MINUTES

OF

SIXTH WMG MEETING

DALHOUSIE

[illegible] SEPTEMBER, [illegible]

[illegible]

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Minutes of 6th WMG Meeting held at Dalhousie on 11th and 12th September'09

I. Inaugural Address:-

CME/N. Rly welcomed MM and all other participants in this meeting. He stressed the importance of wagon maintenance and its contribution in overall performance of IR.

II. Keynote Address by MM:-

1. This meeting is being held after a long time, so there is a loss of continuity. I hope, in the future we'll have more regular meetings.

2. Wagon is the main earner of IR, 70% of the IR earnings are on account of wagons.

3. Freight car is no longer of a simple design; it has lot of technology involved in its design.

4. One rake of new-design wagons cost approx. 15 crores. So, now there is change in the philosophy from engine can't wait to wagon can't wait. Hence, 'Wagon on Load' Scheme has been introduced to reduce the detention of wagons. The importance of Wagon availability and utilization has to be appreciated and due importance has to be given to it.

5. Air brake fleet was introduced more than 25 years ago, in the early 1980s. By now, we have enough experience of such wagons. Vacuum brake is on way out and air brake is going to be the main stay of IR. Deliberations have to be started to phase out vacuum brake and four wheeler stock in the coming years.

6. As per Vision 2020, IR will be carrying 1800 MT of originating traffic, which is more than double the current loading of 850 MT. So, additional wagons will be required for achieving the target. Currently, we have approx. 1,70,000 air brake wagons and there is plan to add 20,000 wagons every year. In the current year, target is to add 18,000 wagons. Hence, there is need to strengthen the wagon maintenance infrastructure.

7. New high-productivity wagons having higher pay to tare ratio and higher axle load will have to be designed. RDSO is developing new wagon designs keeping these requirements in mind. Some of such wagons have already been put in service e.g. BOXNHL wagon. BCNHL wagon with higher MMD. One rake of BCNHL can carry 58 wagons with increase in rake throughput of 40 % over rake of BCNA wagons with CC+8+2 t loading.

8. In introduction of new wagon designs, there are teething troubles. Liaisoning with all concerned has to be done to sort all such issued quickly.

9. [illegible]

[illegible]

statistics show increase in detachment of wagon during examination. This is not a happy situation. Sickline attention is not a credit, it is bad as it is unplanned maintenance. Normally, it should be 'zero'. High sickline outturn reflects on the poor quality of POH and ROH. Whenever a wagon goes out of sickline after maintenance, the wagon should be as good as POH/ROH fit. Mentality of making the wagon fit for next few hundred kilometres should be given up. This is achievable with improvement in logistics, materials, tools and infrastructure. During field inspection highest stress should be given on quality of wagons.

11. All ROH depots should have NTXR examination as it is critical assessment of our quality of work. We are investing heavily in wagon maintenance and deserve to get the best.

12. List of modifications, issued by RDSO, to be carried out in wagons during POH/ROH should be prominently displayed in workshops and depots/sicklines as has been done in DCW, Patiala. This will spread awareness.

13. In the agenda there are items pertaining to train parting, door operating mechanism, LSD not working, etc. We have been discussing these issues for the last 20 years. We can't overcome these problems till we work very seriously on them.

14. BOXNHL wagons have been cleared for operation at 75 Kmph by RDSO, but Rlys have not processed for CRS sanction. ECR, NR & NCR are urgently required to take action in this regard. Very soon these wagons will be plying on other railways also.

15. 22.9 t axle load (CC+8÷2) has come to stay. We should strive for a speed of 75 Kmph in loaded condition. RDSO should find a solution for this.

16. We are trying to improve the subsystem of wagon. Data show that brake rigging is the major cause of sickmarking of wagons within 90 days of POH. One of the improvement in this direction is the introduction of Bogie Mounted Brake System, which has been in use in coaching for the last 10 years. All new procurements of wagons will be with BMBS. Three rakes of BTPN wagons with BMBS have recently been put in operation. Railways running BMBS can pool their information regarding various issues related with BMBS and get all such issues sorted out.

