Minutes of the CMEs' Conference held at Goa/SWR on 22^{nd} and 23^{rd} March 2010

Address by MM:

- 1. MM complimented all CMEs for the good work done in 2009-10. Both traffic and railway's earnings have gone up in this year. The rolling stock availability and reliability have improved. Though accidents have come down in absolute numbers, yet there has been an increase in the number of collision cases, which points to a need for improving the training and monitoring of running staff and Loco Inspectors. This is more relevant during the foggy weather where there is a need for additional counseling drive etc.
- Running staff operating diesel trains are the responsibility of the CMEs. CMEs have to assert the technical control on the running staff on their zone.
- 3. Production Units have done very well and have exceeded their targets. However, ICF should give more emphasis to the production of DEMUs which are critical for the Mechanical Department as they help in meeting the aspirations of the passengers.
- 4. DLW has already commenced manufacture of 4500 hp diesel locos and by June 2011 it should be in a position to turn out the 5000+ horse power EMD locos. The trial of hotel load WDP4B should be taken very seriously and its success should be ensured.
- 5. Setting up of Rae Bareli Factory and other Production Units This is a challenging task for Mechanical Deptt. and action plan for each of the units is to be framed meticulously and progress monitored for faster implementation.
- 6. The Self Propelled ARME is still not on the horizon.
- 7. Disaster management Institute has also not taken off, though this work has been sanctioned some years back.
- 8. IR is having is shortage of wagons as new production is not increasing in the numbers as required. The wagon manufacturing workshops which are having the capacity should manufacture wagons as many as possible.
- 9. To make available maximum possible wagons for traffic loading, we should ensure quality of workmanship during POH, ROH and on sick line so that ineffective is controlled and repetitive sick marking is avoided. There is shortage of covered wagons due to transition from old design to new design. Railways should monitor timely repair and attention to covered wagons on day-to-day basis.
- 10. Four new designs of wagon have been developed by RDSO but prototype could not be made. Now IR is planning to develop a wagon prototype centres and first may come at KGP.
- 11. As per Vision 2020 Document, there will be requirement of 29,000 wagons per year for the next 10 years. To meet the wagon requirement, 5 new wagon manufacturing units are likely to come

- under PPP/JV mode. IR is also working for refrigerated containers for cold chain. Ten auto hubs may also come in near future.
- 12. The demand for coaching stock is more than what we are able to manufacture. Production Unit should gear up to step-up the Production.
- 13. Mid-life rehabilitation (MLR) should also adopt new technology and superior interiors. Coaching maintenance is primarily workshop centric. All technical and safety related work should be executed by workshops. Depot should generally focus on passenger amenities and house keeping.
- 14. Quality of passenger services needs to be improved to match the passenger expectation. Running gear has generally been improving. Mechanical Deptt. has to gain expertise in contract management. For this purpose, each division' should have a legal and contract management cell. Coach cleaning, pest control, upgradation to interiors etc. are assuming great importance.
- 15. RDSO and PUs must issue comprehensive instructions whenever any new system/technology is introduced to ensure faster dissemination of the technology by the Railways.
- 16. There have been few cases of train parting generally in the loco in CBC coaching rakes. RDSO must issue comprehensive instruction for guidance of maintenance and operating staff.
- 17. We should introduce few high speed trains with 160 kmph oh diesel traction to demonstrate operational and rolling stock capability.

Address by AM(PU):

- 1. Running of rolling stock overdue POH is practically non-existent today.
- 2. With the increased periodicity of coach POH, the surplus capacity should be utilized for improving coach interiors.
- 3. Group Incentive Schemes should be implemented in lieu of CRJ pattern.
- 4. Railways should plan for single agency to handle workshop modernization.
- 5. PUs have to take initiatives for technology improvement. ICF & RCF are both heavily vertically integrated with only 8% outsourcing.

