GOVERNMENT OF INDIA
MINISTRY RAILWAYS
(RAILWAY BOARD)

No.2018/M(N)/951/20 New Delhi, dated: 15.11.2018

PCMEs of All Indian Railways and
All concerned as per list.

Sub: Minutes of PCME's Conference held from 26th to 28th October, 2018 at Kolkata.

The Minutes of PCMEs Conference held from 26th to 28th October, 2018 at Kolkata is uploaded on IR's website for information and necessary action.

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Railway Board

DA: 15 pages.

MINUTES OF PCMES' CONFERENCE HELD FROM 26TH TO 28TH OCTOBER 2018 AT KOLKATA

S.No.	Item	Action by
1.0	**Address by MRS**	
1.1	There are large numbers of challenges facing the Rolling Stock department and PCMEs need to react to all the issues. Despite these challenges delivery is non-negotiable.	**PCMEs, ZRs/PUs & EDs/RDSO**
1.2	Zonal Railways must aim for excellence in all areas of activities and fulfil the IR benchmarks. For achieving excellence and benchmarks, there should be continual improvement. PCMEs and other officers need to have their own dashboards and keep regular tab on the targets.	
1.3	On IRPSM, there are Rs.20,000Cr worth of works (PH 41&42), which need to be completed and the rate of execution needs to be increased so as to furnish all the works at the earliest.	
2	**ssues flagged by PCMEs**	
2.1	NR: In case of contracts of all types consuming department should be accepting authority.	**ED/Transf/RB**
2.2	ER: To ensure timely availability of materials for smooth and uninterrupted manufacture of wagons, it is essential that wagon production programme is issued in advance for 3 years or more on the same lines as is followed for Production Units.	**PEDME(W)/RB**
2.3	NFR: In case of PH 42 works, the estimate is being held by departments other than Rolling Stock, which is leading to problems of budgeting, prioritisation and timely completion. There is need for directive from Board to ensure that the estimate should be prepared, monitored and finalised by Mechanical Deptt particularly for PH 42 works.	**PED(ME)/W EDME(Proj)**
2.4	ECoR: Raised the issue of AMC for components. Sub assemblies at place of use at the time of procurement of the same so as to avoid high cost at a later stage. It was decided that to the extent possible, AMCs of major components/sub assemblies should be included as a part of procurement process at PUs and COFMOW, which may be operated by user railways as and when required.	**PED(ME)/W PCMEs/PUs CAO/COFMOW**
2.5	NFR: Coaches received in two different years had different arrangement of wiring in fire alarm systems. PUs must ensure that wiring diagram and general arrangement should be standardised. This is to be coordinated by RDSO.	**EDS/Carr/RDSO PCMEs/ICF,RCF &MCF**
3.0	**Items for decision at Board**	
3.1	PCMEs raised the issue of condemnation of ICF design coaches, which are more than 20 years old and are beyond economic repair. At present, powers of condemning such coaches are with General Managers of Zonal Railways. Transformation Dte to process for change in SPO to provide powers to PCMEs for such condemnation	**ED/Transf/RB**
3.2	WCR: Conversion of screw coupling to CBC during MLR needs to be	**EDME/Chg**

	reviewed as there is a shortage of ICF design screw coupling coaches.	
3.3	NFR: SOP provides powers for sanction to computers by PCMEs, which is inadequate. Enhanced powers should be delegated in this regard. Transformation Dte/Railway Board should process the same.	ED/Transf/RB
3.4	NFR: Qualifications for technicians should include electrical, electronic and mechatronics. ED (Transformation) to move a proposal in this regard.	
3.5	ICF: Artificial Intelligence should be utilised in a big way in order to reduce maintenance requirements and brake failures in advance	PCMEs/ZRs& PUs EDME/Dev
3.6	There is a ban on recruitment of supervisors, it should be examined and lifted. Immediate decision required from Board permitting direct recruitment of supervisors by RRB	PED(ME)/W
4.0	**Instructions to RDSO**	
4.1	**CAMTECH**	
4.1.1	Design of all weather 3 tier coaching depot for distributed power rolling stock (DEMU, MEMU, EMU, Trainset) needs to be finalised quickly. Appropriate waste disposal system in coaching depots design should also be considered.	ED/CAMATECH
4.1.2	Must change items list for LHB coaches to be reviewed, and brought closer to the original recommendations of LHB/ALSTOM. Any quality improvements in the indigenous supplies to be enforced by use of suitable quality improvement methods.	ED/CAMTECH EDS/Carr/RDSO
4.1.3	Indian Railways should revert back to old regime of maintenance schedule of LHB coaches as recommended by LHB/ALSTOM and FIAT.	EDS/Carr/RDSO
4.1.4	The Manual for maintenance of LHB coaches and its CTRBs should be reviewed and a revised maintenance manual should be issued by CAMTECH	ED/CAMTECH EDS/Carr/RDSO
4.1.5	Capital spares requirements of LHB coaches should be reviewed along with Carriage Directorate of RDSO. This should be included in the maintenance manual for guidance of PUs & ZRs	
4.1.6	SCR suggested that for evacuation of bio-toilets in depots, a pathway is need for movement of machines. ED/CAMTECH should get the issue examined and modify the design of pit lines. Effort should be made to redesign the evacuation machine in such a way that it can be moved easily in the available space of existing CAMTECH pits.	ED/CAMTECH EDS/Carr/RDSO CAO/COFMOW
4.1.7	NFR: New MEMU rakes required for NJP will be maintained at DEMU shed in NJP. CAMTECH to study and develop design for combined DEMU, MEMU shed	ED/CAMTECH
4.1.8	Non standard bolts & inadequate torquing is being done in control arms of LHB coaches. Standardised torque wrenches with data recording and storage facility should be developed for use in maintenance depots	ED/CAMTECH
4.1.9	Proper instructions for maintenance of CTRBs should be prepared and issued by CAMTECH. Warranty of 72 months from fitment or 84 months from date of supply must be enforced	ED/CAMTECH