17. Very soon instructions will be issued to have twin pipe brake system in wagons. RDSO advised 20 years ago for it, but field officers said it is difficult to maintain due to shortage of material, hence single pipe operation started. Now, history should not be repeated. Permissiveness should not be allowed. It will help in working, especially with heavier and longer trains. Drivers do not have patience, so they start trains without waiting for complete release, resulting in train parting. Twin pipe is an operating necessity now.

18. Sliding of unbrakables has become very high. There is lack of study of various causes for sliding of unbrakables. Hiding behind wheel flat or damage during mechanised [illegible]

faced in this regard should be highlighted. Si te of loading/unloading should be inspected and win-win solutions are to be found.

19. There are six to seven embedded empties in loaded rakes resulting in large revenue loss. Mechanical certified the wagons to be fit, but traffic expresses inability to load them. Even if two wagons run empty in a rake, it results in a 3% revenue loss. Total revenue loss on account of running of embedded empties is more than the total wagon maintenance budget! So, there is need to tackle this problem of unloadable empties on war-footing. Railways must realize it, quantify the problem and take corrective action. Arranging attention at loading points will pay. In case indiscipline is found, strict action should be taken. This is an important area to concentrate upon.

20. Recently, two cases of cold breakage of axle took place just after shop attention. This is a serious matter. No dilution of instructions in this regard should be permitted. Each case of cold axle breakage has to be dealt with as an accident and responsibility fixed. This should not be taken as a routine activity.

21. Instructions to provide additional springs in wagons were issued more than 3 years ago, but even after 2 ROH cycles, these have not been provided. This is sorry state of affairs. Before end of this year all the wagons should be provided with additional springs. It is a very important activity as non-provision of springs may lead to damage to bearings, etc.

22. CC rakes are formed Off POH/ROH wagons. Target should be that for at least three examinations, the sickmarking should be 'zero'. This will call for lesser shunting. Lesser shunting requirement will reduce the detention of rakes from 12 hours to 6 hours. Mechanical Department says it is not responsible for shunting time. but traffic says mechanical is responsible as shunting has to be done because of the sickmarking. Overall objective is to how to reduce it.

23. The system of repair of minor defects in yard has to be strengthened. At least in 15 to 20% of the rakes examined, sickmarking should be 'zero'. We should give incentive to staff if they achieve the target, but not at the cost of safety.

24. We hope to have fruitful discussions so that by the end of the meeting we have a clear mandate on the direction that wagon scenario will take.

III. Address by AM (M) on 13th September:-

1. Weakness in wagon maintenance is not so much for reasons like staff shortage, training, equipment, infrastructure. It is on account of management which is not sufficiently involved with wagon maintenance and prefers to delegate it to junior functionaries. Besides, attitude towards wagon maintenance is luke-warm. It is not viewed from the angle of serving the needs of traffic dependent basic User-Industries will always run smiling in the Railways.

3. Information system in wagon domain is out of reality. We are unaware of the problem of embedded empties as traffic department does not highlight it enough. A regular mechanism must be created to monitor the movement of embedded empties and then an action plan must be worked out to eliminate it. On SWR, when WDG4 locos were used, two in front and three in rear, instead of 8 WDG3 locos, 3 in front, two in middle and three in rear, for ghat movement, two massive derailments took place. On investigation it was found that accident took place due to embedded empties. These were removed and thereafter there has not been any problem in movement with WDG4 locos. There are AAR standards for embedded empties, but IR has no such standard. When drive for taking out embedded empties started in SWR, daily 50 wagons had to be detached. Even traffic department was not aware of the extent of the problem. Railways should evolve strategies to liquidate embedded empties at some select nodal points by erecting sub-depots.