Agenda items

DIESEL TRACTION

After discussions the following decisions were taken on the agenda items:

Current Issues pertaining to ALCO/EMD locos:-

A. Extension of trip schedule periodicity of ALCO & EMD locos:

- i. Around 800 ALCO locos have so far been put on 30 day schedule by Feb'10. We should now look forward to the implementation of the 40 day schedule. All eligible locos should be planned to be retrofitted with MBCS and MSU over the next 2 years. All off POH locos to be fit for 30/40 day schedule. The microprocessor conversion under RSP during 2010-11 should be done with REMLOT system. Railway Board to issue directive to the railways to incorporate REMLOT as a part of conversion.
- ii. The action plan for setting up of DLSCs should be sent to Board and proposals sent in the WP 2011-12. While planning for DLSC, the following facilities should be catered for:
 - a) Wheel gauging
 - b) Crankcase oil check and top up
 - c) DM water check and top up
 - d) Compressor oil check and top up
 - e) Gear case oil check and top up
 - f) Brake block renewal and brake adjustment if necessary
 - g) Reading of EM2000 fault archive and communicating to the home shed
 - h) Good quality Sand

Each Railway should also nominate one shed where outstation EMD locos will be attended.

- iii. DLW, RDSO and DMW should monitor the progress of introduction of tight lock coupler and soft preload draft gear. Locos with soft preload draft gear to be identified with clear marking and these are to be matched with trains. Also adequate training on this coupling to be incorporated.
- iv. Railways should ensure that the stocking of material during POH is as per the approved must change list issued by RDSO. The committee nominated to issue a similar list for IOH/Yearly should expedite its report. RDSO to issue list of must change

items for ALCO as well as for EMD locos. For EMD locos, vetted indents for the 425 EMD items circulated by DLW to be sent by 15th April. DLW should process for a rate contract for the tools.

v. Railways should commission all the EMD locos in a time bound manner.

(B) Planning for homing of additional locos/infrastructure:

- (i) Railways should ensure that the homing capacity of the locos is commensurate with the actual holding. Railways should send the WP proposals for augmentation as well as improving the infrastructure in the sheds and training schools. SWR should get in touch with KRCL for taking over the shed at Verna where it should be planned to home additional 50 EMD locos. The work of Izzatnagar shed also need to be expedited and the shed augmented to home atleast 75 BG locos in addition to the MG.
- (ii) Railways should send proposal for simulator as per approved plan.

(C) Strategy for New Developments:

- (i) DLW should expedite the production of dual cab WDP4D locos. We should also switch over to 100% production of dual cab passenger locos. WDP4 locos to be run at 140kmph in KRCL by identifying suitable train.
- (ii) Railway should ensure that trials of hotel load locos in train set formation are successfully conducted.
- (iii) Due to shortage of diesel locos we are unable to run locos in multy. Railway should therefore plan for proliferation of distributed power system on diesel locos.

2. Issues pertaining to DEMUs:

- Railways should obtain the necessary manpower sanctions for DEMU maintenance and ensure proper shed facilities for DEMUs which are essential keeping in view the high ineffective.
- ii. The progress of procurement of DEMU spares against the Board Bulk RSP and the itemized RSP requirement of Zonal Railways at ICF is not satisfactory. The machinery needs to be strengthened so that items pertaining to procurement of material, warranty issues are sorted out on priority.
- iii. DEMUs should necessarily run on rail link formation and this should be ensured by the Railways.

COACHING ITEMS

1. Cleanliness and hygiene in coaches

(i) Mechanized cleaning of rakes

65 coaching depot have been covered under mechanized cleaning scheme against the total of 110 depots. The progress of CR, ER, NR, NCR and SCR is far behind the target. Railways must finalize the contract and cover entire fleet of coaches under mechanized cleaning scheme on Puri pattern.

(ii) On Board House Keeping services

173 trains have now been provided with OBHS against 388 identified trains. SWR, SECR, ECR, ER, WR, ECoR, NFR, SCR, SER have shown significant progress in operationalizing the OBHS during the year. However, progress on SR, CR, NR and NCR is far behind the target and need to be expedited. Railways reported very positive feedback as OBHS has been very effective in improving the cleanliness and hygiene standard. The quality of service, regular passenger feedback and constant monitoring of the scheme should be ensured by Railways to maintain the effectiveness of OBHS.

