

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)**

2024/E(Trg.)/41/15

New Delhi. Dated 4.11.2024

The General Managers
All Indian Railways/PUs,
Metro Railway/Kolkata
DG/RDSO/Lucknow
CAO/DMW/Patiala
CAO/COFMOW/New Delhi
ED/CAMTECH/Gwalior

DG/NAIR/Vadodara
DG/IRITM/Lucknow
DG/IRIEEN/Nasik
DG/IRIMEE/Jamalpur
DG/IRICEN/Pune
DG/IRISET/Secunderabad
DG/IRIMEE/Jamalpur
DG/JRRPF/Lucknow
DG/IRIFM/Secunderabad

Sub:- Revised Training Modules for Initial/Refresher Course of Chief Loco Inspector (CLIs).

Vide Board's letter no. E(MPP)/2023/3/28 dtd. 04.09.2023 (RBE No. 105/2023) Revised combined training modules of Chief Loco Inspectors were circulated to all Zonal Railways/ PUs etc.

2. In order to have a better structured training, the existing training modules for Initial / Refresher Training of Chief Loco Inspector (CLIs) have been reviewed and a revised combined training module for Initial and Refresher Training of Chief Loco Inspectors (CLIs) have been prepared in consultation with Electrical TRS Dte, Signal Dte and Traffic Dte respectively. Further, as approved by the Board (Member/TRS, Member/O&BD and DG/HR) the Initial & Refresher training for CLIs is to be imparted in 3 modules as detailed below:

CLI Training Modules	Initial	Refresher
Technical Training	18 days, at IRIEEN	6 days, at IRIEEN
Signalling & Kavach	3 days, at IRISET	3 days, at IRISET
Transportation Training	3 days, at MDZTI	3 days, at MDZTI
Total days	24 days	12 days

3. Accordingly, the revised combined training modules for Induction and Refresher Training of Chief Loco Inspector (CLIs) have been scanned and uploaded under **MPP Training Circulars** on 'Indian Railways' website and can be viewed or downloaded from railnet.

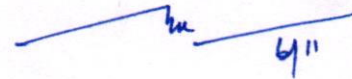
Kindly acknowledge receipt.

Jitendra Kumar
04/11/2024

(Jitendra Kumar)
Dy. Director/Estt. (Training)
Railway Board
Ph. : (011) 23047251

Copy to:

- 1) The General Secretary, NFIR, 3 Chelmsford Road, New Delhi for information (Copy may be downloaded from E(MPP) Training Circulars/Railnet/Internet).
- 2) The General Secretary, AIRF, 4 State Entry Road, New Delhi for information (Copy may be downloaded from E(MPP) Training Circulars/Railnet/Internet).
- 3) The Secretary General, FROA, R.No.256-A, Rail Bhavan, New Delhi for information (Copy may be downloaded from E(MPP) Training Circulars/Railnet/Internet).
- 4) The Secretary General, IRPOF, R.No.268, Rail Bhavan, New Delhi for information (Copy may be downloaded from E(MPP) Training Circulars/Railnet/Internet).
- 5) All Members, Department Council & Secretary Staff side National Council 13-C, Feroz shah Road, New Delhi (Copy may be downloaded from E(MPP) Training Circulars/Railnet/Internet).
- 6) The Secretary General, AIRPF Association, Room No.256-D, Rail Bhavan, New Delhi (Copy may be downloaded from E(MPP) Training Circulars/Railnet/Internet).
- 7) General Secretary, All India SC & ST Railway Employees Association, 171/B-3, Basant Lane Railway Colony, New Delhi (Copy may be downloaded from E(MPP) Training Circulars/Railnet/Internet).



For Principal Executive Director (IR) /Railway Board

Copy to:

- i) PS & ED(PG) to MR, MoSR (S) & MoSR (R)
- ii) PSO/Sr.PPS to CRB, MF, M(Infra.), M(TRS), M(O&BD), DG(HR), DG(RHS) & DG(RPF)
- iii) Sr.PPS/PPS/PS to AM(Budget), AM(CE), AM(C&IS), AM(Comml.), AM(E&HM), AM(Fin), AM(HR), AM(L&A), AM(Mech.), AM(Plg.), AM(Project), AM(PU), AM(RS), AM(Sig.), AM(Staff), AM(Traction), AM(T&C), AM(Tele), AM(TT), AM(Works), PED(Vig.), PED(Safety), PED(Coaching), LA,
- iv) ED(Plg.), ED(Accts.), EDCE(B&S), EDCE(G), EDCE(Plg.), ED(CHG), ED(CC), ED(C&IS), ED(E&R), EDEE(Dev), EDEE(G), EDEE(M), EDEE(RS), EDE, ED(RRB), EDE(N), EDE(Res), EDF, EDF(B), EDF(X)I, EDF(X)II, ED(H), JS(C), EDME(Chg.), EDME(Fr.), EDME(PU&W), ED(PC)I, ED(PC)II, EDRE, ED(Safety), ED(Safety)-II, IG./RPF(Hqs), ED(Sig.), ED(SP), EDRS(G), EDRS(S), ED(TD), EDTC(R), EDCE(P), ED(PM), ED(FM), ED(PG), EDTT(F), EDTT(S), EDV(E), EDV(Elect), EDV(T), EDVE(S), ED(W).
- v) Chief Commissioner of Railway Safety, 3rd Floor, TA Office, State Entry Road, New Delhi-55.
- vi) E(NG)I, E(NG)II, E(G), F(E)I, F(E)II, F(E)III, E(SCT)I, E(SCT)II branches of Railway Board.

**REVISED TRAINING
MODULE FOR
INDUCTION AND
REFRESHER
TRAINING OF CHIEF
LOCO
INSPECTORS(CLIs)**

Annexure-1**Combined Initial Training Module (24 days) for Chief Loco Inspectors (Diesel & Electric):
"CLI INITIAL"****A. 18-days Technical Training Module for Induction Training of CLIs at IRIEN**

Duration : 3 Weeks (18 days)

Total Duration in Hours : 126

(7hours per day i.e. 6 Hours of study+ 1 Hour for Computer)

Sl No	Topic	No. of Hours	
		Class Room	Practical
1	Registration & Introduction to Course	2	
2	Railway Systems and role of CLI Duties of CLIs, LPs & ALPs Brief overview on Organizational structure Supervisory Skills-leadership, motivation technique, Communication Knowledge of trade, redressal of grievances	2	
3	Locomotives (Elect & Diesel) Trouble Shooting with circuit Modifications Failure case studies&investigation WAG-12 locomotive, MEMU/EMU, Vande Bharat, Amrit Bharat (Push-Pull) etc. DEMU/SPART & Shunting Locos WDG4/G6 locomotive Self Propelled Inspection Car (SPIC)	14	2
4	TrD (OHE) and Pantographs Brief of TrD& Power Supply arrangement Cantilever assembly and its parts Brief on ATDs & Neutral Sections Type of pantographs & latest features like ADD, ORD etc. OHE & Pantograph interaction Panto Entanglement - It's causes & key points to be noted during investigation	3	1
5	Permanent Way / Bridge Track structures&Route classification (A, B, C, D, E, HDN, HUN etc) Rail Wear Profile Track maintenance procedures & schedules Type of Bridges & their inspection schedules Cause of derailment, track defects etc. Track Measurement (cushion, ballast, versine, Cant etc.) in accident investigationswith practical demonstration/hands on training	7	2

SI No	Topic	No. of Hours	
		Class Room	Practical
6	Rolling Stock (C&W) Rolling stock defect that can cause accident/ derailment Readings at the time of accident/SPAD Wheel profile Wheel slip and wheel skidding Brake systems, Brake binding & Hot axle Important equipment of Coaches & wagons and related troubleshooting e.g. FDS, FIBA, APM, LSD etc. Type of Coaches & Wagons and critical measurements with practical demonstration/hands on training Long haul formation etc Stalling & Train Parting	7	2
7	Train Dynamics Tractive Effort Requirement Adhesion Haulage Capacity Stalling Load Capacity Load Table HP/Tonne Ratio Emergency Braking Distance(EBD) etc.	4	
8	Evaluation of Driving Techniques and Grading/Categorization of Crew Evaluation on Plane, Graded, and Ghat Sections Performance in Extreme Weather Conditions Negotiation of CD (caution order) Entering in loop lines Controlling of train while passing signal at yellow / double yellow etc. Grading/categorization of Crew on prescribed attributes as per Railway Board's guidelines (ref. letter no. 97/Safety-I/23/15 dated 29.03.2007)	5	
9	Data Analysis and Report Preparation SPM and Fault Data Analysis VCU Data Analysis Datalogger Report Analysis SCADA Report Analysis Report Making Techniques	3	1
10	Inspections VIP Movement Footplate Inspections R/Room & Lobby Inspection Inspection of ART/ARME/Crane RDI inspection Punctuality drives Foggy weather precautions Ambush checks & other special drives Formation of Signal sighting committee, responsibilities & inspection Gate inspection Relay room inspection Station area inspections	5	

