

**Minutes of the meeting held in Railway Board on 24.05.2016 regarding Fuel economy measures on IR**

- 1.0 DME (Traction), welcomed all the participants and appraised the gathering that the meeting has been called to discuss issues regarding Fuel economy measures on IR including technological interventions.
- 2.0 Address by EDME (Traction):
  - a) This meeting is called to discuss and sensitize of importance on fuel savings. Target of 10% saving on fuel expenditure during this year should be achieved.
  - b) Instead of CMEs/CMPEs, this time Board has called Sr DMEs (Power/ Diesel) to sensitise the cutting edge level on the extreme importance of this subject.
  - c) During the meeting we would discuss about the status and role of technological developments like fitment of APU, CReDI, dry break coupling etc.
  - d) Sr DMEs should be aware of HSD issues on daily basis, change in pattern should be noticed and looked into. They should spend at least 1 hour daily on the subject of fuel economy.
  - e) MBCS modification on 40 locomotives is being done on SCR, on which Crew should enter details of fuel taken over, handed over, topping up enroute, trailing load, section etc. Online report through REMMLOT, section wise, Crew wise, loco typewise SFC would be generated. We are targetting 05<sup>th</sup> June 2016 on SCR and on all locomotives in the next 3 months.
- 3.0 Address by OSD (MR):

Revenue shortfall has to be compensated by cost saving. Consumption efficiency must improve. Hon'ble MR desires that Rs 1500 Cr reduction in Diesel fuel bill should be achieved during this financial year. Any assistance required from the Hon'ble MR to achieve this target would be provided.
- 4.0 Address by MM:
  - a) CCTV camera should be installed of on all fuelling installations.
  - b) Leakages should be arrested on all places. Necessary technical input should be given for zero spillage.
  - c) Flow meters at RCDs should be calibrated as per schedule.
  - d) Age old practice of rationing of fuel based on section, type of loco, trailing load should be revived. Set benchmark, identify 10 good and 10 bad bad Loco Pilots. Good LPs should be rewarded and bad should be counseled.
  - e) Good driving techniques should be taught to Loco Pilots. Simulators should be utilised for fuel economy training.
  - f) Utilisation of APUs is not encouraging, should aim for 75% this year. LPs should utilise favourable hours.
  - g) Around 2000 locos have been fitted with REMMLOT, its features should be utilised.

- h) Sr DMEs of diesel sheds should monitor shed consumption and set internal benchmark.
  - i) Fuel consumption pattern of DEMU trains should be monitored, these rakes should be maintained in good fettle.
  - j) Total Fuel Management (TFM) trial introduced on 2 RCDs on NWR should be pursued aggressively for proliferation to other locations.
  - k) GOLD project has been lagged behind, it could provide 10% improvement in driving techniques and good fuel savings. It must be expedited.
  - l) Railways should try to workout SFC for Passenger and Mail./ Exp. Trains separately.
  - m) Loco Inspectors (Lis) should be assigned monitoring of shunting activities at all major yards and shutting down of idle engines. Performance in this aspect should be included on their APAR.
- 5.0 Address by AM(PU):
- a) Loco pushers can be tried for use of sheds and workshops.
  - b) Multi genset locos should be proliferated.
  - c) RDSO to work on SMART mutiple units.
  - d) GOC to explore possibility of manufacturing WDS6 locos.

6.0 Discussion on agenda items:

- a) )10% reduction in fuel issues over last year must be acheived by each Shed and Division, except for locations identified as cheap under the Rationaliztion of Fuelling Pattern scheme.
- b) Overaged WDM2 locos should be condemned.
- c) Railways should insist on issuing shunting orders (ticket) for all shunting activities performed by all type of locos and ensure its correct accountal.
- d) Checking of all decanting points before and after decanting should be done thoroughly.
- e) All valves, flow meters, pumps should be maintained properly. No leakage should be permitted. Overhauling and calibration of all meters as prescribed periodicity should be ensured.
- f) Loco Pilots should be educated on good driving techniques. Separate module on Fuel Economy Measures should be introduced on all training centres. Loco Pilots also be trained on all this.
- g) Utilisation of APUs should be monitored effectively. All APU fitted locos should be monitored by their respective Sr DME(D)s and the Sr DME(D)s in whose territotry the loco is working. All Railways should achieve 75% utilisation of favourable hours by December 2016.