(iii) Restoration of longitudinal upper berth in SCN and ACCN

Instructions have been issued from the Board about a year back for removal of side berth and relocation of upper berth to original location. 346 ACCN and 3007 GSCN coaches are still in service without relocation of side berth. Railways may ensure that no coaches are turned out from workshop after POH without relocation of side upper berth and this work is completed within one POH cycle which is completing during next 6 month's time.

(iv) Cushioned seat in unreserved coaches

As per the target the provision of cushioned seat should have been completed by now. However, around 2500 coaches are yet to be provided with cushioned seat. The left over coaches must be completed early.

(v) Curtain in AC 3 Tier coaches

As per Board's instructions, Railways are required to provide curtains in AC 3 Tier AC coaches. So far, 997 coaches have only been covered against holding of 2792 coaches. The remaining 1795 coaches should be covered at the earliest.

(vi) Enroute coach detachment

Board has taken a serious note of incidences on online coach failure. So far 88-detachments have been reported as compared to 82 during year 2008-09. While the bearing failure have shown reduction from 53 during 2008-09 to 46 during

the current year (upto February 2010), there is increase from 29 to 43 coach detachment during the year on account of bogie suspension, wheel! brake and miscellaneous defects. The quality of POH/IOH needs to be given adequate attention to control enroute coach detachments.

(vii) Quality of POH - Un-schedule detachment (within 100 days of POH)

Railways need to analyze 100 days POH detachment cases for taking corrective measures. As per the data received from few Railways, brake system defect, bogie suspension defect, water tank and plumbing connection are major area of concern. On CR, 18 cases of axle box defects (canted grease oozing etc.), 10 cases of draw and buffing gear defect and 10 cases of seats and berths, door/window (carpentry work) have been reported, while other Railways have reported much lesser number of cases on their system. Railway-wise position is given in enclosed Annexure-I.

Railways are advised to focus on bogie maintenance, strict compliance of material as per RDSO specification and approved source.

CRSEs & CWEs must conduct regular inspection of workshops for effecting improvement and quality of POH.

ROSO must finalize the report on standardization and provision of passenger amenities items.

(viii) Setting up of mechanized laundries

Hon'ble MR has announced in the Budget Speech the setting up of Mechanized laundries to improve quality of linen for supply to passengers. Railways may ensure that mechanized laundries are operationalized during the current financial year as per PDC given in the Annexure of agenda.

(ix) Manufacture and operation of double-decker coaches

Hon'ble MR has announced introduction of double-decker coach services. ROSO and RCF have already taken up this project and progress made so far is commendable. Prototype coach has been turned out and squeeze test performed with satisfactory results. The coach is likely to be turned out shortly after furnishing. The following action need to be taken in a time bound manner.

- ROSO to conduct oscillation trials and issue final speed certificate
- Railways may process for obtaining CRS sanction
- Zonal Railways to confirm route clearance to permit operation of higher height (4366 at route centre) double chair car coach

• RCF to organize for series manufacture of double-decker coaches so as to turn out first rake by December 2010.

(x) Development of environment friendly toilets

As per the action plan approved by the Board, more extensive field trials have been planned during the year for each type of environment friendly toilets including in-house development with the assistance of DRDE.

Railways/RDSO/PUs may ensure expeditious action for following:

Vacuum toilet

- (a) RDSO to finalize technical specification by April 2010
- (b) Fitment on two LHB Shatabdi rakes to be manufactured by RCF and based at New Delhi coaching depot, NR.
- (c) NR must plan in parallel for nomination of pit lines, developing necessary infrastructure, feasibilities for connection to sewer lines, etc.
- (d) Development Cell/RB shall plan for procurement as per specification issued by RDSO

Biological toilets

Instructions have been issued to RCF to initiate procurement for fitment of biological toilet on 200 coaches to be turned out in rake form for conducting extensive field trial. RCF and RDSO must ensure that procurement and field trials are expedited and rakes are inducted in service during the current year.

Bio-toilet to DRDE Technology

It has been decided to develop biological toilet in-house with technological collaboration with DRDE for which a MoU has already been signed. RCF & ICF have to turn out two rakes for field trials. RDSO to finalize the details of AMOC in consultation with DRDE and advice to Zonal Railways. AMOC must be finalized before rakes are turned out by PUs to ensure proper attention to toilets during run. Initially two prototype coaches each from RCF and ICF should be turned out for performance monitoring and thereafter remaining coaches to be turned out for field trials.