4. The quantum of empty wagon movement has to be understood. It is unavoidable to some extent and hence an overhead. Energy consumption on account of empty movement is enormous. If we can reduce empty movement, substantial energy will be conserved, which will dwarf the conservation attained by other means like efficient lights, etc.

5. In premium examination there are 2.5 loading/unloading cycles. C&W should contribute in refining operations so that L/E cycles increase even further. Failures have to be eventually linked to number of L/E cycles sustained.

6. Tackling of unloadable wagons has to be monitored on a daily basis. Strategy to liquidate 'C' category unloadables should be dictated by the need to reduce transit times for consigning them to Shops. Moderately 'C' could be done in sickliness, through Works contracts. If need be, SWR should quickly finalise a model in this regard.

7. In 'C' category unloadables, mainly attention to side walls and floor plate is required. Repair to be planned wherever required. Workshops to do 'C' category unlodables which require complete rebuild. In open line, partial repair of 'C' category unlodables can be done. Procedure of replacement of side wall without disturbing the end wall (i.e., moderately 'C' category wagons) should be deliberated by Camtech, in consultation with RDSO. A trial can be organized for this purpose by Camtech. All such work in open line should be done in revenue. RSP funds can be reserved for more important activities. Sicklines should get their due share of work.

8. GDR is requirement of GR and we are not aware of it. Even though C&W is not involved in GDR, Mechanical officers should know how much breach of GDR is taking place.

9. Underside examination of trains is very important. We should constantly monitor CCTV at examination shed and all such advice examination points should be used to [illegible]

11. Must change items list must be finalized. Till then, Railways must revise their imprest schedule considering new wagon designs. AAC should be critically reviewed by the Railways. CRSEs to be personally involved in this exercise.

12. The imprest schedule should be displayed in ROH depots and consumption co-related frequently.

13. Nine WILD equipments have been installed till date, but PTC of only four equipments has been issued. Reasons should be ascertained by EDME(Dev). ILF for WILD should be revised after thorough study.

14. In pink book provision of 350 crores has been made for OMRS. Judicious utilization of these funds should be ensured.

15. Idling of wagons on traffic account is generally more than that on mechanical account. However, mechanical department does more of answering on the subject. Mechanical engineers should embrace the subject of detentions comprehensively. There may be infrastructural deficiencies in the yard shunting, signals, shunting necks, shunting loco problem, etc. Mechanical officers should get willingly involved in addressing problems, wherever the root might lie.

16. Getting CRS sanction for issue of speed certificates has to be coordinated by GM (Engg.), but in case these are not issued timely, mechanical deptt is the most affected party. Hence, CME has assumed the role of GM (Engg.).

17. CRSEs should become 'shadow depositories' of speed certificate.

18. One rake of BOXNHL wagon may be converted by ECR to twin pipe brake system, which can be executed as works contract.

IV. Presentation on Areas of New Technology:- Presentation on 'Areas of New Technology and Requirement of Maintenance facilities by the Railways' was given by EDSW. Following areas of new technology were mentioned:-

1. Stainless Steel (IRS:M44)
2. Lock Bolting
3. CRF sections
4. Improved quality coupler and draft gear
5. Modified brake system
6. Bogie Mounted brake system
7. PU Painting
8. Swing Motion bogie

iii. Maintenance Manual for wagons should be revised at the earliest. Meanwhile, concise instructions on minimum facilities required for maintenance of stainless steel wagons should be issued immediately by Camtech and circulated to all the railways.
iv. Procedure for repair of stainless steel wagons should be prepared by ECR in consultation with RDSO. Similar procedure for BCNHL wagons should be developed by SCR.
v. ECR was asked by Rly. Bd. to identify the locations where external damage to BOXNHL wagons is taking place, it should be done at the earliest.
vi. ECR should submit monthly report on problems being faced in the imported couplers and draft gears to RDSO with copy to Railway Board.
vii. NR is facing problem in procurement of spares for draft gear of Container rakes. It should be looked into by RDSO.
viii. RDSO should organize Seminars at various places to spread awareness about areas of new technology in wagons.
ix. An economical alternative to PU paint should be proposed by RDSO.

