

पूर्व तट रेलवे
EAST COAST RAILWAY

Office of the
Pr Chief Electrical Engineer,
Rail Sadan, 3rd Floor, South Block,
Bhubaneswar-751017

No. ECoR/EL/TRO/421/04

03rd August 2020

Divisional Railway Manager
Khurda Road, Sambalpur & Waltair

Sub: JPO on running of freight trains with End of Train Telemetry.

Please find herewith the Joint Procedure Order No. 01/2020 (vide PCEE Office letter No. ECoR/EL/TRO/421/04 dtd. 14.07.2020) on End of Train Telemetry (EoTT) for running of freight trains, jointly signed by PCEE, PCME, PCSTE & PCOM.

This may please be implemented.

Encl: As above (04 pages)


(Kalyan Pattnaik)
Chief Electrical Loco Engineer

Copy to: PCOM/ECoR for information please.
Copy to: PCSO/ECoR for information please
Copy to: PCME/ECoR for information please.
Copy to: PCSTE/ECoR for information please

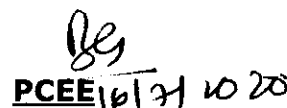
EAST COAST RAILWAY**JPO No. 01/2020**No ECoR/EL/TRO/421/04/
Date 14.07.2020Sub: JPO on running of freight trains with End of Train Telemetry (EoTT).**A. EOTT Features and General Instructions:**

1. End of Train Telemetry (EOTT) will be installed in freight trains to facilitate operation of these trains without guard and brake van.
2. EOTT mainly consists of HOT (Head of Train) in cabs of the locomotive and EOT (End of Train) fitted on CBC of last vehicle as per RDSO drawing along with connection to BP pipe of the last vehicle. EOTT has GPS module to indicate location of the train, GSM module to transfer data to server and radio for control between HOT (front unit) & EOT (rear unit).
3. EOTT has the provision to display BP pressure of the last vehicle of the train to LP in the cab of the locomotive. It has provision to apply emergency brake from last vehicle of the train by opening a valve in EOT remotely from the cab of locomotive and is possible to apply emergency brake from the rearmost wagon using EOT in case of train parting. The front to rear transmission and rear-of-train equipment (EOT) has the provision for automatic application of train emergency air brakes also from rear when emergency train air brake is applied by the Loco Pilot in the cab.
4. 'LV' of suitable size is written on EoT with retro reflective material and red colour High Visibility Marker light flasher device in EOT is provided with automatic switching ON & OFF based on the ambient light condition.
5. Only Freight trains will work with EoTT device and these trains will run with WAG7 class locomotives of ELS/ANGL and WAG9 class locomotives of ELS/WAT for a proof of concept trial of EoTT without Guard.
6. Exchange of Signals by Guard as per provision in GR 4.35 & GR 4.42 is waived off for trains having provision of EoTT.
7. LV/red colour HVML of EOT will be treated as LV Board/Tail lamp of the train running with EoTT.
8. GR 4.25 (3) for a train working without Guard should be strictly followed for running a train with EoTT i.e. when a train is worked without a Guard, such of his duties as can be performed by the Loco Pilot shall devolve on him as may be specified by special instructions Like (a) Filling up of T34HF (b) carrying of all relevant papers of guard i.e. Wagon Way Bill, Copy of GDR (if any) & BPC (c) Examining BP continuity (d) Examining brake power of the train (e) Protection of train as and when required.


17.7.
PCOM


PCME


27.7.
PCSTE


16/7/20
PCEE

9. In case of failure of the EoTT Equipment, instructions for train running without Guard shall be followed as per SR 4.25.02 separately by Section Controller, Station Master and Loco Pilot. These instructions/safety precautions are mentioned at different paragraphs in this JPO and enumerated below for guidance of the staffs.

B. Duties of Controller

1. CHC (shift) and Section Controller on duty should closely monitor running and working of trains with EoTT device. CHC (Shift) shall keep a record of trains running with EoTT in a register on daily basis. Section Controller should make a remark in SCR diary in this regard.
2. Section Controller will handover the train list equipped with EoTT on each shift. CHC (Shift) shall intimate all the Station Masters of his section well in advance about EoTT trains. CHC (Shift) shall also inform about the train running with EoTT to next crew changing point in advance.
3. Section Controller will ensure issue of caution order to Loco Pilot by on duty SM/SS with necessary endorsement for running of train with EoTT and also indicating the last vehicle number complying to SR 4.25.02(b).
4. Section Controller will ensure that backing of train shall not be permitted in case of stalling. The train will wait till arrival of assisting/banking engine to clear the block section.

