GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No.2019/M(N)/951/20 New Delhi, dated 01.7..2019

The Principal Chief Mechanical Engineers,
All Indian Railways and MCF, ICF, RCF, RWF,
DLW, CLW, DMW, KRCL, Metro Railway

CAO/COFMOW, New Delhi
CAO/Bela, Chhapra,
CAO/WPO/Patna
CAO/IROAF/New Delhi
Director/IRIMEE, Jamalpur

PED/Wagon, ED(Carriage),
ED(QA)/Mech, ED(PS&EMU),
ED/Motive Power,
RDSO, Lucknow.
ED/CAMTECH, Gwalior

Sr. Professor (Mech.)/NAIR/Vadodara

Sub: Minutes of Meeting of PCME's Conference held on 26 to 28 April, 2019.

The Minutes of Meeting of PCME's Conference held at Secunderabad, (SCR) from 26th to 28th April, 2019 can be downloaded from Railway Board's website at www.indianrailways.gov.in by following the path "About Indian Railways>Railway Board Directorates>Mechanical Engineering>Circulars>Mechanical (Freight)>S.No.I/Meeting and Conference.

The Minutes has the approval of Board (MRS).

(S.P. Mahto)
Dy. Dir. Mech. Engg. (Frt.)
Railway Board

DA: As above.

Copy to: PSO/MRS for kind information of MRS.
AM (ME), AM(PU), PED(EnHM).

EDME/Chg., EDME(W), EDME(Frt.), EDME (Proj.), EDME (Dev.),
EDEE(G), EDME (Trn.), EDME (EnHM).

MINUTES OF PCMEs CONFERENCE HELD on 26th to 28th April, 2019

S.No.	Items	Action by
A.	**Address by MRS**	
	1. For the first time in Indian Railways Rake Out programme has been finalized. The individual Railways know the composition including the seating & the facilities which are to be expected.	All PCMEs
	2. The individual ZRs can order particular compositions	
	3. Distributed Rolling stock is the future. The passenger is interested in the coach & passenger amenities. ZRs can plan beforehand.	
	4. Freight loading is critical for Indian Railways. Freight ineffective has been reduced to lowest ever levels leading to availability of 100 wagons extra per day.	
	5. Cement coefficient must go beyond 50%.	
	6. Trains signify the Railways. The Rolling Stock team has significant influence on the servicing of the Railway customer.	
	7. Lot of works with the team spirit has led to great strides. The outlook of the top level is now very positive towards Rolling Stock department.	
	8. Vande Bharat Epress has taken the world by storm. It was a herculean job to get the service started & credit goes to all the units who have worked hard in the project.	
	9. The PUs & workshops have made great improvements in the last one year. These units play an important role in the development of the economy of the country.	
	10. A proper Cadre structure is the need of the hour & the analysis needs to be done at the individual post code level for better interaction with our workforce & officers.	
B.	**Coaching**	
1.	**Project Swarn** – 12 rakes are yet to be upgraded, 9 by NR and 3 by NFR. The work on all the rakes should be completed by September, 2019.	PCME/ NR & NFR.
2.	**Project Utkrisht** – 90 rakes have been covered upto March, 2019. In the current year 2019-20, 50 rakes of Phase-1 and 500 rakes of Phase-II should be targeted for completion. All Zonal Railways should ensure that there is no slip up and all the rakes are covered under Project Utkrisht during the current year.	PCMEs/ All Zonal Rlys
3.	**ICF Coach Upgradtion** – Zonal Railways advised that the report of the Committee set up to finalise specifications for refurbishment has been accepted by Board and circulated to Zonal Railways. Work is to be carried out during POH. In the current year 2019-20, Zonal Railways must ensure that at least 1500 coaches are covered under upgradation.	PCMEs/ All Zonal Rlys