V. **Presentation on 'Safety areas for Prevention of Leakages and fire in tank wagons'-** Presentation on 'Safety areas for Prevention of Leakages and fire in tank wagons' was given by ED/Camtech. Following areas were covered in this presentation:-

1. Important relevant documents (G-65, G-87, G-90, Red tariff rule No. 20 & Joint Safety Circular issued by WCR)
2. Reasons of leakages in tank wagons
3. Precautions to be taken during leakages, shunting and fire
4. Suggestions for prevention and better management of leakages/fire/shunting
5. Tools & equipments required by staff to deal with such unusuals

In this regard following instructions were issued:-

i. In case of accident of tank wagons, the responsibility of railways/other parties involved should be clear to all.
ii. Present instructions for prevention of leakage & fire on tank wagons are too cumbersome to read. A committee should be constituted for:-
a. Finalizing the instructions for prevention of leakage & fire on tank wagons in simple language which can be understood easily by the line staff.
b. Finalizing the list of all equipments including safety equipments (explosimeter, etc.) which should be required in dealing with such eventualities
c. Any other issue pertaining to maintenance and operation of Tank wagons
iii. All CRSEs to get a copy of the Safety circular issued by WC Rly for taking similar action at their end.
iv. Coupler with top and bottom shelf should be provided in all tank wagons carrying hazardous goods on the pattern of practice prevalent in North American Railroads. A note in this regard should be furnished to Board.

VI. Discussion on Agenda Items:-

Agenda Item No.1: To finalize the list of must change items for wagons during POH/ROH

Proposed By: S.Rly

Discussions:
The list of must change items for POH and ROH varies from workshop to workshop and depot to depot. For ensuring uniform maintenance standards, must change items needs to be standardised.

There was a difference of opinion regarding necessity of some items being made must change e.g. Centre Pivot. Also, there is a variation in the extent of change of proposed items being done by workshops/depots during POH/ROH.

The items proposed for must change should also be linked with problems being faced on account of respective items in the yard examination. Hence, it is important to know the sickmarking/yard repair on account of proposed items. This information should be collected by all the Railways and submitted to RDSO.

	Group's recommendation	Railway Board's decision
1	RDSO will circulate a proforma to all the Railways asking for information about extent of change of items being done in POH & ROH and sick marking/yard repair on account of such items. Thereafter, RDSO will submit a techno-economic report to Rly. Bd. for taking final decision. This exercise should be completed within two months.	Approved

Agenda Item No. 2 Problems of DOM in BOBRN wagons

Proposed By: ECo. Rly., S.E.C. Rly., S.E. Rly.

Discussions:
Presentation was made on analysis, regarding failure of DOM components & incidental opening of bottom doors.

RDSO's M&C dte had analyzed the failed components collected from ER & SER, which included forged hinge, bronze bush, eye bolt, square shaft, adjustable bushing & Bearing (for square shaft). It was found that the failure is due to either material defect or manufacturing defect. STR's for the components have been issued & RDSO's QA Directorate has been advised to include these critical items of 'Door Operating Mechanism' for inspection by RDSC & also develop vendors as per the STR.

Accidental opening of door is taking placed mainly because of improper over the center locking of bottom flap door and opening of the secondary lock. RDSO has modified dimensions of the three DOM levers, to prevent infringement & improve locking in the door and issued drawing no.WD-92081-S-55 (Alt. 3). This also reduces stresses in the system. In secondary lock, dimensions have been modified, to improve locking of DOM cylinder piston and issued drawing no. WD-92081-S-56 (Alt. 5).

Instructions for bottom door adjustment are given in G-73 & have to be followed.

E. Rly informed that they are not having any problem of incidental opening of Doors. They are deputing the staff to check the proper working of DOM before loading. Eco Rly to study the system and accordingly take action.