4.1.10	Phase wise implementation of ROMS and CBM in coach maintenance should be studied and action plan for implementation should be developed	**ED/CAMTECH EDME/Dev**
4.1.11	Details of EN 50126 and ISO 55000 to be disseminated amongst all the CMEs by CAMTECH. CAMTECH & IRIMEE should develop web based classes for the Zonal Railways and others for familiarisation and implementation of these specifications/standards.	**ED/CAMTECH Dir/IRIMEE**
4.2	**CARRIAGE**	
4.2.1.	**Problem of jerks in LHB rakes:** ➢ CR: Change of CBC components is restricted between different makes of couplers. There is need for standardization. ➢ RDSO will bring out revised specification of H type tight lock coupler in Nov '18 to include complete machinability over coupling area, set of measurement gauges and optimized draft pads pre-load/energy absorption ➢ Zonal Railways should ensure fitment of balanced draft gear on all LHB coaches by December 2018 ➢ A new design of coupler for IR should be developed by RDSO. ToT for coupler design may also be considered	**EDs/RDSO PCMEs/ZRs**
4.2.2	**Spring failures in LHB coaches:** ➢ Railways raised the issue of LHB spring failures ➢ RDSO shall critically analyse helical coil spring failures in LHB coaches based on data to be sent by Zonal Railways/PUs. All dilutions from FIAT standards to be identified and steps to reduce corrosion pitting shall be studied by RDSO. Failures of RSK make springs were reported by zonal railways on higher side – a detailed review of material, processes, testing and inspection at RSK should be undertaken. Use of better anti-chipping paint, improved packing and handling, heat treatment after grinding and hot short pinning for the end coils may be adopted suitably by PUs in consultation with RDSO. ➢ Quality of springs manufactured by RSK, Sithouli must be improved. Audit by M/s Gruber should be carried out on urgent basis and deficiencies found should be rectified. ➢ RDSO should examine the possibility of providing a rubber pad below the primary spring in order to avoid bi-metallic corrosion etc., which may be resulting in failure of springs. ➢ Various deficiencies during inspection and manufacturing processes of springs were brought out by EDME (Coaching). Detailed instructions regarding improvement in spring manufacture and maintenance should be issued in the next 10 days. ➢ SECR: Failure of primary springs in LHB coaches is resulting in detachment of coaches. RDSO should examine and issue necessary instructions for permitting coaches at restricted speed with broken primary springs.	**EDS/Carr/RDSO**
4.2.3.	**PUs raised the issue of corrosion in LHB coaches under frame.** ICF: Brought out that there are issues of corrosion in LHB coach	**EDS/Carr/RDSO**