4.	**Quick Watering System –**	PCMEs/ All Zonal Rlys
	➢ 138 locations have been identified by Zonal Railways of which only 16 have been provided with quick watering facilities till March, 2019. LOA has been issued for 26 locations. The remaining 122 locations are to be provided with quick watering systems during the current year 2019-20.	
	➢ It was advised that even with quick watering system, at least 10 minutes are required to ensure that all the coaches are filled up at nominated watering stations. Zonal Railways should ensure that a stoppage of 10 minutes is provided at all en route watering stations where quick watering arrangements have been provided.	EDME(Chg.)
	➢ PCME/SWR brought out that a proposal for quick watering system at Bengaluru has been sent to Board with the approval of GM for sanction. EDME(Chg.)/Railway Board advised that the same has been rejected by Finance for sanction under Umbrella Work. The proposal shall be moved for sanction in the Budget 2019-20.	
5.	**Automatic Coach Washing Plant -** 97 locations have been identified by Zonal Railways as against 180 coaching depots and 30 car sheds. Presently, automatic coach washing plant manufacturers are ready to customise design depending upon locations. All Zonal Railways must ensure that automatic coach washing plants are provided at all depots and car sheds having adequate coach washing load. In case customisation is required, manufacturers may be approached for site-specific designs. All out efforts should be made to provide automatic coach washing plant atleast 80 more locations in the current year.	PCMEs/ All Zonal Rlys
6.	**Under floor pit wheel lathe –** ➢ Needs to be provided at all important depot having significant holding specifically in view of the fact that LHB coaches are being proliferated. The pit wheel lathe should be provided with adequate track length on either side so that EMUs, MEMUs & Train sets can be taken up for tyre turning.	PCMEs/ All Zonal Rlys
	➢ PCME/NR brought out that portable wheel lathes are now available and the same can be tried out. NR was advised to try out the portable wheel lathe in one of its depots.	
7.	**Jerks –** ➢ Railways have reported jerks in rake fitted with BDG couplers. Shimming has to be ensured in all rakes to avoid any clearance/gaps in the couplers.	PCMEs/ All Zonal Rlys
	➢ The taper knuckle trial should be carried out expeditiously by ER.	EDS(Carriage)/ RDSO
	➢ RDSO should expedite the new design of coupler, both semi-automatic and semi-permanent.	

8.	**Bio toilets – flushing & ventilation –** Various issues connected with the working of bio-toilets were considered. The following was decided:	PCMEs/ All Zonal Rlys and ICF, MCF & RCF, Sr.ED/ CAMTECH EDME(Chg.)
	• 100% conversion of P-trap to S-trap should be ensured during POH. It should be made an NTXR rejection item.	
	• AMOC should be available at all depots and effluent testing must be ensured at regular intervals.	
	• Evacuation of the first chamber should be carried out at least every three months, preferably every month. CAMTECH should revise instructions regarding this within next 15 days.	
	• RDSO instructions regarding flushing and ventilation should be implemented with immediate effect.	
	• FRP Venturi system should also be provided in all ICF & LHB coaches.	
	• Targets given by the Zonal Railways for provision of Venturi system in all ICF design coaches and conversion of P-trap to S-trap should be ensured. All coaches should be covered by August, 2019 positively.	
9.	**CTRB failures –** ➢ CTRB failures on LHB coaches have shown an alarming trend. 21 cases of failure have occurred in 2018-19 of which 11 are new coaches. All Zonal Railways & PUs should ensure proper audit of their CTRB sections & wheel shops. ➢ RDSO should ensure audit of all major workshops and PUs. Shortcomings noticed at ICF during RDSO audit must be made good in the next one month.	PCMEs/All Zonal Rlys. and ICF, MCF & RCF EDS(Carriage) /RDSO
10.	**Wheel shelling –** Instructions of RDSO should be implemented by all Zonal Railways immediately. In case of heavy wheel shelling in a coach, the wheel should be taken out and CRTBs overhauled before putting the wheel back into service. PUs to also ensure during manufacture.	PCMEs/ All Zonal Rlys. and ICF, MCF & RCF EDS(Carriage)/ RDSO
11.	**Spring failure –** ➢ All Zonal Railways have reported high incidences of primary spring failure on LHB coaches.	PCMEs/ICF, MCF & RCF EDS(C)/RDSO
	➢ Vendor development of spring should be centralised with RDSO including inspection of raw materials and finished springs.	
	➢ No deviation from instructions is to be permitted by any PU. ICF & RCF have been advised to carry out a consultancy for primary spring design, which should be done expeditiously.	
	➢ RDSO is working on revised specs of springs which should be finalised at the earliest.	