SI No	Topic	No. of Hours	
		Class Room	Practical
11	Disaster Management ART, 140T BD CRANE, SPART/SPARMV, ARME , LUCAS , HRD/HRE Mock drills, Hooter codes Types of accidents/derailment Investigation of accident/derailment Protection & Analysis of Evidence Preparation of Joint Report Stalling & Train Parting Fire fighting, First aid and Hygiene etc.	5	
12	Counselling Techniques Area of Counselling Written Communication&Verbal Communication Oral Message Written Message CLI Diary etc.	5	
13	Manpower Planning, Crew Links, Crew related issues Requirement of Loco & Running Staff including requirement of CLIs/TLCs/PRCs/CCs Crew Links & Loco links Power Plan, Power On Line(POL) Training courses of running staff including Aptitude test, Learning Road and PME rules etc.	5	
14	Establishment and D&AR Matters D&AR rules, Enquiries, Standard Forms, Major & Minor Penalties, Do's & Don'ts for dealing D&AR cases HOER classifications of Rly staff, Rules pertaining to running staff pay and allowances Leave rules, Pass rules Welfare activities of Railway PF, Gratuity and Pension Rules for running staff etc.	6	
15	Introduction to web based applications/ portals CMS, ICMS, SLAM, COA, FOIS, RTIS, CCLMS etc. RDSO's EBD Simulation Software etc e-office, HRMS/APAR Module, UDM, IMMS, GEM portals etc.	4	1
16	Crew Control & TLC/PRC Organization Brief duties of different Control Organizations at divisions/HQs Implementation of rules for running staff - duty hours Engine Failure Punctuality loss Engine Hours Four hourly holding Crew &Loco balancing Loco utilization&Outage etc	5	
17	Railway Diesel Installation(RDI) & fuel/energy conservation Records maintained at RDI Anti pilferage measures Calibration of gauges, Decanting facilities, Flowmeters Fixation of trip ration Fire protection at RDI Fuel Conservation measures SFC & LOC SEC & Energy Conservation measures, Regenerative braking in 3-Phase electric locomotives etc.	4	

Sl No	Topic	No. of Hours	
		Class Room	Practical
18	Crew Welfare Issues Importance of Yoga/Meditation Health/food habits accommodation issues Importance for proper rest of crew Social issues Redressal of grievances, Working conditions Importance of interaction with family of Running staff	2	
19	Personality development & Motivation Development of communication skills for liasioning How to pass information to officers & its hierarchy Collection of relevant data from various departments for preparation of ready reckoners Stress management Importance of positive thinking Importance of Yoga, Hygiene & Sports activity Development of hobby	4	
20	New Development HOG, DPWCS, CVVRS, R-DAS, RTIS, etc.	4	1
21	Mission Karmayogi	2	
22	Computer		14
23	Group Discussion on Safety Incidences (SPAD, derailment, accident etc.) Feedback	4	
Total		102	24
		126	

Note :

- (1) Daily 1 hour yoga session in the morning on all working days
- (2) Syllabus is excluding Safety rules & Signaling system

B. 3-days Training Module on Signalling & Kavach for Induction Training of CLIs at IRISSET

Duration : 3 days
Duration in Hours : 18
(6 Hours per day)

S.No.	Name of the topic	Duration in hours
A	Signalling	
1	Basics of Signalling systems covering <ul style="list-style-type: none">• Signal Interlocking Plan• Block overlap and Signal overlap• Signal Engineering Manual• Track circuits and Axle Counters• Points• Signals• Block Instruments• IBS (Intermediate Block Signalling)• Electronic Interlocking (EI)• Interlocked LC gates• Signal sighting committee• Crew feedback	07
2	Automatic block signaling	
3	Study of data logger	
4	Laboratory sessions	
B	Kavach (Automatic Train Protection System)	
1	Overview of Kavach system	
2	Loco Kavach <ul style="list-style-type: none">• Brake Interface Unit• Modes of operation with responsibilities of LP• Switch ON & OFF procedure• Train configuration selection• Brake functional test• DMI indications and messages• SOS generation• Collision scenarios and actions by LP• Sealing arrangements• Dos & Don'ts for LP• Troubleshooting• Versions 3.2 and 4.0• Provisions in GR	10
3	Laboratory session & visit to Loco Shed	
C	Evaluation & Feedback on course	01
	Total	18

C. 3-days Training Module on Transportation Training for Induction Training of CLIs at MDZTIs

Duration : 3 days
 Duration in Hours : 18
 (6 Hours per day)