	under frame as it is made of Corten Steel. RDSO was directed to study the possibility of using austenitic steel for making the under frame to avoid corrosion. Instructions for rationalization of types of steels used in LHB coaches shall also be issued by RDSO.	
4.2.4	**Seats & Berths** MCF: Railway Board has issued instructions for provision of silicon foam seats and berths, which is not progressing due to adequate vendors not being available for supply of silicon foam. MCF suggested that PU foam with fire barrier as per EN standards should be permitted. It was decided that RDSO should examine the proposal of MCF for provision of PU foam seats and berths with fire barrier, compliant with EN 45545 HL3 and toxicity level less than 2.5 and issue necessary direction in this regard.	**EDS/Carr/RDSO**
4.2.5	Recent steps taken to reduce wheel shelling the LHB coaches were explained to Zonal Railways. Zonal Railways were requested to ensure proper electrical connections of WSP dump valves/speed sensors, changeover to the specified choke sizes and ensure free movement of brake callipers. The instructions with regard maintenance of WSPs and modifications in the air brake system issued by RDSO must be immediately implement by all Zonal Railways and PUs. This will reduce cases of wheel shelling. RDSO also informed that under frame junction boxes with MIL-grade connectors are under fitment in RCF/MCF. Instructions for complete switchover of these fittings by brake manufacturers shall be issued by RDSO within a month.	**PCMEs/ZRs**
4.2.6.	**Air Spring cut-in:** MCF: Raised the issue of capacity of air springs to be provided in LHB coaches. RDSO appraised that 120 KN air-spring for LHB AC Coaches is a stop gap arrangement. Oscillation trials with 160 KN air spring have been completed for other than C&M Vol.I track and awaiting CRS sanction for C&M Vol.I track. It was decided that for the present all coaches may be provided with 140 KN springs. RDSO shall expedite trials and standardise the 160 KN air spring. RDSO to issue necessary instructions in this regard.	**EDS/Carr/RDSO**
4.2.7	**MCF has proposed to manufacture AC-II tier shell** RCF: Shell variants of LHB should be reduced in number and standardised The designs shall be studied and standardized by RDSO so as to reduce the number of shell variants.	**EDS/Carr/RDSO**
4.2.8	In view of poor performance of existing canvas cloth duct, specification for silicon coated canvas has been issued by RDSO. Zonal Railways also reported water leakage from FRP tray placed below RMPU. RDSO to examine feasibility of replacing the same with robust metallic tray and issue necessary instructions.	**PCMEs/ZRs** **EDS/Carr/RDSO**
4.2.9	EDME (Coaching) brought out that there is an increase in roller bearing failures of ICF and LHB coaches. Zonal Railways & Production Units to get their roller bearing sections audited and necessary corrective action be taken. RDSO should examine the reason for failure of these bearings and submit a report in this	**PCMEs/ZRs** **EDS/Carr/RDSO**

	regard.	
4.2.10	Various modifications in the furnishing items are being carried out by the PUs, which is resulting in maintenance problems in the depots. There is an urgent need for the CDEs of the three Production Units to discuss changes and standardise them in consultation with RDSO. Executive Director Stds. (Carr.)/RDSO shall co-ordinate in this regard.	**PCMEs/PUs EDS/Carr/RDSO**
4.2.11	WCR: Attachment of LHB coaches with ICF design rakes should be permitted. RDSO should examine and issue necessary instructions in this regard.	**EDS/Carr/RDSO**
4.2.12	WR: Quality of brake blocks being supplied is sub-standard. Railways should provide feedback to RDSO regarding the same so that the issue could be taken up with the defaulting vendors.	**PCMEs/ZRs**
4.2.13	RCF: Requested for exemption of VPs being manufactured on LHB platform from oscillation trials. RDSO should examine the possibility of the same. RCF: Lay-out of CZ issued by RDSO needs a review. RDSO should examine the suggestions of RCF and take a decision in this regard	**EDS/Carr/RDSO**
4.2.14	RDSO to examine the issue of increasing MEMU train length to 24 coaches	
4.2.15	RDSO must upload draft specification of modified Switch Board Cabinet in next 15 days. After issuance of final specification by RDSO, PUs must cut in production of coaches with same.	
4.2.16	Toilets are being provided in trailer coaches of new MEMU coaches being manufactured in production units since 2010. PCMEs have raised issue of non existence of any guidelines for retrofitment of toilets of trailer coaches manufactured prior to year 2010. ED(Carriage) in consultation with ICF/RCF should issue necessary modification sheet for retrofitment of toilets in existing MEMU coaches.	
4.2.17	Roof Mounted Package unit must have arrangement for monitoring CO_2 level inside the coach with automatic adjustment of fresh air control. RMPU should have Ultra Violet lamp in return air duct for making conditioned air environment bacteria free. RDSO should come out with necessary specification of same.	**EDPS & EMU**
4.2.18	ICF: RDSO failure database needs to be upgraded in order to enable Railways to feed in the data and carry out data analytics. MRS directed RDSO to ensure that a portal similar to that of Motive Power Dte be developed having advanced features in order to enable proper analysis and corrective action	**ED/Carr./RDSO ED/W, RDSO ED/Trainset ED/PS&EMU**
4.2.19	ER: RDSO should quick finalize report with regard to review of periodicity of different maintenance schedule and POH, in view of technological improvements made in EMU/MEMU stock over the years. EDEE/G/RB and ED/PS & EMU/RDSO to finalize and circulate at the earliest.	**EDEE/G/RB ED/PS&EMU, RDSO**
4.2.20	RDSO to issue modified specifications of connectors should be used on LHB coaches, EMUs, DEMUs & MEMUs	**ED/Carr, EDMP & EDPS&EMU**
4.2.21	Enclosure of Microprocessor control of the vacuum bio-toilets must conform to IP 67 standards	**EDS/Carr/RDSO**

