

भारत सरकार GOVERNMENT OF INDIA
रेल मंत्रालय MINISTRY OF RAILWAYS
रेलवे बोर्ड RAILWAY BOARD

No. 2014/M(L)/101/2(BG)pt.D

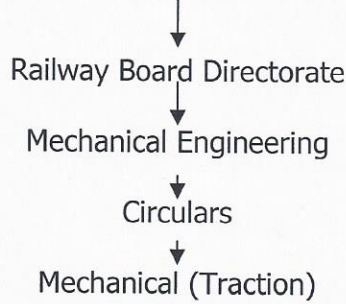
New Delhi, dt. 12.1.2016

**Chief Mechanical Engineers,
All Indian Railways.
(Except ECoR. WCR)**

Sub: Minutes of Meeting on DEMU held on 28.12.2015.

Minutes of Meeting on DEMU held on 28.12.2015 at Northern Railway HQ is papered and approved by the competent authority. Minutes are available at Indian Railways' website.

www.indianrailways.gov.in



The same may be downloaded for information and necessary action please.


12/1/16.
(Alok Kumar Misra)
Dir. Mech. Engg. (Tr.)
Railway Board

Copy to: PS/MM: for kind information.

AM/ME, for kind information please.

EDME (Chg.), EDME (W) for information and necessary action please.

Minutes of Meeting on DEMU held on 28.12.2015 at NR HQ

1. Address by MM

S.No	Points	Action by/ Target
1.1	Maintenance of DEMU has been neglected for long. It is least cared rolling stock.	ZR/ Immediate
1.2	DEMUs are running in pockets with little planning. Having too many DEMU sheds with only 1-2 rakes leads to wastage of resources and must be avoided. As instructed by Railway Board, proper facilities must be created for maintenance of DEMUs having at least 10 rakes or more.	ZR/ Immediate
1.3	Many DEMU are running in island sections with little connectivity. Proper links for DEMU must be made to connect all these isolated sections even if it leads to running DEMUs under wire.	ZR/ Immediate
1.4	It has been decided that no more AC-DC DEMU (1400 HP) will be made. Only AC-AC DEMU (1600 HP) will be manufactured. Railways must gear up for maintenance of 1600 hp DEMU	ICF, Haldia ZR/ Immediate
1.5	As per policy guideline issued by Railway Board CMPE's have been made nodal officers for DEMU in Zonal Railways. This must be ensured to give sufficient focus on maintenance of DEMUs.	ZR/ Immediate
1.6	Railways must plan adequate infrastructure for maintenance of DEMUs. Pit lines of adequate length - 10/12/16 car length, must be proposed to take care of present and future demand.	ZR/ Immediate
1.7	Board has decided to replace passenger trains with DEMU or MEMUs. Running time should be reduced whenever passenger train is replaced by DEMU.	ZR/ Ongoing
1.8	Railways were advised to prepare links so that existing passenger trains can be replaced by DEMUs. Links submitted by Zonal Railways are not proper, having many flaws like longer passenger trains (having 20-22 coaches) and many overnight trains have been included by Railways. Links must be prepared again keeping these things in mind and taking into consideration present and next 5 years demand on account of conversion of passenger trains to DEMU.	ZR/ Immediate
1.9	Revised Links must be prepared in a manner that all light schedules could be carried out within the time provided in the shed. Also, all rakes must reach the sheds as per link on a regular basis. Revised links should be submitted to Railway Board by 15.01.2016	ZR/ Immediate