	Group's recommendation	Railway Board's decision
1	RDSO will circulate the list of approved sources for DOM components to all the Railways	Approved
2	Railways should procure the DOM components from RDSO approved sources only and inspection of such items shall be carried out 100% by RDSO.	Approved
3	Railways should ensure stocking of adequate spares for maintenance of DOM.	Approved
4	RDSO to give simple instructions to field staff for checking the proper working of DOM within 3 months.	Approved

<table>
<tr><th></th><th>Group's recommendation</th><th>Railway Board's decision</th></tr>
<tr><td>5</td><td>Modifications in DOM should be done as mentioned below:-
<table>
<tr><th>S. No</th><th>Item</th><th>Schedule</th></tr>
<tr><td>1</td><td>Use of modified forged door hinge to IS 1875(Class IV) & with provision of middle rib</td><td>In POH</td></tr>
<tr><td>2</td><td>Modification in the outer door hinge lug</td><td>In POH</td></tr>
<tr><td>3</td><td>Provision of quick coupling for external air supply</td><td>In POH</td></tr>
<tr><td>4</td><td>Material upgraded for Bearing housing</td><td>In POH & as replacement</td></tr>
<tr><td>5</td><td>Provision of full section in bronze bush</td><td>In ROH & as replacement</td></tr>
<tr><td>6</td><td>Modification to the End & central levers</td><td>In ROH & as replacement</td></tr>
<tr><td>7</td><td>Modification to the secondary lock hook plate</td><td>In ROH & as replacement</td></tr>
<tr><td>8</td><td>Modification of the door flap by provision of door flap stiffener & door hold stiffener</td><td>In ROH & sick line</td></tr>
</table></td><td>Approved</td></tr>
<tr><td>6</td><td>Status of implementation of modifications shall be discussed in the next meeting</td><td>Approved</td></tr>
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Agenda Item No. 3 **Maintenance issues for 25 t axle load operation on existing wagons**

Proposed By: S.E. Rly. & East Coast Railway

Discussions:-

a) Excessive wear of brake blocks -

SE Rly has been experiencing excessive wear of Brake Blocks in 25t axle load operation.

Wear rate of Brake Block at 25t axle load will be more than that at 22.9 t. But, due to restriction in speed of 25 t axle load operation the wear rate should not be abnormally high. This has been verified in RDSO Labs.

ECo Rly which is running BOY wagons at 25 t axle load is not experiencing the excessive wear of brake blocks in such wagons.

However, in this regard RDSO has planned to carry out comparative trial for assessing the performance of CBBs of all the firms in CKP division, S.E. Railway. Test scheme has already been advised to S.E. Railway.

b) Severe wear in wall of bottom Centre Pivot-

ECo Rly has been experiencing problem of severe wear in wall of bottom Centre Pivot in 25 t axle load operation.

Investigation indicates that excessive wear can be due to absence of CP washer and use of worn out/unequal sizes of wedges & bogie liners. These factors create clearances, which permit rotation/canting of the bogie bolster, causing severe wear.

ECo railway to carry out in-depth study of the problem of severe wear in wall of bottom centre pivot and if the wear is in one direction only, arrange periodic reversing of rakes.

c) Premature failure of CTRBs

Eco Rly has been experiencing problem of premature failure of CTRBs in 25 t axle load operation.

With the increase in axle load, the L_{10} life of the bearings will be less.

It was informed by ECo Rly that there have been eight cases of bearing [illegible] from April to July'08. However, on examination it was found that the cause was [illegible] of front grease seal shifting.

condemning dimensions). These aspects should be checked by the Rly during investigation of the failed bearings.

Railways are not carrying proper analysis/investigation of bearing failures. Also, the requisite data for bearing failure analysis is not being provided by the Railways to RDSO.

RDSO had carried out Quality Audit of some workshops and on this basis issued instructions to Rlys regarding maintenance of bearings in shops/depots/yard.

Quality audit of the Railway workshops has also been conducted by M/s NEI & M/s Timken. Deficiencies noticed during the audit have been conveyed by the firms to respective workshops.