12.	**CMM –** ➢ CMM has to be implemented by all the depots. ➢ 100% data feeding on CMM has to be ensured by all the Zonal Railways. Confirmation in this regard should be furnished in the next one months. ➢ Gate Pass Module has been developed on CMM. The same should be implemented by all the PUs with immediate effect. Turning out of coaches through Gate Pass Module is mandatory for all PUs.	PCMEs/ All Zonal Rlys. and ICF, MCF & RCF GM/CRIS EDME(Chg.)
13.	**Train Sets –** Train Sets are likely to be proliferated in the coming years. Train set depots with adequate facilities for maintenance of train sets are to be set up. Western, Southern, Eastern and Northern Railways should immediately plan and send proposals for setting up of Train Set depots.	PCMEs/ER, NR, SR & WR
14.	**Design Issues –** The list of design, specification, initiatives, predictive maintenance and development of future trains was discussed. CDEs' group along with Exec. Director Stds.(Carriage)/RDSO and EDME(Chg.)/Railway Board should continuously work on these issues and try to address them at the earliest. Regular meeting of CDEs' group should be held and issues finalised.	PCMEs/ICF, MCF & RCF EDS(Carriage)/ RDSO EDME(Chg.)
15.	**Issues raised by PCMEs –**	
	ECoR Electrical staff needs to be bifurcated for coaching and general activities. It was decided that all Zonal Railways should get this completed with provision of staff for coaching activities as per yardstick.	PCMEs/ All Zonal Rlys
	NCR - SS-1 arising is high on NCR and assistance is required from the workshops. - Escorts WSP data cannot be downloaded. RDSO was advised to ensure that the required software is provided by Escorts to the Zonal Railways at the earliest.	PED/ME/W EDS(Carriage)/ RDSO
	SR - Audit of analysis of the data of Knorr systems is not possible. RDSO was advised to examine the system and ensure that proper software analysis is provided by Knorr. - Coach heat insulation material needs to be revisited. Glass wool being provided does not hold in its place. Layered rock wool or foam should be considered. - Roof paint colour also needs to be revised.	EDS(Carriage)/ RDSO EDS(Carriage)/ RDSO PCMEs/ICF, MCF & RCF
	WR - Inadequate staff sanctions on Zonal Rly for maintenance of rolling stock. All the Zonal Rlys were advised to work out additional sanctions required for both electrical and mechanical staff for maintenance of rolling stock and process the same.	PCMEs/ All Zonal Rlys EDME/Chg

	- Requested that quick watering facility for Jamnagar may be sanctioned at the earliest. WR was advised that the work is under process and sanction thereof would be conveyed after Model Code of Conduct ceases to be in force. - Shortage of VPs was raised. RDSO should expedite the trial of LHB VPU.	EDS(Carriage)/ RDSO
	ECR - Requested for provision of maintenance spares as a standard part of RSP. In this regard, it was advised that RDSO has, in consultation with PUs, issued a list of spares to be provided along with LHB rakes. The same may be examined by the Railways and in case any further assistance is required, the same may brought to the notice of Board. - Requested scratch rake for Vaishali Express to ensure that the train runs on right time. - There have been too many cases of rexine failure. The details of manufacturers, etc. are available on the back side and as such berths have to be torn to lodge warranty claims. RDSO to examine and issue revised instructions.	PCMEs/ All Zonal Rlys EDME/Chg. EDS(Carriage)/ RDSO
	WCR - Requested for unit exchange spares for LHB coaches as per holding. - Raised the issue whether MLR of ICF coaches is to be carried out. It was advised that instructions in this regard shall soon be issued by Board.	EDME/Chg. EDME/Chg.
	SECR Requested assembled LHB bogies as capital spares	EDME/Chg
	CR - Brought out that LWS coach has been permitted upto 105 kmph on 52 kg 70 UTS rail. CR has many sections with this class of rail. Speed of the rake which has LWS coach has to be regulated to 105 kmph. RDSO should sort out the problem and issue revised speed certificate. - Cases of LHB brake pads burning have been reported on some coaches. RDSO should immediately establish reasons therefore and issue necessary instructions to avoid any further such case.	EDS(Carriage)/ RDSO EDS(Carriage)/ RDSO
	NWR - Requested for allotment of LS-5 bogies from MCF. - ACP resetting is a problem in LHB coaches as it has to be done from inside. The possibility of providing a reset switch at a more convenient location may be examined by RDSO.	EDME/Chg EDS(Carriage)/ RDSO
	SCR Automatic door closing system operated with pneumatic pressure causes problems due to inadequate air flow in the FP. This issue may be examined by RDSO and corrective action suggested.	EDS(Carriage)/ RDSO