S.No	Points	Action by/ Target
1.10	In house capabilities for maintenance of DEMUs must be developed. Proper training must be ensured for staff engaged in DEMU maintenance. If need be, training can be organized by suppliers of engine and other major parts.	ZR/ Ongoing
1.11	RDSO has issued speed certificate for DEMU upto 20 car length. Northern Railway is already running 16 car DEMU. Other Railways must also explore possibility of increasing DEMU from existing 8 car to atleast 12 car depending upon traffic requirement.	ZR/ Ongoing
1.12	All rakes of 1600 HP DEMU coming out of PU (ICF/ Haldia) must be of standard length having 15 cars.	ICF, Haldia/ Immediate
1.13	For power cars life of engine has been specified as 18 years, but nothing is specified for DEMU engines. This may be looked into.	RDSO/ 2 months RB
1.14	It may be explored to convert/ replace existing 700 HP DEMU to 1600 HP by replacing full 700 HP DPC with 1600 HP DPC & utilizing same TCs.	RDSO/ 1 month
1.15	All DPCs are with aero dynamic front. Intermediate DPCs can have flat end for better aesthetics.	RDSO, ICF/ 6 months
1.16	Specification and proto-type must be developed for Dual mode DEMU and LNG DEMU.	RDSO/ 3 months
1.17	MUTP-II rakes having same bogies are permitted to run at a speed of 110 kmph. RDSO must explore the possibility of increasing DEMU to same speed.	RDSO/ 3 months
1.18	RDSO issued modification sheet for 3 safety modifications: <ol style="list-style-type: none"> 1. Relocation of the horns 2. Provision of additional BP cut out cocks with vent, 3. Disabling VCD reset through VCD reset push button from the nonworking control stand/desk of Single Cab Diesel electric locomotives (ALCO and HHP Loco). <p>Railways should complete these modifications immediately</p>	ZR/ Immediate

2. Address by AM/ME

S.No	Points	Action by
2.1	DEMU's are like train sets. They must be maintained as a unit. Every case of failure must be properly analysed. In no case DEMU services should be cancelled.	ZR/ Ongoing
2.2	Maintenance shed with proper facilities must be setup. Quality of maintenance must be ensured and problems, if any must be highlighted at appropriate level.	ZR/ Immediate
2.3	Few years back, DMW was asked to support overhauling of major assemblies like TM & TA of DEMU. DMW must	DMW/ 1 month

S.No	Points	Action by
	gear up to support all type of TM, TA & other major assemblies of 1400 HP and 1600 HP DEMU.	
2.4	To justify DEMU sheds quick analysis of requirement must be done and plan links so that DEMU touch back once in 7 days.	ZR/ Immediate

3. Address by EDME/Tr.

S.No	Points	Action by
	<ul style="list-style-type: none"> i. Prime concern today is reliability of DEMU's. It is high-time we streamline maintenance of DEMU. ii. In place of proliferation-Large DEMU sheds must be planned. Huge requirement has been projected by Railways but without proper planning of links and infrastructure. 	<p>ZR/ Ongoing</p> <p>ZR/ Immediate</p>

3. Address by EDME/Coaching

S.No	Points	Action by
	<ul style="list-style-type: none"> i. Lot of passenger complaints are received that DEMU toilets are either locked or not functional. Letter in this regard has been issued by Railway Board that toilets should be made functional wherever available. ii. Time table must be changed when passenger trains are replaced by DEMU. 30 minutes saving is shown by traffic department in many cases. 	<p>ZR/ Immediate</p> <p>ZR/ Ongoing</p>

Points highlighted by Railways

S.No	Points	Action by
NER		
3.1	<ul style="list-style-type: none"> i. When new DEMUs are allotted unit exchange spares must be given like being done for Diesel Locomotives. i. Present holding of DEMU is 6 rakes. ii. For replacing passenger trains 42 additional rakes will be required. ii. One shed at Clutterbuckganj in Izzatnagar is sanctioned for Rs. 49 crore. Another DEMU shed at Aunrihar Jn. in Varanasi Division is being proposed this year at a cost of Rs. 88 crore. 	<p>ICF, RB</p> <p>NER</p>
SR		
3.2	<ul style="list-style-type: none"> i. SR has 15 rakes running 46 trains. There is only one pit line of 9 car length at Trichy. Regular 	SR