Zero discharge toilet developed by RDSO and IIT Kanpur

SR and RDSO have to take necessary action for finalizing the MoU for conducting the field trials on one rake.

(xi) Provision of automatic fire detection system in 20 pair of trains

Hon'ble MR has announced in Budget speech in 2009-10 for provision of automatic fire detection system in 20 pair of identified mail/express trains as a pilot scheme. Similar system has already been provided in Bhubaneswar Rajdhani rakes. RDSO must conclude the field trial and finalize the technical specification to enable procurement for 10 pairs of trains each by RCF and NR. RCF will provide the system in the nominated Duronto/ Rajdhani/ Shatabdi rakes. NR will make centralize procurement for retrofitment of fire alarm system in the nominated rakes, details of which shall be advised in due course.

FREIGHT ITEMS

1. Performance Review

- Quality of workmanship in CTRB overhauling needs improvement. Some of the railways who have not given compliance and removed deficiencies in the workshops identified by RDSO in quality audit may take immediate action and feedback given to RDSO and Board.
- > Some of the railways are failing to submit hot axle report in the prescribed format to RDSO, this may be ensured with immediate effect.
- ➤ RDSO to take immediate action against the manufacturers who have supplied inferior coupler components. To prevent train partings, it is necessary that the quality in manufacturing of the couplers is improved. Railways should give regular feedback to RDSO about the quality of supply being received by them.

2. Availability of Wagons

In view of shortage of wagons as per traffic requirement, the waiting time of the wagons for repairs needs to be reduced. This should be monitored on day-to-day basis by the Sr. DMEs, and CRSEs.

3. Maintenance of CC Rakes

ROH due wagons should be detached from the rakes only at nominated points and CMEs will identify such points on their system. Railways should avoid increasing the periodicity between two examinations violating Railway Board's instructions a global view is required to be taken based on life of different components as per rejection criteria. Hence such ad hoc decisions should be avoided.

4. Upgradation of Maintenance Facilities

The progress in upgradation of ROH depots, sick line and examination points is not as expected. Railways must submit proposals for upgradation as per recommendations of EDs Committee.

5. Maintenance of New Design BOXNHL and BCNHL wagons

To start with MGS, Katni, Bilaspur and one more depot in WR may be nominated for ROH of stainless Steel wagon and railways should take immediate action for development of facilities and arrange spare parts. CME/WR may nominate ROH points for these wagons in their system.

RDSO should quickly respond to the problems being faced by railways in new design of wagons so that corrective action is taken timely and detention of rakes is avoided.

WORKSHOP ITEMS

- 1. Workshop performance and shop capacity
- 1.1 Considering that a large increase is going to take place in holding of EMUs & MEMUs, proposals should be sent by CR, WR, ER, SERs for augmenting the capacity of POH of EMU coaches.
- 1.2 There have been cases of NTXR rejection of wagons on ER, SER & SECR. This should be completely eliminated. CMEs pointed out that the rejections were due to non fitment of Load Sensing Device (LSD) in BOBRN wagons. This is not acceptable. MM directed that LSD must be provided in all wagons going after POH. ED/W/RDSO was asked to re-examine the design of LSD with a view to improve its reliability.
- 1.3 Overdue POH of passenger coaches on WR is high (7.4%) which should be reduced. Overdue POH of EMU coaches is high on ER & SER.

2. Refurbishment of coaches.

Following modalities for execution were decided:

2.1 Coaches in the age group of 10 to 18 years should be taken up for refurbishment

Coaches which have already been given MLR at Bhopal workshop should not be taken up for refurbishment.

- 2.2 Quality of work should be at par with or better than Bhopal workshop. Inspections must be carried out at officers level.
- 2.3 Weightage of two POH units shall be given to each refurbishment.
- 2.4 In addition to shops already nominated, Mancheshwar workshop shall also be given quota for the refurbishment.