	RWF Cast wheels should be permitted on LHB coaches upto 130 kmph. RDSO should examine the issue.	EDS(Carriage)/ RDSO
	RCF ICF CBC headstock are lying at RCF. Railways which require headstock may obtain the same from RCF. All coverage of ICF CBC headstock should be dropped by the Zonal Railways.	PCMEs/ All Zonal Rlys
	ICF - Pointed out that recron is not giving the required performance and suggested that PU foam with fire barrier and toxicity of less than 1 may be permitted for use. RDSO should examine the issue and suggest immediate action. - Vista dome coaches should be made under RSP as per requirement of Traffic Dte. - There is no vendor directory for vacuum toilets as a result it is difficult to ensure proper vacuum toilets. It was decided that ICF should make a vendor directory for vacuum toilets.	EDS(Carriage)/ RDSO PED/ME/W PCME/ICF
	MCF - Advised that 100 SMART coaches are being made. It was decided that all AC coaches should be SMART coaches and PUs take action accordingly. - Advised that 400-500 world class coaches would be made in 2019-20. Allotment of these rakes should be made to important trains. - A decision with regard to product mix as to which type of power cars should be manufactured needs to be taken. It was suggested that the single engine power car prototype which was given to ICF should now be made by MCF.	PCMEs/ICF, MCF & RCF EDME/Chg PCME/MCF
C.	**Directions of MRS –**	
	1. RDSO to issue specifications for EP brakes and TCN for mainline coaches.	EDS(Carriage)/ RDSO
	2. Requirement of VPs should be got confirmed from Commercial Dte. and production planned accordingly.	EDME(Chg.)
	3. RITES' inspection should be tightened to ensure proper quality of rexine	MD/RITES
	4. RDSO to carry out audit of seat and berth manufactures to ensure proper quality products are supplied.	EDQA(Mech.)/ RDSO
	5. NVH analysis should be carried out on LHB coaches and proper material for heat, noise and vibration insulation should be specified by RDSO expeditiously.	EDS(Carriage)/ RDSO
	6. PUs in consultation with RDSO should finalise specs for proper ceramic based white paint which would reduce heat load inside coaches.	PCMEs/ICF, MCF & RCF EDS(Carriage)/ RDSO
	7. There are too many coaching depots over IR and new depots are being set up. Railways should carry out a review of	PCMEs/ All Zonal Rlys

	infrastructure facilities and rationalise the depots. Further, opening up of new coaching depots should be avoided to the extent possible.	
	8. Divyang features should be introduced in all coaches by provision of a wider coach main door and the AC partition door. Side berths in the first compartment may be suitably adjusted for the same. This will ensure that wheel-chair bound passengers are able to get inside all the coaches. Lay-outs for these should be advised by RDSO in consultation with PUs.	PCMEs/ICF, MCF & RCF EDS(Carriage)/ RDSO
	9. In order to avoid instances of fire, a fire ball may be provided in all AC coaches which will check spread of fire.	EDS(Carriage)/ RDSO
	10. CRIS should formulate a smart phone enabled check sheet for LHB maintenance to ease the work of maintenance staff.	GM(CMM)/CRIS
	11. The White Manual for Diesel Locos provides for capital spares. The possibility of adopting a similar system on the coaching side may be examined.	EDME(Chg.)
	12. CRIS should map all the depots in the CMM. An all India map should be made indicating location of depots hyperlinked to provide infrastructure details of all depots at a glance. This should be carried out in the next one month.	GM(CMM)/CRIS
	13. All ACs should be of reversible cycle only.	PCMEs/ICF, MCF & RCF
D.	**EnHM**	
1.	NGT orders to be implemented by Railways at 37 identified stations by June 2019 and Action plan to be prepared for all NSG - 1 to 4 and SG - 1, 2 Stations of IR.	All PCMEs
1.1	In terms of NGT order dated 01.10.2018 in O.A. No. 141/2014, Railways submitted the minutes of meeting held by CRB with GMs along with Action Plan for maintaining Cleanliness at Railway Stations, Trains and Tracks to NGT.	
1.2	NGT discussed the Action Plan on 22.01.2019 and directed Railways to frame Action plan for 5% of 720 major stations (NSG - 1 to 4 and SG - 1, 2) of IR. Action plan of 37 identified stations was accordingly filed to NGT by ZRs by 15.03.2019.	
1.3	As per the latest directions of NGT dated 26.03.2019,	
	(i) Railways have to submit implementation status on Action Plan at 37 identified stations by 31.07.2019 through CPCB.	
	(ii) Railways have to frame Action plan with verifiable indicators for balance of 720 Stations and forward to Railway Board by 15.7.19. Compiled action taken reports to be submitted by RB to NGT by 31.7.19 through CPCB.	All PCMEs
1.4	As advised vide CRB letter No. 2018/EnHM (CE)/01/02 dt 17.04.2019, Railways are required to forward the Action Taken Report to Railway Board by 25th of every month, starting from April 2019.	All PCMEs

