- SER (Mother Base-2)
CP- ER

This circuit will primarily serve Cement cluster of SECR and SER to ER and movement of empties back to SER and SECR. In this circuit, close to 10 rakes/day at all the loading points in the circuit are expected to materialize.

30 rakes will be approximately required in BSIP base and 10 rakes will be required in NMP base.

7.5 Special conditions for maintenance and operational discipline for the above circuits:

i. CC rakes have to be formed from off ROH/POH wagons as far as possible.

ii. Each CC rake shall be based for maintenance on CC pattern at a nominated mother base depot of the Circuit (WCR- Satna, WR- Vadodara, SCR- Vijayawada, SR- Jolarpet, SECR- Bilaspur, SER- Nimpura). The name of the mother CC base and also the ZRs defined in the Circuit should be clearly mentioned on the BPC.

iii. The rakes should be returned back to the nominated Mother Base Depot as per validity of BPC.

iv. The BPC of such CC rakes shall be valid for 6000 km or 30 days whichever is earlier, on the ZRs defined in the Circuit, as a trial measure. In case kilometers are not logged on BPC, the validity of BPC should be treated as per the Railway Board’s instructions for premium end-to-end rakes.

v. Infrastructure facilities at most of the nominated CC points are below ‘A’ category, which is an essential requirement for maintenance of 6000 km CC rakes. Hence, facilities at these points should be upgraded to ‘A’ category on top priority. Till the facilities are upgraded to ‘A’ category, DRM should ensure that proper lighting arrangement, material handling equipments, welding facilities etc. are made available in these yards. If
required, by hiring so that quality of examination/repairs and safety is not compromised.

v. a) In empty condition--In case the CC rake becomes invalid or nears invalidity at outstation bases in the specified circuit, it can be examined and BPC may be revalidated once at the outstation depot (within the circuit) for a period of 10 days, so that it can move to its nominated mother CC base for examination and issue of fresh BPC on CC basis. The rake should be returned back to nominated CC mother base depot within this 10 days period otherwise it shall lose CC character and treated as reformed rake.

b) In loaded condition-In case BPC become invalid at outstation in the circuit, it will be examined at the next available TXR point in the direction of movement and BPC shall be revalidated for movement in the specified circuit upto its nominated mother depot via unloading point. Examination in loaded condition should be in exceptional circumstances.

vi. In case of examination and revalidation of a rake at other than its nominated mother CC base, it is essential that in case of sick marking, the examination point have to try for in-situ repair and as far as possible also replenish the sick wagons.

vii. Loading/Unloading of rakes will only be confined to the Railways defined in the circuit. In case loading is not on the defined circuit, the rake shall loose its CC character and will be logged in FOIS.

viii. The rakes should be given a unique nomenclature such as Satna-1, 2 etc. These nomenclature rakes should be entered in FOIS and monitored, including breaking/loss of CC rakes.

ix. FOIS terminal should be provided with TXR control and Sr.DME/C&W and also with CRSE (Frt.) and Headquarter TXR control of the nominated CC bases. GM/DRM should provide terminal equipments and connectivity under their extent powers within two months. CAO/FOIS to provide assistance, if required.

x. Besides special conditions mentioned herein above, with respect to maintenance and operation of these special CC rakes, all other general instructions regarding maintenance of air braked freight stock and 6000 km CC rakes, issued by Board from time to time, shall be observed.

8. GMs should carry out fortnightly review of the progress of implementation of the above-mentioned decisions of the Railway Board with DRM's and concerned PHODs and submit monthly progress report to Railway Board.

(G.C. Budafakoti) 26/03/05
EDME(Frt.)

(D.P. Pande) 26/03/05
EDTT(M)
| SN | Item | Target | NIL POH stocking @ | NIL POH stocking on | Removal of Guard Wagon of BCN stock | NIL BCN wagon at Guard Wagon on | PRI TMT takes | Minimum possible | 5% less than target | Reduction of terminal detention: | 3 | BTM TMT takes | NIL BCN wagon in | BGN/BCNAHMI/BGCASHMI to | BGN to BCNAHMI | Conversion of | 6 | Detection of examination of rake | Reduce by 10% | Reduce by 21.44% | 100% Segregation | Segregation of BGN & BCNAHMI | 7 | 8 |
| **Remarks** | **Cumulative Status** | **Monthly Status** | **Target** | Item | Item | Item | Item | Item | Item | Item | Item | Item | Item | Item | Item | Item | Item | Item | Item | Item |

Program for Feedback on Implementation of Joint Action Plan (Modified)

Annexure - 2
### Annexure 2

**On Condition basis**

<table>
<thead>
<tr>
<th>Item</th>
<th>Target</th>
<th>Monthly Status</th>
<th>Cumulative Status</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
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</tbody>
</table>

- Provision of facilities for illumination.
- Necessary equipment for repair through rental purchase/hiring of welding materials handling and minor work.
- Manpower arrangements to overcome shortage ofadvised.
- Present status and action taken tobe notified CC bases.
- DME/CZV and CRSEFR of all HG, and DH, TXR Controls, S.
- POIs Terminal

- (d) Circuit 4 (Bilel, as Nimpara)
- (e) Circuit 3 (Vimal, as Nilampur)
- (f) Circuit 2 (Vadodara)
- (g) Circuit 1 (Sana)

Increase in number of CC take:

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*(Page 2 of 2)*