3. Issues related to 18 month POH.

- 3.1 Poor performance of phenolic brake gear bushes and Recron cushioning material were discussed. RDSO would take appropriate action and advise modifications early.
- 3.2 It was confirmed by railways that action has been initiated to ensure that all bogies are given IOH in workshops.
- 3.3 Weightage of 0.1 POH shall be given for bogie overhaul in workshops.

4. Quality audits

- 4.1 Poor quality of painting of coaches in PUs & workshops was discussed in detail. The deficiencies in painting have already been pointed out by RDSO audit of RCF paint shop. RDSO has also carried out quality audits in various areas like rehabilitation of wagons attention to roller bearings, interior furnishing of coaches, diesel loco power pack overhaul. Follow up of these audits is urgently required.
- 4.2 CMEs shall also ensure that self audit is carried out of repair activities in workshops and other important areas of work by SG/SAG officers of the railway. It would be desirable to carry out audit against the check list already prepared by RDSO.
- 4.3 Programme for quality audit by RDSO shall be shortly issued by workshops and PU Dte. of Board.

5. PH 42

- 5.1 Fund utilization during 2008-09 was Rs.973 crores which is more than double of the fund utilized in the previous year. Fund utilization would have been even better but for surrenders by ECOR, ECR, NCR, NER, NFR and WR. Among the PUs, performance of RWF and CLW was not satisfactory. DLW has also surrendered approximately Rs. 5 crores.
- 5.2 Railways are advised to complete all, more than 4 year old works during 2009-10.
- 5.3 Works related to modernization of workshops need to be started immediately.
- 5.4 Works related to freight examination (41 Nos.) and coaching pitlines (61 Nos.) should be put on fast track.
- 5.5 Railways and PUs are also advised to ensure full utilization of funds in 2009-10.

MM desired that it should be advised to CME/Plgs that timely & proper execution of PH 42 works would be a major criteria in appraisal of their performance.

6. PH 41

- 6.1 Funds to the tune of Rs. 287 crores were utilized. Though this utilization is 49% more than the previous year but is inadequate considering large throw forward. A very large surrender of over Rs. 90 crores has taken place in RWF due to poor planning and estimation of requirement of fund.
- 6.2 MM & AM/PU pointed out that over 3800 machines are pending procurement with COSs of the railway. CME/CME/Plg. should monitor this position on regular basis and expedite procurement.
- 6.3 Over 300 machines are awaiting commissioning in workshops and PUs. This is a very high figure. Railway and COFMOW should regularly monitor this figure and bring down the number.
- 6.4 A large number of cases of excess over estimate pending in railways, PUs and Railway Board is also a matter of concern. Corrective action needs to be taken.

6.5 Though some improvement has taken place in performance of COFMOW, MM pointed out that longtime taken in the procurement of machines is unacceptable and efforts should be made to complete the procurement process within 180 days.

7. Coaches with world class interiors.

7.1 There has been extra ordinary delay in execution of this work on part of ICF and WCR. MM advised CME/ICF & CME/WCR to expedite the work.

8. Production Units.

8.1 Switch over to stainless steel coaches.

The subject of switch over to stainless steel coaches were discussed in detail. Complete rakes as per traffic requirement are to be turned out independently from each PU. Railways were also advised to obtain CRS sanction for running of these coaches over their system well in advance.

8.2 Teeth to tail ratio:

Each PU and workshop shall critically analyse the ratio of the staff directly engaged in production and repair activities vis-à-vis staff engaged in support services such as Accounts, Stores, General administration etc. With progressive reduction in strength of incentive staff due to increased productivity and outsourcing, the ratio of support staff has become unduly large and needs review. Detailed instructions in this regard shall be issued by PU Dte.