1.5	Railways must coordinate with local authorities to ensure cleanliness and for proper waste management, as necessary.	All PCMEs
1.6	As per NGT orders, Notice regarding Anti-littering fine under Indian Railways (Penalties for activities affecting cleanliness at railway premises) Rules, 2012 is to be displayed in all coaches.	
2.	Sanctioning, fund provision and utilisation of 1% provision for environment related works (ERW) should be monitored. 1% ERW has been made part of D&G charges of estimates vide RB letter No. 2017/E&R/3(2)/2 dt. 20.02.2019.	All PCMEs
3.	**Green Ratings** : Excellent work has been done by all railways and PUs in last 2 years in achieving more than 60 green certifications including Workshops, PUs, Railway Stations, Green Buildings, Schools etc.	
4.	**Energy Efficiency Studies:** First phase of Energy Efficiency Studies carried out under MOU with CII at 6 PUs and 4 Workshops has resulted in 7-15% improvement in energy efficiency. Energy Efficiency Studies for 10 more Units, 2 PUs and 8 Workshops, are in progress. All units to assess improvement in energy efficiency and reduction in energy intensity and compare energy consumption and expenditure on energy bill.	
	Other workshops should also learn from the experience of these units and take necessary action for improvement in energy efficiency.	
5.	**Housekeeping of trains and stations**	
5.1	Progress of implementation of SBD for Housekeeping contracts to be advised to Railway board by ZRs separately for Trains housekeeping and Stations housekeeping - contracts awarded, tenders opened and estimates prepared.	
5.2	Following should be ensured for effectiveness of these housekeeping contracts :	
	• Four years contract period.	
	• Aadhaar enabled GPS tagged bio-metric attendance system.	
	• IT enabled feedback to be linked to payment.	
	• Entry in Shramik Kalyan Portal.	
5.3	Two contracts can be permitted for a depot at a time. This will enable availability of back up agency in housekeeping contracts to provide against failure of one agency.	
6.	**OBHS**	
6.1	IT enabled performance monitoring including Aadhaar enabled GPS tagged bio-metric attendance and passenger feedback to be linked to payment.	ALL PCMEs
6.2	'Coach Mitra' application of CRIS has been implemented with short code 138 and CRIS Number 9821736069. Zonal Railway wise data of 'Coach Cleaning' and 'Toilet Cleaning' for the month of March, 2019 was discussed. Performance of CR is best. 85% requests in CR were closed with passenger satisfaction code. 66.7	ALL PCMEs

