

**PROFORMA OF BOOKLET
ON IMPORTANT ASPECTS TO BE CHECKED
DURING INSPECTIONS OF VARIOUS ACTIVITY
CENTRES / EQUIPMENT
FOR INSPECTING OFFICIALS**

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**CHIEF SAFETY OFFICER
PREPARED & PUBLISHED BY HEADQUARTERS
SAFETY ORGANISATION
SOUTH CENTRAL RAILWAY**

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PROFORMA FOR INSPECTIONS OF VARIOUS ACTIVITY CENTRES

OPERATING Activity Centre – STATION		
S. No.	Items to be checked	Observations made
1	GR 3.38 (2) – Reversing the points immediately on arrival of the train – whether the staff are in the habit of doing it or not? especially on a double line when a stopping train is received on a common loop where the SM is required to alter the points in rear and in front.	
2	EXCHANGE OF 'ALL-RIGHT' SIGNALS WITH RUN THROUGH TRAINS – By SM from platform side and by the Pointsman from 'off' side. Record maintained by the station staff, if any when any unusual noticed by them.	
3	ENSURING COMPLETE ARRIVAL OF TRAIN: • Through BPAC indication on the panel or • where BPAC is not available / during its failure, by exchanging PNs with the Guard of the train • Record the same in the Train Signal Register. • For Goods trains without BV / Guard – separate register to be available at the station.	
4	SHUNTING ORDER (T.806): • Whether the station is exempted from issuing the shunting order by Sr. DOM, check for a copy of the	

	same in the SWR or in the form of a letter. • If no such exemptions are given, check whether Shunting Order is prepared in triplicate (one for LP, one for Guard and another for station record). • Also notice whether it is a signalled movement or not. • If it is not a signalled movement, whether the staff is locking the points? • Whether the SWRs prescribe any special precautions under Para 8, if so whether the same are known to the staff and followed by them or not? • Whether the staff is aware that permitting back movement over a wrongly set point which was trailed through by the LP/Shunter is prohibited?	
5	ESSENTIAL SAFETY EQUIPMENT: • Whether available as per SWR • Whether they are in working condition or not • Whether the prescribed equipment is adequate as per station layout or not?	
6	LC GATE REGISTER: • Whether entries are separately made for UP / DN trains • Whether the PN is exchanged with Gateman of non-interlocked LC Gate? • Cross check the PNs of previous three trains.	

7	MONTHLY SAFETY MEETING REGISTER: • Whether the acknowledgement of staff is obtained in two parts or not? • First part for those staff who is physically present on the day of the meeting and second part for those staff who resume duties after leave / sick / absent /another shift. • Ultimately, the acknowledgement shall be 100%. • Another important item to be checked in this is whether the Guards stationed to work at the station are acknowledging it or not.	
8	SURPRISE NIGHT INSPECTION BY SM: • Whether the schedule of 4 for supervisory and 2 for non-supervisory is followed or not? • Whether there is proper spacing between inspections or not? Whether the PN of SM and name of the SCOR is recorded or not? • Whether any shortfalls / irregularities, if noticed are highlighted in red ink or not? • Whether all the activity centres of the station such as Dy.SS office, Cabins, LC Gate, Goods Yard, Crew Lobby, etc., are covered on a rotation or not?	
9	TRAIN SIGNAL REGISTER: • Whether the entries are clear and legible • 'Out' / 'In' report is written as per BWM guidelines or not by cross checking the timings with the	

	adjacent stations for at least 3 trains, direction wise • Whether Block Forward / Block Back entries are made in full and in red ink? • Whether the name & designation of the Night Patrolman is written in red ink or not (if night patrolling is in force) • Whether the SM in-charge of the station is scrutinising the TSR daily or not?	
10	ROUTE CANCELLATION REGISTER: • Whether reasons are correctly written or not? • If route cancellation is done for a departure signal/s, whether written memo was served to the crew or not? • If route cancellation is done for reception signal, whether any accident was averted, if so details? • Whether the time taken for route cancellation is being recorded or not to analyse the efficacy of timer relay?	
11	SWR: • Check for the currency • Whether it is in the new format or not • Check whether the layout is tallying with the rule diagram • Alternate power supply like IPS is incorporated or not • Whether any special precautions are prescribed under Para 7 for blocking / stabling of loads • Whether the station is situated on a steeper gradient (steeper	

	than 1 in 400), if so what special precautions are prescribed and followed by staff, etc.,	
12	SWR DECLARATION REGISTER: • Cross check the details with the Attendance Register to see whether staff are acknowledging after 15 consecutive days of absence (before taking charge of duties)? • Whether acknowledgement is separately taken for SMs & Pointsmen duly keeping an index with page number. • The acknowledgement register shall be divided in three portions, one for fresh SWR declaration, one for any amendment received to SWR, another portion for such staff who resume duties after 15 consecutive days of absence / staff of outstation.	
13	S&T FAILURE REGISTER: • Whether all Signal and Telecom failures are getting recorded or not? • In case of block failures, whether failure entry is made at both the stations or not? • Cross check the train passing documents such as T/A 1425 to T/D 1425 & T. 369 (3b) and identify specific shortfalls including individual lapses. • Whenever trains are received on Calling-‘on’ due to Home Signal failures, whether SMs are entering the Home Signal failure entry in the failure register or not?	