5.0	**Production Programme & Proliferation of DPRS**	
5.1	**Vacuum toilets** ➢ Instructions for provision of vacuum toilets in all the newly manufactured coaches have been issued to the three PUs. Timetable for production should be advised by the PUs. ➢ Apart from this, three Zonal Railways nominated for centralized tender for retrofitment in premium trains should finalize the tender expeditiously. ➢ RDSO is working on revision in the specification, which should be finalized within next one month ➢ Guidelines for retrofitment of vacuum toilets in existing coaches need to be issued by RDSO	**PCMEs/ZRs, MCF, ICF & RCF EDS/Carr/RDSO**
5.2	RDSO should expedite necessary tests/trials of same of already offered under slung DG sets by the vendors. RDSO should also develop sufficient number of sources for this item, keeping in view the future requirement.	**ED/PS&EMU, RDSO**
5.3	MRS directed that only under slung power cars in SLRD format should be manufactured from 2019-20. This will provide enhanced seating capacity in the trains. PUs to plan for earliest cut-in	**PCMEs/PUs**
5.4	1. Train 18 – EDME (Coaching) brought out various issues regarding trials and running of Train 18 ➢ Concerned Zonal Railways should nominate maintenance team both for the trial and for regular running. Composition of maintenance team should be advised to Railway Board ➢ ICF should supply necessary spares required for maintenance of this train and provide necessary support from the OEMs for maintenance ➢ Necessary training of crew by the concerned Railways should be organised well in advance ➢ RDSO and Zonal Railways should process for running of this train as per the revised Railway (Opening for public carriage of passenger) Rules, 2000 and Policy circular no.6. Efforts should be made by RDSO to further reduce the time required for oscillation trials of train 18. ➢ Training for TCMS is being organised in ICF. Railways may nominate Officers for the training	**PCMEs/NR, WCR&ICF ED/Trainsets**
	2. ICF: Train set would be turned out on 29.10.2018 from ICF. ED(Trainset)/RDSO should take over the various technological features provided in the Train Sets	**EDS/Carr/RDSO ED/Trainset**
5.5	ER: Requested that umbrella works for EMUs/MEMUs so as to set up proper facilities. MRS directed that an umbrella work for provision of Distributed Power Rolling Stock (DPRS) facilities should be proposed in Works Programme 19-20	**EDME/Pr**
5.6	SR: Suggested that complete implementation of Board's instruction regarding rolling stock maintenance should be ensured. MRS instructed the Board's instructions should be implemented on all Zonal Railways	**PCMEs/ZRs**

5.7	RCF: Provision of water level indicators in water tanks of LHB coaches needs a review. It was decided that water level indicators should not be provided in water tanks of LHB coaches. Electronic indicator as provided in SMART coaches should be adopted. MRS further directed that all the three PUs should cut in production with all SMART coach features to enable utilisation of the features on a larger scale.	**PCMEs/MCF,ICF &RCF**
5.8	From 2018-19, there will be induction of 1200 coaches of MEMU every year. ZRs to plan for new facilities or up gradation of existing facilities for maintenance of MEMU stock	**PCMEs/ZRs EDME/Pr**
5.9	MCF: By Jan 2019, MCF will cut in for Smart coaches. ICF has also placed order for 140 Smart Coaches. RCF to also plan	**PCMEs/RCF,ICF &MCF**
5.10	1. Present population of DPRS is 10000 coaches, which is likely to increase in future. During 2019, on golden quadrilateral many passenger loco hauled trains are expected to be replaced with DPRS. Staff & maintenance facilities accordingly to be planned.	**PCMEs/ZRs, MCF, ICF & RCF EDME/Pr**
	2. Augmentation work of MEMU sheds to be expedited. Management may be strengthened by redistribution of posts.	**PCMEs/ZRs**
	3. CAMTECH to issue maintenance manual for DPRS	**ED/CAMTECH**
	4. Training of staff in electrics of EMU/MEMU 3 phase must be undertaken	**EDEE/G**
	5. Washing, cleaning of EMU rakes must be undertaken by ZRs. Wherever watering facilities are not available on stabling location of these trains, a separate sanction may be taken	**PCMEs/ZRs**
	6. Integrated maintenance in coaching depots must be undertaken	**PCMEs/ZRs EDEE/G & EDME/Chg**
	7. Speed of MEMU trains to be increased to 130 kmph	**ED/PS&EMU**
	8. WR: Problem of running of MEMU in high rise OHE on Western Railway. Guidelines to be issued by RDSO	
	9. RDSO to prepare different layouts for Air Conditioned EMUs having longitudinal and transverse seating arrangement	
5.11	1. The production planning by PUs should be done in three monthly cycles so as to ensure that full complement of rakes is available while ensuring that there are adequately large batch sizes of each type of coach	**PEDME(W)**
	2. Increase in LHB coach Production a) More LHB AC pantry Cars b) LHB First AC c) LHB ACCW d) LHB power car	
	3. Production programme should be issued in rake wise format so that PUs can plan outturn in rake form. PUs should have the information about the plan for rake replacement from ICF to LHB. Rake wise production programme should also account for the matching requirements for coaches already available with Open Line but short of FAC, CB, LRRM etc.	
	4. Coaches turned out by PU should be in all readiness to start	