S.No.	Name of the topic	Duration in hours
A	<ul style="list-style-type: none"> • Essential of Absolute and Automatic Block System. Starting of the train from Station. • Various operating forms and authorities, cases and precautions for their issue in Automatic and Absolute Block System. • Working of trains during failure of point/signals. • Working of trains during abnormal conditions in Automatic and Absolute Block System. • Duties of Loco Pilot and Train Manager, when an Automatic Stop Signal is to be passed at 'ON'. • Working of trains in electrified section • Reception of train on obstructed line/non-signaled line, dispatch of train from non-signaled line or from a line having common starter signal. 	Day-1
B	<ul style="list-style-type: none"> • Working of trains during Line Block, Power Block. Working of trains during fault in OHE. • Working of material train, track machines and Tower Wagon. • Shunting — Supervision, Authorities and responsibilities. • Lobby working, Chain pulling, overshooting of stop mark and platform. • Accidents — Definitions, Threshold Value, Classification, Reporting, Assistance Protocol. Accident case studies. • Speed over facing point, Maximum Permissible Speed, Sectional Speed. Crossover & Turnouts. • Block rake of passenger and goods trains, Marshalling of Dead Engine, Inspection Carriage, Crane, Damage Vehicle, and Special Stock. Precaution during running of special type stock. 	Day-2
C	<ul style="list-style-type: none"> • WTI, punctuality, Working of ODC, material train, python rake, Long Haul Goods Train, double stack container, special/VIP train. • Running of trains without brake van/Train managers. • Action to be taken in case of Train parting and Hot axle. • Boards and indicators. Loco While Codes • Engine pushing, Head light/flasher light. • Caution orders, Stabling & Securing of formation, Formation check by Loco pilot and Train manager. • Discussion on latest circulars, Correction slips to GR and policies. 	Day-3
	Total	18

Combined Refresher Training Module (12 days) for Chief Loco Inspectors (Diesel & Electric): "CLI REFRESHER"

A. 6-days Technical Training Module for Refresher Training of CLIs at IRIEEN

Duration : 1 Week (6 days)

Duration in Hours : 42
(7Hours per day)

SI No	Topic	No. of Hours	
		Class Room	Practical
1	Registration & Introduction to Course	1	
2	Locomotives (Elect & Diesel) Trouble Shooting with circuit Latest modification Failure case studies&investigation MEMU/EMU, Vande Bharat, Amrit Bharat (Push-Pull), WAG12 etc. Self Propelled Inspection Car (SPIC) WADG4/G6 locomotive DEMU/SPART & Shunting Locos Joint note preparation	6	1
3	TrD (OHE) and Pantographs Brief of TrD& Power Supply arrangement Cantilever assembly and its parts Brief on ATDs & Neutral Sections Type of pantographs & latest features like ADD, ORD etc. OHE & Pantograph interaction Panto Entanglement - It's causes & key points to be noted during investigation	2	1
4	Permanent Way Track structures Rail Wear Profile Track maintenance procedures & schedules Derailment mechanism Track Measurement (cushion, ballast, versine, Cant etc.) in accident investigationswith practical demonstration/hands on training	3	1
5	Rolling Stock (C&W) Rolling stock defect that can cause accident/derailment Readings at the time of accident/SPAD Wheel profile measurement Wheel slip and wheel skidding Summarizing Brake systems, Brake binding & Hot axle Type of Coaches & Wagons & critical measurementswith practical demonstration/hands on training Stalling & Train parting Latest/Important equipment of Coaches & wagons and related troubleshooting e.g. FDS, FIBA, APM, LSD etc Long haul train formation	2	2