	• Cross check the failure entries with failure memos issued to S&T Official. • Whether any particular signal or point is repeatedly failing, if so whether S&T Officials are closely monitoring that asset? • Calculate the average failure time for the month to comment on the efficiency and swiftness shown by the S&T Official. • Cross check the Disconnection Register whether the S&T Official has issued Disconnection Notice before attending such gear as per Group 'C' of Appendix XIII of G&SR.	
14	ACCIDENT REGISTER: • Whether all the accidents and unusuals are entered or not. • Whether complete details of the incident including D&AR action initiated against the staff held responsible are entered in the register or not? • Identify similar type of accidents / unusual taking place on a particular line / point to suggest remedial measures.	
15	DISASTER MANAGEMENT DISPLAY BOARD: • Whether the board is available or not. • Whether contact telephone numbers including mobile numbers of Medical (Railway and Non-Railway), Civil, Transport, Voluntary Organisations, etc., are displayed or not.	

	• Whether the SM is making a random check to check the correctness of the telephone number once in a fortnight; and if so, record of the same. • Availability of fire extinguishers and the knowledge of the staff in using the same.	
16	STABLED LOAD REGISTER: • Whether the entries are properly made in the register as per the pro-forma. • Whether the exchange of PN with SCOR is followed or not, if so the details are written or not. • Whether the validity of BPC is written or not? • Whether the GLP check memo issued or not – if given, the record keeping of the same is correctly maintained or not. • Physically check the stabled load formation and ensure whether the written details are correctly written and followed or not. • Whether coaching rake stabling details are entered in the register or not.	
17	STATION DIARY: • Whether the SM in-charge is filling up the columns pertaining to him before 1000 hours of the day or not. • Whether all the columns are correctly filled or not.	
18	CAUTION ORDER MESSAGE REGISTER:	

	• Whether brought forwarding is done as per Appendix I of G&SR. • Whether the Serial Numbers are properly maintained or not. • Cross check the details with the Caution Order copy issued to the Crew. • Identify such SRs which are not feasible to obey, for example 75 kmph + stop if required – to address the problem by writing to Engineering Officials. • Similarly, at certain locations we may find cancellation and imposition of caution orders under one and the same message number which is irregular. • Also identify such SRs which are given for two / three block sections instead of giving them individually to one block section. • Whether adequate space is left in between two SRs for interpolating any new additions given on emergency account.	
19	BIO-DATA REGISTER: • Cross check the entries with the actual BCC / PCC, PME certificates possessed by the employees at the time of inspection. • Whether they are adhering to the instructions of IRMM Para 514, i.e., staff after attaining the age of 45 years are supposed to undergo PME as per their date of birth. • Ensure that RC / PME overdue staff are not utilised in direct train operation.	

20	WEATHER WARNING REGISTER: • Whether the acknowledgement time and date is correctly written by the Officials who received the message. • Whether the SM is writing the actual weather condition at the time of receipt of the weather warning message? • Whether the beat books are deposited with the SM of the station or not. If available, cross check the entries of TSR & Station Diary with the beat books or vice-versa.	
21	RELAY ROOM KEY REGISTER: • Check whether proper reasons are written in the register? • Whether all the columns are correctly filled by the station staff? • Whether the name, designation of the employee who is handing over / taking over the key are legibly written. • Calculate the total number of times the key is taken in a month; and the total time the key is out of the box to comment on the unhealthy practices, if any. • Whether the opening of the Relay Room door or EKT is inter connected with the datalogger, if so whether the same is getting registered or not.	
22	DISCONNECTION & RECONNECTION NOTICE (T.351): • By scrutinising the foils pasted in the register, identify such works	

	which involve joint works with Engineering Department. Further look for the remark “joint work with engineering” is passed or not as per SR 3.51.6. • Whether the S&T Official is ensuring track ‘fit’ memo / remark from Engineering Official after completing such joint works. • In the course of regular maintenance of block instrument, whether the SM is passing a remark on the face of the Disconnection Notice that ‘no train in block section’ as per Para 5 of Appendix XIII of G&SR.	
23	CRANK HANDLE REGISTER: • Whether the entries are made by the officials whenever the crank handle is removed. • Whether the chain is properly connected to the EKT housed in the glass cage of SM Office. • Whether the S&T Officials are testing the crank handle working as per the schedule of once in a fortnight by the ESM, once in a month by the JE/Signals and once in three months by the SE/SSE. In the course of testing, whether all the points that are connected to that crank handle are tested on a rotation or not?	
24	AXLE COUNTER RESETTING REGISTER: • BPAC axle counter resetting, direction-wise details are correctly recorded in the register or not. • Whenever resetting is done,	