	service immediately on receipt in ZRs and there should be no requirement of commissioning activity at the base depot	
6.0	**Coaching items**	
	Issue: Proliferation of IT & IOT in day to day maintenance and operation. Electronically generated BPC, Real time capture & transmission of data etc.	**PCMEs/ZRs, MCF, ICF &RCF AM/ME**
6.1	**Decision:** Following action shall be taken by the Zonal Railways: All activity centres shall have CCTV, WiFi and handheld devices. All maintenance depots have to be covered with CCTVs & feed must go to a Central command Centre for analysis by 31.12.18	
	1. CMM and FMM to be implemented across all depots and two way Integration with ICMS and FOIS to be done to ensure clean data and continuous purging of rubbish data.	**PCMEs/ZRs**
	2. Issues on various user level access controls for data like addition, deletion, updation etc. to be decided in consultation with EDME/Chg and EDME/Fr in Board	**GM/CMM/CRIS**
	3. CRIS may advise railways for procurement of hardware sanctioned as per the estimate, in case delay is anticipated in procurement by CRIS	
	4. Powers for procurement of Hand Held Devices/Tablets/Portable Printers/Data Cards etc. at divisional/depot level to be included in the SOP and all effort shall be made to make systems completely accessible on hand held devices especially Smart phones	**GM/CMM/CRIS EDME/Transf**
	5. PHODs to be empowered to decide about the type of computing device (Desktop/Laptop/Tablet/Notepad/Notebook/smart phones etc.) required for a particular objective. 6. At present, they can sanction 10 desktops with accessories worth up to Rs.75000/- each every year. Instead of ceiling on numbers, there should be annual financial ceiling of say, Rs.4 lakhs for the PHODs. Same should be applicable to other officer empowered to sanction desktops.	**ED/Transf/RB**
	7. GM(CMM)/CRIS brought out that there are 89 depots where partial implementation of CMM has taken place. All Zonal Railways must immediately use CMM in all depots	**PCMEs/ZRs**
	8. The issue of RFID tagging of coaches was discussed. It was decided that RFID tagging of coaches and wagons should be carried out expeditiously	**EDME/Dev CAO/COFMOW**
	9. Zonal Railways must complete HOG conversion work in all LHB coaches during 2019-20	**PCMEs/ZR**
6.2	**AC Tonnage for AC Coaches (CME/CR)**	
	Decision: Keeping in view hot climate of our country, there is a need to enhance tonnage of RMPU unit from existing 2x7t so as to have spare capacity, to cater to cooling requirement of coach in case of failure of one refrigeration circuit or any of the components	**EDS/Carr/RDSO**
6.3	**MLR of ICF coaches**	
	Decision:	**PEDME(W)**

	MLR of ICF coaches will be continued for all PCVs. Adequate capacity may be created to cover LHB coaches also.	
6.4	**Human Resources for new generation Hi-Tech and smart coaches**	
	Decision: 1. There will be need to create a cadre of highly skilled artisans who are conversant with all aspects of coach maintenance. 2. TL&AC staff required for rolling stock maintenance needs to be separated from electrical general works 3. Cadre of C&W fitter & TL&AC fitter should be merged in future and a **new cadre of ROLLING STOCK FITTER** should be created 4. For this to function effectively both theoritical and hands-on training of existing Mechanical staff on electrical side and electrical staff on mechanical side shall be done 5. RDSO to guide IRIMEE and STCs to formulate a training regime, having uniformity in the content and skill proposed to be imparted. For this to function effectively both theoritical and hands-on training of existing Mechanical staff on electrical side and electrical staff on mechanical side shall be done. 6. This exercise shall be completed in next 3 months by Zonal Railways in a phased manner. For RRB/RRC recruits, training should be suitably restructured	**EDME/Chg** **EDEE/G** **PCMEs/ZRs** **EDS/Carr/RDSO**
6.5	**Painting of Coaches** 1. Painting of all coaches with revised colour scheme was discussed. It was decided that painting of all coaches should be done with PU paints as per extant instructions 2. Further ICF brought out that roofs should be painted with heat resistive white paint instead of grey and silver colour paints being used at present. This is expected to substantially reduce the thermal load inside the coaches. It was decided that roof of all coaches should be painted with heat resistive white paint for which specifications shall be finalised and circulated by ICF.	**EDME/Chg** **PCMEs/ZRs** **EDS/Carr/RDSO**
6.6	**Conversion of coaches to camping coaches, NMG, ART/ARME etc.** 1. Coaches that have completed 15 years of service should be got converted, in order to ensure that adequate life of rolling stock is available after conversion for the intended services. The existing policy will be reviewed at Board and necessary instructions issued. 2. There is an urgent requirement of NMG and camping coaches. Zonal Railways should expedite conversion against RSP already allotted to them	**EDME/Chg**
6.7	**Standardisation of LHB Brake system** With the currently prevalent two designs of brake systems for LHB coaches, constraints are being faced by Railways in spares as each LHB coach has to have same make of coach system, bogie, WSP and its wheels. With development of new designs this problem is expected to aggravate. There is a need to standardize the air brake systems in LHB coaches so that intermixing in a coach is possible. RDSO will examine the issue and attempt to develop inter operability of different designs or	**EDS/Carr/RDSO**