S.No	Points	Action by
	<p>maintenance is done at Coaching depot but DPC is send to Diesel shed which is a problem.</p> <p>ii. SR operating department has given requirement of 37 DPC + 100 TC to Railway Board. It may be looked into.</p> <p>iii. Augmentation proposal for Trichy DEMU shed at a cost of Rs. 23 crores has been proposed. It may be sanctioned this year.</p>	<p>RB</p> <p>RB</p>
WR		
3.3	<p>i. Kankaria (ADI) & RTM are existing sheds. DEMU rakes will be based at SBI. BRC is also planned for conversion to DEMU shed.</p> <p>ii. 16 additional rakes are required for replacing 52 passenger trains.</p> <p>iii. Main base will be SBI – schedule upto monthly will be done at RTM and Bhavnagar. At RTM there is 1 pit and 4 rakes at present.</p> <p>iv. Spares pool of traction machines for 700 hp DEMU is depleted due to equipments not being repaired by BHEL.</p>	<p>RB</p> <p>ICF, DMW</p>
SWR		
3.4	<p>i. Bangalore Cantt. (BNC) shed has only one 8 car pit line with no shunting neck, no spare line. There is no scope for further expansion. Many passenger trains are 20/24 coach, thus unsuitable for conversion to DEMU.</p>	<p>SWR</p>
SER		
3.5	<p>i. SER has 4 rakes of DEMU of 1400 HP - 3 at KGP, 1 at BNDM.</p> <p>ii. Work proposed for DEMU infrastructure at KGP & BNDM. Requested for sanction.</p>	<p>RB</p>
SECR		
3.6	<p>i. Gondia maintains 7 rakes of 1400 HP, out of which 5 rakes are in use.</p> <p>ii. There is no POH facility in SECR. For POH DEMU rakes are send to Charbagh and Perambur workshop. POH cycle time is 2 months and transit time is 15 days to 1 month. So, total POH cycle time becomes 3 months.</p> <p>iii. There is no pit wheel lathe at Gondia. Proposal for one pit wheel lathe has been sent this year in M&P programme.</p> <p>iv. One spare bogie set is required for TC.</p> <p>v. As per operating department there is requirement of 5 additional rakes.</p>	<p>NR, SR</p> <p>EDME/W</p> <p>DME- P II</p> <p>EDME/ Tr.</p> <p>RB</p>

S.No	Points	Action by
	vi. At Gondia work of second phase is under construction and third phase has been proposed this year. Requested for sanction.	RB
SCR		
3.7	<ul style="list-style-type: none"> i. Vijayawada shed is having pit of 9 car length which will be proposed for augmentation to 15-16 car length. ii. At Maula Ali further expansion is not possible Existing pit is of 8 car length which can go upto 12 car length at most, due to space constraints at the location. iii. Up to 'D' check is done in-house only 'E' check is outsourced. iv. Earlier Perambur workshop was doing 'E' check. v. As per projections, 30 more rakes of 12 car are required. vi. Max permissible speed of 1600 hp DEMU is only 75 kmph, which must be increased to 100/ 110 kmph. 	<p>SR</p> <p>RB</p> <p>RDSO/ 1 month</p>
NFR		
3.8	<ul style="list-style-type: none"> i. At Siliguri 10 DEMU services are running. Shed has 2 pits. ii. 2 more DEMU sheds are coming up- at Pandu & Tinsukia. iii. 4th DEMU shed is proposed under gauge conversion at Agartala . iv. Electrical issue- DMW is accepting TM & TA of only 700 HP and not of 1400 HP DEMU. This issue may kindly be resolved. v. Rate contract for CGL spares is required. vi. A,B,C schedule are done in-house. 	<p>DMW</p> <p>ICF</p>
NWR		
3.9	<ul style="list-style-type: none"> i. 10 rakes are based at Merta Road. ii. It is proposed to make Phulera as mother shed with 2 satellite sheds at, one at Merta Road and another at Suratgarh. Augmentation work at Merta Road has been awarded. iii. RPC-4 permits maintenance after 3500 km while for DEMU it is 7 days, whichever is earlier. KM limit is achieved in many links much earlier than 7 days. This issue may be looked into. iv. Only 2 spare rakes are available. v. Spare percentage must be increased for DEMU vi. More number of spare DPCs are required in place of full spare rake. 	<p>RB</p> <p>RB</p>