Currently, there is no Codal life prescribed for CTRB. Railways have been requesting RDSO to fix the Codal life. From the data of bearing rejection of two workshops, KGPW and JUDW, it can be seen that percentage of bearing failures increases sharply after 15 years. From analysis of online bearing failures also it is observed that failure rate of bearings increases with age and there is sharp increase after 12 years. Hence, there is need to fix the Codal life of Bearing.

	Group's recommendation	Railway Board's decision
1	RDSO to organize comparative trials for assessing the performance of CBB of various makes and accordingly take action against the poor pertormers.	Approved
2	ECo railway to carry out in-depth study of the problem of severe wear in wall of bottom centre pivot and if the wear is in one direction only, arrange periodic reversing of rakes. Report in this regard should be submitted to RDSO within two months.	Approved
3	Railways to ensure proper investigation of failed bearings and submit report to RDSO, as per the proforma circulated vide RDSO's letter no. MW/CTRB/D dated 25/03/2009.	Approved
4	All railways workshops should take action to remove the deficiencies noticed during various quality audits and comply with the instructions issued by RDSO vide letter no. MW/CTRB/D dated 09/04/2009. Confirmation in this regard should be sent to Railway Board within 3 months.	Approved
5	Codal life of CTRB to be fixed as 15 years.	RDSO to submit detailed justification to Railway Board

Agenda Item No. 4 **Formation of groove on journal due to NEI-make seal wear ring of CTRB**

Proposed By: SC Rly.

Discussions:-

SC Rly reported the problem of grooving of axle journals fitted with NEI make bearings which is probably due to lesser width of step inside the seal wear ring of NEI bearing

Seal Wear Ring of M/s NEI is having contact length of 6.5 mm, while that of M/s Timken has 19.84 mm. Due to less contact area, the contact pressure increases, specially in case of overloading, leading to grooving of axle.

Further, it is observed that interference of seal wear ring of M/s NEI is less than that in case of M/s Timken which results in less holding load, contributing to loosening of seal wear ring.

Over a period of time loosening of seal wear ring takes place due to fretting wear, but in case of M/s NEI the process is accelerated due to less contact length and less interference.

	Group's recommendation	Railway Board's decision
1	RDSO to issue revised drawing of seal wear ring of NEI make with increased contact length and interference within 15 days.	Approved

Agenda Item No. 6 **Provision of replaceable liner inside frame at manufacturing stage**

Proposed by: Eastern Rly.

Discussions:-

E.Rly has proposed to provide 5mm thick replaceable liners at manufacturing stage itself in pedestal jaw (long & short) & anti rotation lug of side frame, on the pattern of standard replaceable liners at prominent wear surfaces of side frame and bolster.

These provisions shall reduce time and effort during reclamation at workshops. Also, it is difficult for the Railways to ground the surface properly for welding of liners subsequently and ensure squareness.

Technical feasibility of provision of liners at pedestal jaw (long & short) & anti rotation lug of side frame will have to be studied. However, it was pointed out poor quality of welding may lead to maintenance problem in the open line.

More study is required to be done before taking final decision in this regard.

	Group's recommendation	Railway Board's decision
1	RDSO will study the fitment aspects of liners and issue instructions accordingly within the next four months.	RDSO to submit report on fitment aspects to Board for approval

Agenda Item No. 8 **Non functioning of Load sensing device (LSD)**

Proposed by: SE Rly.

Discussion:

SE Rly informed that LSD on wagons are non functional or deficient despite repeated special efforts for fitment during POH/ROH. This is also pointed out by NTXR and 174 BOBRN wagons were turned out from KGPW (from Sept., 08 to Feb.'09) without fitment of LSD. It proposed that fitting of LSD on BOBRN wagons should be exempted.