	a standard IR design.	
6.8	**Automatic Coach Washing Plants** 1. All major coach maintenance depots are to be provided with automatic coach washing plant (ACWP) 2. COFMOW has placed LOA for 10ACWPs, which should be commissioned at the earliest. 3. COFMOW has opened a tender for provision of ACWP at 21 locations, which should be finalised within the next one month 4. Some of the Zonal Railways, whose locations do not have standard yard layout of 100/30m straight line track, have invited tenders for provision of the same against their own specifications 5. All out efforts should be made in coordination to provide ACWPs at 50 locations by December 2018.	**CAO/COFMOW**
6.9	**Examination time on pit line** The issue of pit line maintenance time was discussed. It was decided that it should be carried out strictly as per instructions issued by Railway Board without any deviations.	**PCMEs/ZRs**
6.10	**Issue of BPC on CMM/FMM** For issue of BPC in yard, portable Thermal printers (shoulder hung) required by the depots should be procured centrally and distributed to the various Zonal Railways by CRIS. CRIS will modify the DE for the CMM/FMM works suitably. Railways however, can increase the nos. through direct procurement in due course.	**GM/CMM/CRIS**
6.11	**Provision of quick watering facilities at all enroute watering stations** Zonal Railways should provide this facility at all locations at the earliest wherever sanctions are available An umbrella work is being processed by Board for sanction. Railways should advise their additional requirements, if any.	**PCMEs/MCF, RCF&ICF**
6.12	**LHB Control arm maintenance** The issue of control arm loosening/falling down was brought out by EDME (Coaching). All Zonal Railways must ensure use of proper quality of nuts & bolts, washes etc. Proper torquing of bolts should be ensured. Proper functioning of dampers should be ensured. Instructions issued by RDSO to be strictly followed.	**PCMEs/ZRs**
6.13	**Maintenance of power cars** Maintenance facilities for power cars need to be established urgently. Proper fuelling arrangements for power cars also need to be ensured. Zonal Railways should expedite setting up of coach fuelling depots in coach maintenance depots under the charge of CDO.	**PCMEs/ZRs**
6.14	**'Project Utkrisht'** All out efforts should be made by the Zonal Railways to complete the project by March 2019.	**PCMEs/ZRs**
6.15	**NFR:** ICF coach vendor list has not been updated, which is resulting in problems in procurement for ICF coach spare parts. It was decided that ICF will continue to update the vendor list for ICF coaches till such time all coaches are phased out.	**PCME/ICF**

6.16	**NFR:** New depots should have unified cadre for rolling stock maintenance. It was decided that all proposals for creation of new depots should be with unified staff over all Zonal Railways	**PCMEs/ZRs**
6.17	**SCR:** Brought out that they have developed a computerised test rig for brake system testing of coaches and wagons. It was decided that all the Zonal Railways to adopt the same for testing of brake system.	
6.18	**WR:** Suggested that two western toilets should be provided in each coach. It was decided that the same be implemented on AC coaches. RDSO to issue revised layouts.	**EDS/Carr/RDSO**
6.19	**MCF:** Informed that world class coaches would be manufactured from 2019-20. MRS directed that only one design of each coach should be finalised so as to avoid multiplicity of designs over IR. RDSO in consultation with PUs, should firm up standard design and advise all PUs	**EDS/Carr/RDSO PCMEs, ICF, RCF & MCF**
6.20	**DMW:** It is suggested that a motor test rig has been developed, which could be utilised by the various Zonal Railways. MRS directed that Zonal Railways should immediate utilise such a rig for proper testing of all types of rolling stock motors. DMW to set up a repair line for repair of motors of DEMU, MEMU, EMU & Train Sets.	**PCMEs/ZRs**
6.21	**RCF:** Requested for review of production Programme of double-decker coaches as there is limited increase in capacity of the same. Requirement of double-decker coaches should be re-examined in consultation with Coaching Dte of Railway Board.	**EDME/Chg.**
6.22	Zonal Railways have raised their concerns on the performance of Deep Gen set make DG sets deployed in power cars. DG sets orders on the firm to be kept on hold till problems in NFR are rectified. RDSO should take necessary action for delisting the firm from its approved list following due procedure.	**PCMEs, ICF, RCF & MCF EDPS&EMU**
7.0	**Freight**	
7.1	All depots where CC and premium examinations are done have to be upgraded to A Category through umbrella works in the current year and 19-20. Wherever sanctions are not available, the facilities shall be planned for umbrella works for 19-20.	**PCMEs/ZRs EDME/Fr**
7.2	In case of hot axles and train partings, the investigation report has to be prepared by open line and workshops based on the axle being sent to them. ZRs must ensure that the progress made in investigation of each case of equipment failure is followed up from their office till the report is sent to RDSO	**PCMEs/ZRs**
7.3	Automation of CTRB maintenance should be done so as to a mini SCADA is developed. RYPS/SCR and JUDW/NR shall develop such system	
7.4	Maintenance of CBC & draft gears must be proper in workshops. 100% dropping of draft gear, testing and overhaul to be ensured. The creation of adequate AAC of all replacement components should be ensured	
7.5	The instances of dead and inactive draft gear in wagons are often coming to light. RDSO will issue a WMI for detecting such cases during examination of trains, which has to be quickly implemented.	**PCMEs/ZRs EDS/W/RDSO**