Concluding Session

1. Projects identified as critical to be owned

MM desired that some critical projects should be owned by a nominated officer/team and visible progress seen in the next 3 months. The following projects were identified:

- (i) Bogie mounted brake system on Wagons EDME(Freight)
- (ii) DLW and CLW to ensure that all new passenger locos are provided with modified draft gear and H- type loco coupler- EDMP/RDSO
- (iii) Low preload draft gear for coaches CME/SR
- (iv) Improved interior of coaches CME/ICF
- (v) Monitoring system and predictive maintenance CME/SWR
- (vi) New 25 T bogie EDME(Freight)
- (vii) SPART import and technology for 160 Km/hr EDME(Traction)
- (viii) Train sets with twin WDP1 CME/NR
- (ix) HOG trains for running 24 coach trains up to 150 kmph AM(ME)
- (x) 90 day trip schedule for EMD locos CME/SWR
- (xi) Coach Watering System ED/CAMTECH
- (xii) Coach kms earned for primary rakes EDME (Chg.)
- (xiii) Benchmarking for ROH depots/loco sheds/sickliness Concerned EDME of Board
- (xiv) Distributed Power System CME/SWR
- (xv) Tapering of MG rolling stock Concerned EDME of Board

- (xvi) Wagon building Quality of new production RDSO
- (xvii) Fabrication shops Creation of good welders and evaluating their performance Adv.ME (W)
- (xviii) ICF and WCR must execute the work of **world class coach furnishing** sanctioned for 200 coaches, and advise the target for completion of the work CME/ICF and CME/WCR
- (xix) Provision of vacuum toilets in coaching trains EDME/Dev.
- (xx) There is a need to run all mail/ express trains at a speed of 130 kmph to reduce travel time. RDSO to plan for development of rolling stock and other technical requirements ED(Carriage)/RDSO
- (xxi) The performance of first rake with stainless steel coach having ICF bogie with air spring for secondary suspension to be monitored and prompt corrective measures taken if required- CME/RCF
- (xxii) The trials to be conducted for development of **green toilets** and their specification ED(Carriage)/RDSO.

2. ISSUES RAISED BY CMEs

CME/CR:

- (i) GSCN springs are being fitted by workshops on VPUs due to which loaded VPUs are getting marked sick on account of low buffer height.
- (ii) Equalizing stay design to be modified. The C. Railway design is trouble free.

CME/ER:

(i) The railway is facing vacuum creation problems in BCX loads (40 wagons) with dual brake diesel locos, due to inadequate exhauster capacity.

CME/ECR:

- (i) ECR needs assistance from other railways to create a spare bogie pool to permit movement of bogies to shops for IOH. CME/NER stated that there are surplus bogies available with their railway, which can be collected by ECR
- (ii) Marching surrender is required for staff creation for new assets

CME/ECOR:

(i) BOBRN door hinge design is giving major problem

CME/NCR:

(i) There are large number of case of hanger breakage on coaches.

CME/NER:

- (i) NER requires additional staff for coaching train maintenance.
- (ii) NER requires wheel discs for MG diesel locos.

CME/NFR:

(i) EMD Locos are held up for Traction Motors. Assistance is required from Board.

CME/NWR:

- (i) RITES have agreed to give fixed price quote for modernization of AII Carriage Shops by 31/5/09.
- (ii) From 23/4/09 onwards, BOXN & BCN wagons will not be permitted to move without provision of additional springs.

CME/SR:

- (i) AAC of diesel loco spares is being reduced. He wanted that there should be a standardized list of must change items for POH of diesel locos on the same lines as issued by Electrical Deptt. for electric locos.
- (ii) Yardstick for workcharged gazetted cadre for Mechanical department should be decided.

CME/SCR:

(i) SCR needs feed of 3 rakes per month from other railways up to August 2009

CME/SECR:

(i) The quality of huck bolt fitting on new wagons from Titagarh is very poor. Gas cutting of holes has been done. Huck bolts are founds loose and missing.

CME/SER:

(i) All important letters of Mechanical department should be posted on a website

CME/SWR:

(i) Policy for providing passenger friendly feature on coaches like display board, etc. has to be laid down, so that CMEs are aware of the action to be taken by them.

CME/WCR:

(i) The railway needs additional staff for doing IOH of bogies at CRWS

CME/WR:

(i) Vendors are not responding directly to CMRs. They have to be approached through RDSO or PUs

CME/COFMOW:

- (i) All Railways and units should expedite sanction for excess over estimates for M&P items pertaining to COFMOW.
- (ii) There is a lot of delay in commissioning of Machines and issue of PTC by the zonal railways. This should be expedited.