	% Coach Cleaning requests and 56.3 % Toilet cleaning requests in CR were closed within 30 min. MRS observed that Railways should target response time of less than 15 min.	
6.3	All Zonal Railways should analyse their 'Coach Mitra' data to improve response time and passenger satisfaction.	ALL PCMEs
6.4	Similarly, 'Coach Mitra' data of other request types – Linen, Pest & Rodent, Watering, Electrical & AC, Petty Repair – should also be monitored and analysed to identify weak areas and improve the services and response.	
6.5	Name and Mobile No. of EHK (OBHS Supervisor) and Railway Supervisor to be entered in 'Coach Mitra'.	
6.6	OBHS and CTS staff to be provided necessary training and proper tools including basic training for emergency attention to bio-toilets.	
6.7	Use of prescribed chemicals to be ensured.	
7.	**Mechanised Laundries**	
7.1	Railways have to provide 100% coverage in this year. Maximum shortfall is in ECR (77.4%), NR (73.8%), NCR (56%), ECoR (49%), SR (48%), ER (46%), SWR (44%) and CR (35%). Railways to assess future requirements and also plan for adequate spare capacity.	
7.2	Suitable back up points are to be nominated on laundry network in consultation with adjoining or other end railways.	
7.3	Monitor auto dosing system for chemicals used.	
7.4	CCTV cameras to be provided with live feed on web.	
7.5	Water recycling and ETP to be provided.	
7.6	A pilot exercise has been taken up at JAT/NR, KKF/WR and JP/NWR to introduce IT based laundry management system.	
7.7	RFID tags may be used for identification, accountal and monitoring of linen items. CRIS had displayed some samples of RFIDs including one RFID tag suitable for blankets / linen which can withstand washing and ironing. Specifications and likely sources etc. may be provided / suggested by CRIS.	
7.8	Healthcare Laundry Accreditation Council (HLAC) and other applicable certifications should be aimed for a few good mechanised laundries.	
8.	***Discussions and decisions / clarifications on issues raised by Railways :***	
8.1	Scope of CTS may be restricted to toilet cleaning and watering where stoppages have been reduced. More resources may be provided where stoppage is reduced.	
8.2	Issue of PG / BG in long term BOOT contracts was discussed. The matter regarding special conditions required to be incorporated in variance with conditions specified in GCC for Services has been examined in Board and decision communicated vide RB letter No. 2018/Trans. Cell/Mech/Service Contract, dated 17.12.2018. PHODs may frame and approve Special Conditions of Contract on Service in consultation with Associate Finance.	ALL PCMEs

	Considered consistent decision may be taken while modifying any of the clauses.	
E.	**Freight**	
1.	The regional distribution of POH ineffective across 5 groups has been implemented by January 2019. It is seen that this system has resulted in achieving an average ineffective of 3.4% over IR during the period, which is a significant improvement over 3.8% ineffective achieved during the same period last year.	All PCMEs
2.	During year 2019-20 further effort should continue in the same direction so as to achieve improvement in ineffective %age. The nodal CRSEs must be watch over the POH arisings and their quick disposal to various shops. The outturn target of various shops during year 19-20 has been increased in many cases so as to increase to ensure that the arisings on the group are matched by the POH capacities. **Adherence to POH targets by all workshops will be critical in achieving reduced ineffective**.	All PCMEs Nodal CRSEs
3.	During the year 2018-19, railways have undertaken unloadable repairs of A, B & C categories upto 137678, 47345 & 12604 wagons respectively. The 'C' category repairs during the year, shows a 57% increase over 2017-18. Railways need to continue to focus on unloadable wagon repairs.	All PCMEs
4.	SML rakes operating on the system should be dissipated during examination so as to weed out all the unloadable wagons for taking up the unloadable repairs. Wagons repaired should always be handed over to traffic as Mineral fit.	
5.	During examination of wagons, whenever wagon is found to be unloadable due to improper handling at loading/unloading terminals, the last terminal where the wagons have been suspected to be mishandled should be identified using FOIS data.	
6.	In all cases of damages caused by mishandling the bills for repair of such damages must be raised by the concerned depot.	
7.	Special drive should be taken to undertake joint checks as prescribed by Board's JPO on the subject of unloadable wagons and body damages.	All PCMEs
8.	RSP allotments for rehabilitation of BOXN/BCN/BOBRN wagons have already been advised to Zonal railways (ZR). These works should be expedited.	
9.	For increasing the speed of freight trains to 100/75 kmph in [illegible] trains, fresh oscillation trials have been planned by Samewal section of NR. These trials should be completed by 20.06.2019. The trials of BOXN variants should be undertaken on priority.	PED/Wagon PCME/NR&NCR
10	It is expected that some modifications in the suspension system of bogies would be needed based on the above oscillation trials. RDSO should analyze and come up with the action plan for	PED/Wagon EDME/Fr