Braking forces required in empty and loaded conditions are not the same. Therefore, it is not possible to dispense with LSD on these wagons. Existing LSD has inherent tendency of fatigue failure due to constant contact. RDSO has developed a new improved design of LSD– Automatic Pressure Modification Device (APM). Its design features and operation was explained. These APMs will come in contact with the bogie side frame only at the time of brake application. This will prevent fatigue failures due to vibrations arising from constant contact.

Extensive trials of this new LSD (of M/s Knorr Bremse make) have already been done on ECOR for the last 6 years and there have been no reported failures of the same.

	Group's recommendation	Railway Board's decision
1	APM should be procured by the Railways and fitted in BOBRN wagons during POH.	All new procurements of wagons to be done with APM only

Agenda Item No. 11 **High arising of Unloadable Wagons**

Proposed by: SE Rly. & E Co Rly, ECR

Discussion:

High arising of unloadable wagons is taking place, mainly because of: Stanchion joint failures, Top corner joint failures and damages to side top coping/end top coping, body side sheets, door and floor during loading/unloading.

Railways suggested: Review of corner joint design, Safe use of JCB's & pay loaders, Certification of tipplers by RDSO on yearly basis & joint check by railways and provision of retarders mandatory for reducing the arising.

RDSO has already modified the stanchion joint in 2002 by increasing the number of rivets from 16 to 24, along-with necessary modification. But, the workshops are not implementing it. It was pointed out by one workshop that RDSO had given relaxation from this modification in 2007.

For top corner joint of side wall and end wall, RDSO had issued drawing No. WD-80007-S-06 for providing gusset plate.

RDSO can not undertake annual certification of nearly 293 nos. existing tipplers. Zonal Railways has to ensure quarterly inspection of tipplers, as laid down.

Retarders have been made mandatory for new tipplers. For existing tipplers, zonal railways to take action for fitment of retarders as conveyed by RDSO vide letter no. MW/TPL dt. 16.05.07.

All railways should take steps to reduce damage at loading /unloading points. Commercial Directorate of Railway Board has issued instructions in this regard. Mechanical officers should ensure compliance of these instructions. Further instructions in this regard are not necessary from Board

RSP provision has been given to four Railways for undertaking work of repair of unloadables on contract basis. But, progress of ECR & WCR has been very slow.

There is confusion in the field in categorization of unloadables as the definition of unloadables is not very objective.

	Group's recommendation	Railway Board's decision
1	All railways to take steps to reduce damage at loading /unloading points. Commercial dte of Rly. Bd. has issued instructions in this regard. Railways to take follow up action accordingly	Approved
2	Consolidated list of modifications to be carried out in [illegible]	Approved
3	[illegible]	[illegible]
4	[illegible]	[illegible]

	Group's recommendation	Railway Board's decision
5	'C' category unloadables to be attended in workshops. However, Railways can also do repair of such wagons in sickliness/ROH depots, wherever possible.	Approved
6	Outsourcing targets for repair of unloadables to be met by the Railways. Better management of outsourcing contracts to be done.	Approved
7	'A', 'B' & 'C' Categories of unloadables to be clearly defined. A committee of CRSEs & CWMs shall be appointed who will submit their report within 1 month.	Approved

VII. Other issues raised by the Railways:-

i) **CWM/RYPS/SC Rly**- During POH only 47% draft gears are being dropped. In dropping 100% draft gears following difficulties are being faced:-

a. It gets stuck in the centre sill and sometimes centre sill has to be cut
b. It is very tedious to take out the draft gear as proper equipment for removing the draft gears is not there.
c. In RF-361, for change of shoes and wedges proper method has not been prescribed.

Decision: ED/CAMTECH to visit RYPS workshop and study the problem being faced and accordingly suggest solution.

ii) **CWM/RWS/SEC Rly**.- Cost of repair of RF-361 is more as compared to MK-50.

In this regard it was pointed out that problem of less capacity in MK-50 draft gears has been pointed out by SC Rly.