C. Duties of SM/SS & TP

1. SM/SS/Yard Master will relay the last vehicle number of the train with EoTT to Section controller from originating station. SM/SS shall give a remark in TSR in red ink against the train entry indicating running of train without guard along with last vehicle number.
2. Running of the train with EoTT as well as the last vehicle number shall be mentioned in each line clear and reply message or with the departure report as per SR 4.25.02 (c) (i). If SM/SS is unable to see the EoTT device with LV/Tail lamp indication or not clearly visible, he should inform SCR and take action as per SR 4.17.02, 4.17.03 & 4.23.02.
3. In Automatic block system or in case of IB signalling, a second train shall not be allowed to leave the same block station unless the previous train which has been allowed to leave with EoTT, arrive at the next block station complete except in case of an accident or failure of the train.
4. SM/SS shall be responsible for shunting operations and GDR check wherever necessary.
5. SM/SS shall be responsible to ensure complete arrival and clearance of fouling marks at stopping and crossing stations.


17.7.
PCOM


PCME


SM/SS
27.7
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6. SM/SS shall handover all relevant papers of guard i.e. Wagon Way Bill, Copy of GDR (if any) & BPC to loco pilot at the commencement of the journey and same to be collected by on duty SM at the end of journey.
7. At the train originating station, SM should depute a TP with portable BP gauge, walkie-talkie and EOT key. TP will collect the EOT from Last vehicle of the incoming train in case of change in LV or engine as the case may be and will carry it to the last vehicle of outgoing train to fix the EOT in rear. After locking & securing of EoT device and BP pipe connection in EOT, he shall hand over the key to LP, which will be collected by on duty SM at the end of journey. This will be supervised by ALP if required.
8. If the loco is planned to be stabled or to be attached in a train at a location/yard different from the incoming train or offered to shed for maintenance, the EOT device shall be carried to the locomotive by TP of the station/yard. When the Locomotive is planned to be stabled at the station, SM will be responsible for deputing TP to collect the key from LP, carry the EOT device from rear, hand over EOT with key to LP in the engine. If the loco is planned to be attached in a train at a location/yard different from the incoming train, TP will carry the EOT device from rear and handover EOT with key to LP in the engine. In case loco is planned to be offered for maintenance in shed, EOT with key will be handed over to LP which will be collected by Shed during Shed in and handed over by shed to LP during shed out of locomotive.

D. Duties of LP/ALP.

1. At the train originating station, Loco Pilot after charging the train will send the ALP to the rear. LP shall ensure through ALP that the train ordered with EoTT device has continuous air pressure from engine to rearmost vehicle & the rear most four pistons are in proper working order. ALP will use the walkie-talkie and manual gauge brought by TP to coordinate with LP for continuity test. Then BP pipe will be connected in EOT by TP. ALP will check intactness of EOT fixing, securing & locking and BP pipe connection in EOT by TP. ALP will check the LV retro reflective board & proper working of HVML; if ALP is not satisfied with LV/HVML of EOT then on duty SM will arrange LV board/Tail lamp in the train and guidelines in this regard shall be followed as per JPO on working without Guards No. 13 of dtd. 03.10.2013. LP will also ensure proper pairing of front and rear unit through ALP. Then ALP will hand over the walkie-talkie and manual gauge to TP, take the key from TP and come to the engine. BP pressure of the last vehicle of the train is displayed to LP in the HoT display unit in cab of the locomotive.
2. Columns of T-34 HF will be filled up i.e. train and engine details, from and to station, date & time of on duty & off duty, train start time and arrival time, name and HQ of LP & ALP, electric energy consumption etc and signed by LP at the end of journey.
3. LP can confirm BP pressure drop in the train upto last vehicle during application of air brake by observing BP pressure of last vehicle remotely in the HoT display.


PCOM


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PCEE

4. LP can apply emergency brake from the rearmost wagon using EOT in case of train parting in order to bring the rear portion to an early halt.
5. When EoT is kept at Locomotive for any purpose, EoT will be charged at the nominated location provided for EoT charging in the locomotive under supervision of Loco Pilot.
6. The duties of guard as in GR 4.44 (Train held up at first Stop Signal), GR 9.10 (Protection of trains stopped in an Automatic Section), GR 6.03 (Protection of trains stopped between section), GR 6.08 (Train Parting) will devolve on ALP. Loco Pilot in all such cases will be in the engine and duties of Guard will be done by ALP. As per GR 6.09, if portion of a train is to be left in the block section, then LP will ensure protection of the rear portion of the train as per rule 6.03 by deputing the ALP and application of wagon hand brakes/securing of rear portion. When such situations arise, LP & ALP can switch on their mobile phones and will intimate the same to SCR/TLC/SM immediately by any means of communication. In case of portion of train is to be left in block section, Station Master from both ends shall arrange to send one railway servant out into the block section to monitor condition of the left over portion and nature of assistance. Till such time station staff arrives to take over the rear portion of the train, ALP will not leave the site. Once the station staff arrives ALP will can proceed to the engine.

In addition to the above, any local conditions or restrictions which are necessary to be followed over a particular section are also to be added and circulated by the division before introducing to such run.


PCOM 17.7.


PCME


PCSTE 27.7.


PCEE 14/11/2008