	undertaking the modifications as arising out of these trials. A consolidated action plan should be prepared by RDSO so that RSP sanction needed can be included in the Budget proposal 19-20. The modification to these suspensions shall be taken up during ROH & POH together. Workshops and ROH depots should gear up.	
11.	PED/Wagon gave a presentation on new wagon designs under development. Wagon Dte/ RDSO should adhere to the timelines already advised.	PED/Wagon EDME/Fr
12.	The FMM yard module is already being used by 83 examination yards and 60% of all BPCs generated by the system. Railways must ensure that all depots start using the FMM yard module so that 100% BPCs are issued from FMM yard module.	All PCMEs & GM/CRIS
13.	FMM ROH module is being used by only 3 ROH depots. All railways should start using FMM ROH module.	
14.	Only 4 sick lines have used FMM sickline module during March 2019-20. Up to 11 depots have used this module in the past. All sick lines also should start using the sickline module of FMM.	
15.	The FMM project detailed estimate includes provision for network and hardware including desktop and palmtop devices. However, the procurement of these items is expected to take time. For immediate uses purpose, ZRs should use the local powers for procuring desktops and LAN as per requirements under delegated powers. CRIS should expedite the procurement of hardware and network required.	
16.	In the area of equipment failures, a new system of reporting equipment failures through ICMS network has been started from 18-19. It is seen that large number of wrong entries are being made in ICMS system. Railways must reconcile all reported cases and ensure that the correct cases are only reported through MCDOs	All PCMEs
17.	Cause wise analysis of enroute detachments over selected railways indicates that wheel flat/skid has been the cause of detachment in 34% of the cases. The overhauling of distributor valves by shops and ROH depots should be audited by all ZRs through other depot/shop officers. The RTR testing during examination and SETR testing after ROH should be ensured. Computerization of RTR by all depots should be implanted during the year.	
18.	The next highest cause of enroute detachment is the body defect. Emphasis on detaching all body damaged wagons during the examination to be ensured by railways.	
19.	The ROH outturn during the year was reviewed. Railways must ensure that ROH due wagons are always detached during examination.	

20.	Consumption of critical materials was discussed. The consumption trend of brake blocks indicates an average life of 2+ years. Railways need to ensure that:- • All new brake blocks wearing out/breaking during warranty period are replaced under warranty • Partially worn out brake blocks removed in POH/ROH (must change replacement) should be released to Open line examination yards for use during train examination	All PCMEs
21.	Excluded fittings like wheel set, bogie, bogie components, CTRB, brake gear & coupler items are received from condemned wagons. All workshops and depots must ensure that these items are used on priority after inspection and ensuring serviceability.	
22.	AAC review of all the above category items must take into account the usage of excluded fittings. There are wheel sets and bogies received from excluded fittings accumulated in many workshops. All these items must be put back to use before new material is issued.	
F.	**CRIS**	
1.	CRIS highlighted the following achievements: **CMM** 106 coaching depots are using all features of the newly bespoke developed CMM and many are also using the CMM mobile app. A new feature of Pivot table reports have been introduced in CMM.	All PCMEs
2.	The complaint module for failed components in off built coaches as well as workshop turn out coaches has been deployed in CMM.	
3.	**CMM & WISE** have been integrated. CRIS stated that they shall be deploying Wi-Fi based networking solution at 2 locations so that access through internet for the applications is easily available.	
4.	**FMM** Railway wise usage of yard module (83 depots in Mar 2019), ROH module and Sick line module (usage by only 2/3 depots) was shown. PCMEs were requested to increase usage especially of the sick line and ROH modules.	
5.	**WISE** Home-grown version of WISE is currently used across 5 railways and 7 workshops. The same has 22 functionalities. This would help in capturing the field level data.	
6.	**MRS's instructions to PCMEs/CRIS** i. Usage of CMM by all concerned is essential so that regular synchronization with ICMS would lead to purified data in the database. PCMEs were asked to use ICMS and CMM reports for meaningful analysis.	All PCMEs & GM/CRIS