- h) While working Mus, according to trailing load and section, the trailing locomotive should be shut down. This should also be followed while working LE of Mus.
  - i) RDSO is advised to review the existing shed consumption and issue new guidelines including HHP locomotives.
  - j) Locomotives should be shut down when detention is expected for more than One hour, precaution for securing loco and load should be taken by crew before shutting down the loco.
  - k) Proper coordination with Traffic dept. For ordering trains to avoid pre departure detention of freight trains for savings of fuel and crew effectively.
  - l) Inspection of fuelling installations by officers as per schedule should be done meticulously, abnormalities should be brought to the notice concerned officers and rectification ensured.
  - m) Rationalisation of fuelling should be done by all. Fuelling is to be done at cheaper locations. Monthly position of rationalisation should be monitored by concerned CMPEs.
  - n) Mapping of landed price of HSD at each RCDs and rationalisation of fuelling pattern of all Railways based on major stream of traffic pattern for the period 1-15 May 2016 should be sent to Railway Board by 06.06.2016.
  - o) RDSO to study the possibility of increasing fuel delivery rate by modifying strainer design, report should be submitted by 06.06.2016.
- 7.0 Suggestions of Zonal Railways:

- a) CCTV cameras should be installed on all RCDs for better monitoring of activities. Railways were advised to provide this themselves, wherever OMCs are hesitant.
- b) After 10 minutes of idle running of locos an alerter can be provided to Loco Pilots to keep reverser in neutral position and apply brakes, etc to fulfill the required conditions for working of APUs.
- c) CPLE/DMW gave presentation on fuel management module developed on NER. As it is covering all requisite data and report, DME(Dev) was advised to take up this with CRIS for integration and implementation on Pan-India basis on priority for Fuel Management System for which pilot has already been sanctioned.
- d) Railways reported that there is a difference in WDG4 dual cab locos fuel tank gauges, DLW was advised to examine and resolve the problem reported by Railways.

e) Central Railway reported that Reliance Industried Ltd. is sometimes using black- listed trucks by other OMCs. Central Railway should take up strongly with RIL.

9.0 List of participants in the meeting is enclosed.

A. MIL  
326.16

(Vivek Kumar)  
Exec. Dir. Mech. Engg. (Traction)  
Railway Board.

No. 2015/Fuel/289/3

New Delhi, dated 02.06.2016

Forwarded to:

- (i) MM, AM/ME - for kind information
- (ii) CMEs of all Indian Railways, DLW, DMW
- (iii) EDME(Dev), ED (RS(G)), OSD/MR Railway Board
- (iv) Sr. EDS(MP), RDSO, Lucknow.
- (v) CWM/ GOC/ SR.

**List of participants of meeting on Fuel Saving Initiatives held on 24.05.2016 at Railway Board**

S. No.	Name (S/Shri)	Designation
<b>Railway Board</b>		
1.	Hemant Kumar	MM
2.	R S Kochak	AM(PU)
3.	K. Swaminathan	Adviser (EnHM)
4.	Ravinder Gupta	EDME (Proj.)
5.	Vivek Kumar	EDME(Traction)
6.	Hanish Yadav	OSD(MR)
7.	Alok Kr Misra	DME(Traction)
8.	S. Murali	AME(Traction)
<b>RDSO/ DLW/ DMW</b>		
9.	A K Singh	CDE/ DLW
10.	Satish Kumar	CPLE/ DMW
11.	Anurag Misra	JD/MP/RDSO
12.	D S Kanwal	ADE/MP/RDSO
<b>Zonal Railways</b>		
13.	D C Sharma	CRSE(O&F)/NR
14.	Rajesh Dwivedi	SR DME(D)/PA/CR
15.	Shivaji Kadam	SR DME/SUR/CR
16.	Binay Prasad Barnwal	Sr.DME(D)/UDL/ER
17.	M.M.Pandit	Sr.DME(D)/PTRU/ECR
18.	S.C.Misra	DME/P/MGS
19.	M.Srinivas	Sr.DME(D)/VSKP/ECOR
20.	Dhananjay Kr.Singh	Sr.DME/SBP/ECOR
21.	Kaustabh Mani	Sr.DME(O&F) LKO/ NR
22.	Vivek Mohan	Sr.DME/D/TKD
23.	Arvind Kumar	Dy CME/(O&F)/NR
24.	Anant Kumar	Sr DME(D)/JHS/NCR
25.	Mrs. Maneesha Goel	Sr DME/O&F/ALD/NCR
26.	Virendra Singh Yadav	Sr.DME(O&F)/LJN/NER
27.	Sudhanshu Gupta	DME(D)/SGUJ/NFR
28.	Avinash Prakash	DME/P/MLDT/NFR
29.	Manoj Dhar Dubey	ADME(D)/GD/ NER
30.	Manish Rajvanshi	Sr DME(D)/BGKT/NWR
31.	Venkata Chalapathy G.	Sr.DME/TPJ/SR
32.	R.Paranthaman	Sr.DME(D)/ED/SR
33.	S.Vasudevaiah	Dy.CME/EnHM/SCR
34.	N R K Raju	Sr.DME(D)/GY/SCR
35.	S K Maharana	Sr.DME(D)/BNDM/SER
36.	B.Prabhakar	Sr.DME(D)/KGP/SER
37.	R.V.Ranga Rao	Sr.DME(O&F)/R/SECR
38.	V.Dhuware	Sr.DME(D)/R/SECR
39.	Pranjol Chandra	Sr.DME/Co/ADI/WR
40.	Abhishek Kr Singh	Sr.DME(D)/VTA/WR
41.	Sheikh Mohd Anis	Dy.CME/D/WCR
42.	Anurag Tripathi	Sr.DME(D)/ET/WCR