7.6	Complete overhaul of BMBS system during POH must be ensured. Wherever the test benches and other tools/gauges are not available, railways must plan for the same under WP/M&P 19-20	**PCMEs/ZRs**
7.7	PCME/SCR brought out that casnub bogies released from disposal of condemned wagons are lying unutilised in workshops and yards. It was decided that wagon POH workshop would be nominated to assemble limited number of bogies and supply the same to the wagon manufacturing workshops for use in new manufacture of wagons. Issue will be examined and necessary instructions will be issued from Board.	**PEDME(W)**
7.8	**Issue: Improving quality of painting: "Supply and Apply"" contract**	
	Decision: There is no such concept as "material intensive" work in the Model Schedule of Powers issued by the Board. Mode of procurement and execution has to be guided by the need and interest of the Railways. PCMEs should decide the mode of procurement of goods & services giving proper justification in each case.	**PCMEs/ZRs**
8.0	**EnHM**	
8.1	**Issue: Creation of a new Plan Head for environment related works**	
	Decision: In order to give boost and proper direction to environment related works, it is felt necessary to create a new Plan Head for such works. Environment directorate shall process accordingly. In the intervening period, 1% of the total plan outlay during a year may be aggregated (source of fund wise) at Railway Board and allocated to Zonal Railways as per need. This will save considerable time of executives that they waste running around various estimate holders for allocating 1% for environment related works. Environment Dte would process accordingly.	**PED/EnHM/RB**
8.2	**Environment & House Keeping contracts**	
	Timely placement of contracts should be ensured	**PCMEs/ZRs**
	Splitting of quantity/area may be done as per requirement to have 2 or more agencies in housekeeping contracts to provide back up against failure of one contract	
8.3	**'Coach Mitra'** application developed by CRIS is to be adopted by all divisions/depots with unified no.138. Extension of 'Coach Mitra' to non-OBHS trains may also be done where feasible.	
8.4	**OBHS Contracts**: PCME/NFR suggested sectional OBHS for longer distance trains with more than 3-4 days journey time. It was discussed that ownership of primary depot provides clear responsibility and accountability. In SBD/MCC and OBHS are in scope of the same contract. Rotation of duty should be done by the contractor. However. Limited trial may be done for one or two extreme cases (e.g., Vivek Exp) in coordination with passing/terminating railways.	
8.5	**Mechanised Laundry**: Railways were required to provide 100%	**PCMEs/ZRs**

	coverage by March, 2019. Maximum shortfall is in ECR (77.4%), NR (67.5%), ECoR (56%), NCR (56%), SR(48%), ER(46%), SWR(44%) and CR(35%). ZRs have to assess their future requirements and also plan for adequate spare capacity.	
8.6	**Energy Efficiency Studies:** first phase of Energy Efficiency Studies (with CII) at 6 PUs and 4 Workshops has resulted in 9-15% improvement in energy efficiency. Energy Efficiency Studies for 10 more Units (2 PUs and 8 workshops) have been initiated. Other workshops should also learn from the experience of these units and take necessary action for improvement in energy efficiency. MRS observed that expenditure on energy should also be monitored for complete assessment.	**PCMEs/ZRs& PUs**
9.0	**Workshop & OPU Items**	
9.1	**POH/MLR OUTTURN** - Coaches, DPRS, Locomotives, wagons. Each ZR must become independent in meeting its arising. Wherever, there are capacity constraints or non-availability of workshops, POH plan and allotment matrix should ensure that one Zonal Railway does not have to send coaches for POH to more than one zone. As far as possible POH linkages of individual coaches should not change year to year so that shops during their repair have visibility of work done in past POH.	**PCMEs/PUs**
9.2	**Solar Power:** 100 MW power generations through roof top solar plants in workshops must be planned. Energy efficiency audit reports must be utilised for implementation & getting green certifications	**PCMEs/PUs**
9.3	Every 6 years, **refurbishment of AC coaches** has to be undertaken. RSP provisions have already been made, which are to be utilised over and above POH provisions.	
9.4	**Waste disposal** has to be undertaken by workshop administration. SCR procedure may be followed.	
9.5	**Work place safety:** All standard industry norms must be followed. MCF norms & MLR BPL workshop schedule of PPEs may be circulated.	
10	**Project Items**	
10.1	Land transfer for Latur factory must be expedited by CR with MIDC	**PCME/CR**
10.2	ICF has to facilitate the production process and in future it will be an independent PU. Till that it would work as an extension of ICF with assistance of CR	**PCME/ICF**
10.3	**Badnera**: CR to plan for first POH at Badnera by 31.03.19	**PCME/CR**
10.4	**Jhansi:** a structured plan for inauguration at Jhansi to be worked out by NCR	**PCME/NCR**
11	**Other Items**	
11.1	**NCR**: Requested for conversion of LS-3 to LS-5. In this regard, RSP sanction have been provided to NCR and necessary coaches may be got converted in the workshops nominated for NCR.	**PCME/NWR & NCR**