Decision: ED/QA (Mech.) to arrange measurement of capacity of RF-361 and MK-50 being manufactured and submit report in next one month.

iii) **CWM/PWP/S.Rly**- Bogies under RSP to be allotted for unit exchange spares

Decision: Will be considered at the time of framing of RSP.

iv) **CWM/JHS/NC Rly**- RDSO approved vendors are quoting long Delivery Period.

Decision: List to be submitted to ED/QA Mech. who will look into it and take necessary action.

v) **CMW/JUDW/N. Rly**- Process of riveting of Side bearing housing in the bogie bolster is very tedious and lengthy, instead bolting/lock bolting may be allowed.

Decision: Wagon dte to look into it and convey the decision to JUDW.

vi) [illegible]- Loss of CC Rakes is very heavy

Decision: This matter should be dealt with at Zonal Railway level.

vii) [illegible]- OEM has quoted abnormally high rate for overhauling of brake cylinder of EMBS.

Decision: RDSO should look into the matter and take action accordingly.

viii) [illegible]

a. In large number of BOXN wagons Empty Load change over device is found missing. There are four different types of bogies having minor difference in springs. The [illegible] different rate chart. Hence [illegible] should be revised.

b) Wagon dte to study the possibility of reduction in variety of springs.

ix) **CRSE/ECo Rly-** We are not getting off POH wagons for CC rakes.

Decision: This matter may be dealt with at the Zonal Railway level.

x) **CRSE/ECR-** Due to JPO issued recently by N. Rly, arising of unloadables has gone up in ECR as unloadable wagons are pushed to ECR in unexamined empties.

Decision: N. Rly to ensure unloadables are not pushed into ECR.

xi) **CRSE/ER-**In premium rakes, it is difficult to pin point where the damages in wagons took place and fix responsibility and raise bills.

Decision: Damages taking place in the sidings have to be assessed and accordingly bills raised against the siding owner.

xii) **CRSE/CR-**For moving load for POH, Rly. Bd's permission is required which causes detention of rakes. To avoid this delay, one workshop may be nominated and in case of any difficulty, CR may be advised to move the wagons to some other workshop.

Decision: The existing system has been put in place after lot of efforts and should continue to be followed.

VIII. Other decisions/instructions:-

i. RDSO will examine the issue of provision of 20 mm backing plate in BOXN & BCN wagons on the pattern of BTPN wagons to strengthen the CP top (suggestion given by CWM/Kota).

ii. Railway workshops will ensure 100% replacement of HP40I and MF400 by MK-50/RF-361 in BOXN & BCN wagons after 31/03/2010. This should be extended to all air brake wagons after 31/03/2011. Serious view will be taken if any violation of these instructions is noticed thereafter.

iii. Railway workshops should ensure proper overhauling of MK-50 & RF-361 draft gears.

iv. RDSO will advise the sources for procurement of spares of RF-361 & MK-50 draft gears.

v. RDSO to study the issue of excessive adapter wear due to higher hardness of Pedestal jaw liner.

vi. Raipur workshop is procuring spares of RF-361 & MK-50 in kit form. Other Railways may follow the same.

vii. In all STCs lecture on Stainless Steel Welding to be formed part of syllabus.

viii. In workshops provision of modern tools to maintenance staff should be ensured.

ix. Sanctioned works at various points for extension of facilities for repair of 'C' category unloadables to be expedited.

x. Instruction for modification whenever issued by RDSO should clearly state: purpose of modification, mention about supercession of earlier instructions, procedure of carrying out modification, work content, when to be done (New/Rebuilt/POH/ROH/Yard) and approx. cost involved.

xi. CRSE/W. Rly has done modification in the drawing of Centre Pivot. RDSO may study it and take action accordingly.

xii. Modifications issued by RDSO should be carried out by the workshops without fail. Suggestions, if any, should be given only after carrying out the modification.

xiii. RDSO to organize analysis of recent incidences of failures of M/s Timken make CTRBs in MGS and W.Rly. Analysis of rejection of CTRBs in BLCs in N. Rly should also be done.