	ii. Gate pass module should be used by all 3 PUs and rolling stock certificate (RSC) data should exist in CMM. This data of as-manufactured would form the basis of as-maintained structure.	
	iii. Depots should start using the complaint modules immediately.	
	iv. While viewing the coach maintenance history sheet, MRS desired that the software be designed so that both implosion and explosion across values/data is feasible.	
	v. All modules in FMM to be immediately used by all the Zonal railways.	
	vi. RFID data should be integrated with CMM and FMM. CRIS demonstrated the app both on the web and on the mobile which shows the integration.	
G.	**Project**	
1.	While Zonal Railways and Production units has committed to the completion of 85 last mile works in 2018-19, only 36 of these were completed during the year. Even out of these 36, a number of works have been requested for revival, because actual financial completion was not achieved for many of the works reported to have been completed. ZRs and PUs are requested to see to prompt financial closure of identified last mile works.	ALL PCMEs
2.	Funds are being arranged for PH-42 works with considerable effort. However, these are surrendered unutilized due to poor progress of sanctioned works, Railways may see to complete utilisation of funds, otherwise these are liable to be diverted to other plan heads with better execution.	ALL PCMEs
3.	Railways may coordinate with executing agencies for faster execution of projects for addition of maintenance capacity for LHB coaches, MEMU/EMU and wagons as these would be required in the near future due to increasing holding of these stocks.	ALL PCMEs
4.	Over 85 individual works as requested by Zonal Railways, have been approved by Railway Board, under workshops, Coaching and Freight umbrellas. However, their execution has been very tardy. These works are sanctioned under RRSK Allocation where fund availability would be existent only upto the year 2021-22. These works need to be completed well within this time frame.	ALL PCMEs
5.	Only umbrella works will be sanctioned in Budget 2019-20. The planned umbrella works for 2019-20 were discussed. Zonal Railways may keep individual proposals for & approval under these umbrellas ready, for quick processing after formal approval for umbrella works is conveyed.	ALL PCMEs
H.	**Workshops**	
1.	Production Unit must work towards creating a world class manufacturing base for railway rolling stock and wheels in India. Steps to be taken immediately:	PCMEs/ All Zonal Rlys ICF

	1. IRIS certification at MCF and RCF July 2019. 2. Aluminum TOT tender finalization by MCF by July, 2019. 3. Commencement of DPRS including Kolkata Metro at MCF by Dec, 2019. 4. Production of Sleeper type train set at ICF by Dec' 2019.	RCF MCF
2.	Production units need to fix targets for exports in conjunction with RITES within the spare capacity available to promote Make in India initiative.	PCMEs/ All Zonal Rlys ICF RCF MCF
3.	Pus in coordination with RDSO should work towards adoption of EP brakes and improved couplers on LHB coaches keeping interoperability in Focus.	
4.	Progressive implementation of RAMS in Pus (compliance of EN 50126-1) should now be taken up as the next quality certification measure by all coach manufacturing Pus. Target March' 2019.	
5.	MCF has already implemented 3D parametric drawings for coaches manufactured by them. Other PUs (ICF & RCF) should also shift to 3D parametric. Common respiratory of drawings and current specifications should be made available by the three Pus for use by Zonal Railways.	PCMEs MCF RCF ICF
6.	Umbrella works of Rs.500Cr have already been planned during 2019-20 for upgradation and implementation of automation technologies in workshops. Railways should work towards introduction IoT enabled measuring tools and testing equipments through locally sanctioned work sand available sanctioned works as these are all low value but highly valuable enhancements.	All PCMEs
7.	On WISE project, 7 workshops across 5 zones are using 22 available functionalities. All PCMEs must ensure that the use of WISE functionalities is implemented on their workshops. CRIS should provide a platform for reporting of all performance parameters of the workshops on daily basis through WISE central application.	All PCMEs
8.	POH workshops should provide OEM warranty on their POHed stock. CRIS should develop this module integrated with WISE with an APP based mobile interface for ease of access for all field users.	All PCMEs

No. 2019/M(N)/951/20 **Dated: 01.07.2019**

All PCMEs/ All Indian Railways and MCF, IF, RCF, RWF
DLW, CLW, DMW, KRCL, Metro Railway

CAO/COFMOW, New Delhi
CAO/Bela, Chhapra
CAO/WPO/Patna
CAO/IROAF/New Delhi
Director/IRIMEE, Jamalpur
Sr. Professor Mech./NAIR

PED/Wagon
ED(Carriage), ED(QA)/Mech.
ED(PS& EMU)
ED/Motive Power,
RDSO, Lucknow
ED/CAMTECH/Gwalior

Vivek 01/07/19

(Vivek Mohan)
Dir. Mech.Engg.(Frt.)/RB