11.2	**ECR:** Raised the issue of supply of LHB wheel disc. EDME (Chg) advised that adequate coverage has been made by Board and ECR should advise Railway's Stores Deptt for provision of the same.	**PCME/ECR**
11.3	**ICF:** LHB coaches are fit to run at a speed of 130 kmph. Efforts should be made to utilise the potential of these coaches.	**PCMEs/ZRs**
11.4	**WR:** AAC of various components is being linked with availability of funds thereby reducing the quantity. In this regard, it was advised that AAC has to be fixed as per requirement although the procurement could be limited to availability of funds. Requirement of funds at the BE stage should be projected according to AACs fixed so that proper project for requirement of funds may be made at the beginning of the year The revision of AAC should be finalised latest by September of a year so that the same can be used for preparing BE for the next year	**PCMEs/ZRs & PUs**
11.5	**MCF:** Advised that MCF is regularly carrying out training programmes in robotics. Railways may advise name of participants for training in robotics.	
11.6	**WR:** Raised the issue of classification of items as safety items for LHB. In this regard, it was advised that WR may send the list for inclusion in the list of safety items Wherever railways feel the need for inclusion of their items into the list of safety items, list of such items should be sent to the concerned ED at Railway Board along with justification, who in turn will get the items added to the list of safety items through RS(G) Branch at Board	**PCME/WR EDM/Chg**
11.7	**SECR:** A number of coaches are missing/running over other Zones. Efforts should be made by all Zonal Railways to return foreign Railway coaches to their base depots	**PCMEs/ZRs**
11.8	Coaches of all the trains going to ALD should be in good condition and provided with bio toilets for completely avoiding toilet discharge on tracks during the 'Green kumbh'	**PCMEs/ZRs**
11.9	**NFR:** RB can explore running of a Humsafar rake from NFR. One coaching and one DEMU rake can be given by MCF. A wagon rake in the new colour scheme is to be made ready in time by NFR and in time for inauguration of Bogibeel Bridge by Hon'ble PM	**EDME/Chg**
12.0	**Disaster Management**	
12.1	ICF to increase production of HS SPART	**PCME/ICF**
12.2	ER to finalise AMC for 140t cranes	**PCME/ER**
13.0	**Development & IT items**	
13.1	Target for completion of work of bio toilet fitment must be adhered to by all Zonal Railways, i.e. March/June '19 as applicable to each Railways. As per the current progress available, ECoR, WCR, SECR and NCR have made very significant progress. It was suggested that these railways should try and achieve completion of 100% fitment of their systems by 31.12.18.	**EDME/Dev. PCMEs/ZRs**

	ER, NR, SCR, SWR & KRCL need to ensure that their works is completed by 31.03.19 The remaining railways for whom the target is June'19 need to make efforts to advance target data of completion wherever possible	
13.2	Data for EMU/MEMU & DEMUs to be fed in CMM so as to complete the work of coaching master. Eventually it will be CMM coaching master, which shall provide data to ICMS	GM/CMM,CRIS
13.3	Response of nodal officer for CMM/FMM needs to be prompt so as to ensure proper updating of coach & wagon data on CMM Master/IRWMS	

(AJAY NANDAN)
Exec. Director Mech. Engg. (Fr)
Railway Board

No.2018/M(N)/951/20 Rail Bhawan, New Delhi, Dated: 15.11.2018

For kind information and necessary action:

PSO to MRS
PED (ME)/W, PED/EnHM
CAO/COFMOW
PCMEs, All Indian Railways
PCMEs, ICF/RCF/MCF/DMW/DLW/RWF
PCME/PUs
EDS (Wagon), EDS (Carriage), EDPS&EMU, ED/Trainset & ED/Mech.QA, RDSO, Lucknow
EDME (Traction), EDME (Coaching), EDEE (G), EDME (Dev) /RB
GM (CMM)/CRIS
ED/CAMTECH
DIR/IRIMEE
PPS to AM (ME), PS to PED/EnHM