Sl No	Topic	No. of Hours	
		Class Room	Practical
6	Train Dynamics Tractive Effort Requirement Adhesion Haulage Capacity Load Capacity, HP/Tonne Ratio Load Table Stalling Emergency Braking Distance(EBD)	2	
7	Evaluation of Driving Techniques, Grading/Categorization of Crew and Data Analysis Evaluation on Plane, Graded, and Ghat Sections Performance in Extreme Weather Conditions Negotiation of CD (caution order) Entering in loop lines Controlling of train while passing signal at yellow / double yellow etc. Grading/categorization of Crew on prescribed attributes as per Railway Board's guidelines (ref. letter no. 97/Safety-I/23/15 dated 29.03.2007) SPM and Fault Data Analysis VCU Data, Datalogger, SCADA Report Analysis etc.	2	
8	Counselling Technique & Crew welfare issues Area of Counselling Importance of Yoga/Meditation, Health, food habits Accommodation issues Importance for proper rest of crew Social issues Redressal of grievances Working conditions Importance of interaction with family of Running staff etc.	2	
9	Inspections Type of various inspection (ART/ARME/Crane, RDI, Relay room, reading of datalogger etc) Foggy weather precautions Formation of Signal sighting committee, responsibilities & inspection	2	
10	Establishment and D&AR Matters Summarizing Leave rules, pass rules & welfare activities of Railway Summarizing important D&AR rules, standard forms, major & minor penalties, Do & Don'ts for D&AR cases	3	
11	Disaster Management Mock drills, Hooter codes Types of accidents/derailment & investigation Protection & Analysis of evidence Site photography, if required Preparation of Joint Report etc.	2	
12	Personality development & Motivation Development of communication skills for liaisoning Stress management Importance of positive thinking Importance of Yoga, Hygiene & Sports activity	1	
13	New Development – Software and Hardware HOG, DPWCS, CVVRS, R-DAS, RTIS, CCLMS, SLAM, CMS etc.	2	
14	Group Discussion on Safety Incidences (SPAD, derailment, accident etc.) Feedback	7	
Total		37	5
		42	

Note :

- (1) Daily 1 hour yoga session in the morning on all working days
- (2) Syllabus is excluding Safety rules & Signaling system

B. 3-days Training Module on Signalling & Kavach for Refresher Training of CLIs at IRISSET

Duration : 3 days

Duration in Hours : 18
(6 Hours per day)

S.No.	Name of the topic	Duration in hours
A	Signalling	
1	Basics of Signalling systems covering <ul style="list-style-type: none">• Signal Interlocking Plan• Block overlap and Signal overlap• Signal Engineering Manual• Track circuits and Axle Counters• Points• Signals• Block Instruments• IBS (Intermediate Block Signalling)• Electronic Interlocking (EI)• Interlocked LC gates• Signal sighting committee• Crew feedback	07
2	Automatic block signaling	
3	Study of data logger	
4	Laboratory sessions	
B	Kavach (Automatic Train Protection System)	
1	Overview of Kavach system	
2	Loco Kavach <ul style="list-style-type: none">• Brake Interface Unit• Modes of operation with responsibilities of LP• Switch ON & OFF procedure• Train configuration selection• Brake functional test• DMI indications and messages• SOS generation• Collision scenarios and actions by LP• Sealing arrangements• Dos & Don'ts for LP• Troubleshooting• Versions 3.2 and 4.0• Provisions in GR	10
3	Laboratory session & visit to Loco Shed	
C	Evaluation & Feedback on course	01
	Total	18

C. 3-days Training Module on Transportation Training for Refresher Training of CLIs at MDZTIs

Duration : 3 days
 Duration in Hours : 18
 (6 Hours per day)

S.No.	Name of the topic	Duration in hours
A	<ul style="list-style-type: none"> • Essential of Absolute and Automatic Block System. Starting of the train from Station. • Various operating forms and authorities, cases and precautions for their issue in Automatic and Absolute Block System. • Working of trains during failure of point/signals. • Working of trains during abnormal conditions in Automatic and Absolute Block System. • Duties of Loco Pilot and Train Manager, when an Automatic Stop Signal is to be passed at 'ON'. • Working of trains in electrified section • Reception of train on obstructed line/non-signaled line, dispatch of train from non-signaled line or from a line having common starter signal. 	Day-1
B	<ul style="list-style-type: none"> • Working of trains during Line Block, Power Block. Working of trains during fault in OHE. • Working of material train, track machines and Tower Wagon. • Shunting — Supervision, Authorities and responsibilities. • Lobby working, Chain pulling, overshooting of stop mark and platform. • Accidents — Definitions, Threshold Value, Classification, Reporting, Assistance Protocol. Accident case studies. • Speed over facing point, Maximum Permissible Speed, Sectional Speed. Crossover & Turnouts. • Block rake of passenger and goods trains, Marshalling of Dead Engine, Inspection Carriage, Crane, Damage Vehicle, and Special Stock. Precaution during running of special type stock. 	Day-2
C	<ul style="list-style-type: none"> • WTI, punctuality, Working of ODC, material train, python rake, Long Haul Goods Train, double stack container, special/VIP train. • Running of trains without brake van/Train managers. • Action to be taken in case of Train parting and Hot axle. • Boards and indicators. Loco While Codes • Engine pushing, Head light/flasher light. • Caution orders, Stabling & Securing of formation, Formation check by Loco pilot and Train manager. • Discussion on latest circulars, Correction slips to GR and policies. 	Day-3
Total		18