S.No	Points	Action by
	vii. 1 rake immediately required out of turn for introduction of new DEMU service.	RB
NCR		
3.10	<ul style="list-style-type: none"> i. Agra has holding of 2 rakes by which 3 services are running. ii. 8 coach pit under construction at Agra iii. 1 BEML rake received from CR/NFR is running with only 7 TMs. iv. Popularity of DEMU rakes is very high so 2 rakes are required for augmentation to 12 cars. v. Another shed will be proposed at Jhansi in next year. vi. A, B, C schedules are done in-house. vii. Schedule D, E are outsourced. 	<p>RB</p> <p>NCR</p>
ER		
3.11	<ul style="list-style-type: none"> i. DEMU shed at Sahibgunj was sanctioned in 2011 and the work is under progress. ii. 10 rakes are based at 4 locations- JMP, UDL, BWN, SLDH. iii. 2 rakes are required to be allotted on priority iv. One pit line each at JMP and UDL are coming up for maintenance of DEMU. 	<p>ER/ To expedite</p> <p>RB</p>
ECR		
3.12	<ul style="list-style-type: none"> i. It is planned to operate DEMUs over SEE & SPJ divisions (switching remaining divisions operations to EMU), with maintenance at DEMU Shed/SEE. ii. At present DEMU rakes are of 8 car only due to pit capacity constraint which has been proposed to be extended for 12-car at an estimated cost of Rs 25 cr. iii. This year augmentation work from 8 to 12 car at Sonpur has been proposed. Requested for sanction. iv. DEMUs are sent for POH to Kanchrapara which is primarily an electric POH workshop. So complete POH is not done and only those items which are common with EMUs are attended like TM of 700 HP is attended but not of 1400 HP DEMU. Similarly hydraulics, TAs, Rectifiers, Compressors etc are not touched. v. 13 HHP DEMU rakes are available out of which 7 are being utilized in links which will shortly increase to 10. 	<p>RB</p> <p>EDME/ W</p>

S.No	Points	Action by																
	vi. 2 caterpillar rakes are with one AC coach each. AC coaches are stabled at ECR for want of speed certificate. Rake is being utilized without AC coaches. vii. Cost of Caterpillar engine spares (B-check kit) are much higher in comparison of Cummins spares. Caterpillar Engine is less maintenance friendly as pipe disconnections required even for monthly schedule. viii. BHEL – spares Rate Contract is required to be finalized to facilitate spares procurement from standard sources only. ix. ICF – Parts vendor list not available from ICF even for safety items.	ECR, RDSO ICF ICF ICF																
CR																		
3.13	i. Two- 8 car rakes received last year which have been augmented to 12 car rakes ii. These 12 car rakes are plying between a. Diva – Vasai Road b. Diva – Roha																	
NR																		
3.14	i. NR – DEMUs are based at 3 sheds –Budgam, Jalandhar and Shakurbasti. ii. Requirement given by operating department is of 32 additional rakes. iii. In addition to this 30 rakes at Moradabad and 21 rakes at Lucknow can be deployed. iv. Total demand for NR is as below: <table border="1" data-bbox="318 1297 1019 1486"> <thead> <tr> <th></th> <th>DPC</th> <th>TC</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>1. Required for replacing loco hauled trains</td> <td>157</td> <td>469</td> <td>626</td> </tr> <tr> <td>2. Augmentation</td> <td>32</td> <td>127</td> <td>159</td> </tr> <tr> <td>3. Total</td> <td>189</td> <td>596</td> <td>785</td> </tr> </tbody> </table>		DPC	TC	Total	1. Required for replacing loco hauled trains	157	469	626	2. Augmentation	32	127	159	3. Total	189	596	785	RB RB
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List of Participants:

	Name	Designation
1.	Hemant Kumar	MM
2.	P.K.Agarwal	AM/ ME
3.	Vivek Kumar	EDME/ Tr
4.	Shailendra Singh	EDME/ Chg
5.	Alok Kumar Misra	DME/ Tr
6.	Rakesh Behal	CRSE/Fr/ WR
7.	Shyamadhar Ram	CMPE/ SWR
8.	N.K.Barnawal	CMPE/ SECR
9.	P.Ram Kumar	CMPE/ SCSR
10.	P.K.Misra	CMPE/ NFR
11.	Ajay Kumar Singh	CMPE/ NER
12.	K.S.Chandra	CRSE/ NWR
13.	Ashok Kumar Misra	CMPE/ NCR
14.	S.R.Ghoshal	CMPE/ ER
15.	Rakesh Bahl	CMPE/D/ CR
16.	Amit Agarwal	CRSE/O&F/ NR
17.	A.K.Rana	CMPE/Dsl/ NR
18.	Santosh Sinha	CRSE/Chg/ NR
19.	Anupam Chauhan	Dy.CME/Dsl/HQ/ SR
20.	Rajiv Kumar	Dy. CME/D/ HJP
21.	Subir Bhattacharya	Dy.CME/Sales/ SER