	whether the failure entry is made in the Signal Failure Register or not? • Loop line Axle Counter resetting – whether the co-operation box is kept outside SM Office or not? Whether this failure entry is also made in the Signal Failure Register or not? • IBS Axle Counter resetting – before resetting, whether the SM is aware what precautions are to be taken. Check for the occasions when the same are reset and cross check with the Signal Failure Register entries and TSR.	
25	CALLING-‘ON’ ROUTE CANCELLATION REGISTER: • Whether the Veeder Counter is separately provided for direction wise or not. If a common one is provided, write to the Signal Department officials to provide the same separately to correctly analyse as to how many times the cancellations (direction-wise) are made and to take corrective remedial action. • Check whether the reason for using the Calling-‘on’ is correctly written by the station staff or not. • If it is used due to Home Signal failure/s – whether Home Signal failure entry is made in the Signal Failure Register or not? • Whether the S&T Officials schedule is correctly followed or not (by observing the entries in the register).	

26	TI INSPECTION REGISTER: • Whether the schedule of one per month is followed or not? • Whether he is bringing out irregularities / shortfalls during his inspection, if so what action taken by the SMR / SM in-charge. • If identical shortfalls / irregularities are noticed by the TI – what action taken by the Divisional Administration.	
27	OFFICERS INSPECTION REGISTER: • Action initiated by the SMRr / SM in-charge on the irregularities / shortfalls related to safe operations noticed by the officer/s. • Whether SMR / SM in-charge is putting any effort to get the copy of the inspection report from the division, if not received.	
28	STAFF GRADATION REGISTER: • Whether gradation is done once in 6 months (January and July) as per board guidelines or not? • Details of marks obtained by the staff are written or not? • By observing the details, identify the weak area of the employee/s and counsel the SMR / SM in-charge and TI of the section to concentrate on those subjects / topics.	
29	RUSTY RAIL COLLARS / CAPS: Whether the SWR stipulate special instructions regarding the usage of rusty rail collars / caps, especially at	

	those locations such as Coastal Area, Cement Companies, Iron Ore / Coal loading stations; if so whether the staff are following those instructions, i.e., testing the point/s once in 24 hours and keeping a record of the same.	
30	AVAILABILITY OF WHEEL CHAIR AND STRETCHER AT A STATION: • Whether the wheel chair is available or not? • If so, whether there is a display board to that effect or not? • Whether the wheel chair is in good condition or not? • Similarly, whether there is stretcher under the control of SM, if so its condition.	
31	PLCT WORKING: • During PLCT working, whether the failure entry is made at both the stations of block section made or not? • If the failure is continued for more than one hour, whether the S&T Supervisor is attending the station or not, if 'yes' relevant record is maintained or not? • If the failure time is more than 3 hours, the section TI or SMR of the station is supposed to visit the station to oversee the safe working of PLCT , whether they are aware of it, if 'yes' whether any record is maintained or not? • If the failure time is more than 24 hours, whether SR of 30 KMPH is imposed or not? • Whether the SCOR is adhering to	

	the laid down instructions of not arranging crossing on single line, not arranging precedence on single / double line sections.	
32	GLP (GDR) CHECK: • Whether the GLP Check is effectively done or not? • Whether the GLP is checking the formation as per joint procedure order? • Whether the GLP check memo is prepared in triplicate or not, to be cross checked with the stabled load register. • Whether the staff aware of the new instructions, i.e., when the Goods train is without Guard; LP is responsible for the entire check and SM has to depute one Pointsman to assist the LP. And additional time of 30 minutes, i.e., 30+30 minutes is permitted.	
33	AVAILABILITY OF BV EQUIPMENT: • Whether the loading, locking and sealing of full complement of BV Equipment in all the SLRs of the formation are done or not? • Whether the spare 'OTL' is provided or not? • Whether the display sticker is pasted or not? • Whether there is lighting provision with control switch outside the cabinet in which BV Equipment is loaded?	
34	ANY OTHER OBSERVATION	

MECHANICAL INSTALLATIONS

Activity Centre: COACHING DEPOT		
ASPECTS TO BE CHECKED ON COACHING RAKE ON PITLINE		
1	Check whether the rake is secured by providing wedges and application of hand brakes in front and rear SLR are done or not?	
2	Check whether the point was set against blocked line, clamped and pad locked.	
3	Check whether the rake placement memo was issued on standard form T. 431 by Dy.SS on duty immediately after the placement and obtain the acknowledgement.	
4	Adequacy of Pit-examination time for various rakes as laid down in Policy Circular.	
5	Availability of berthing slots.	
6	INFRASTRUCTURE AVAILABILITY AND ADEQUACIES OF THE FOLLOWING; • Approach road • Pathways for material movement • General lighting • Pit light for night examination. • Availability and functioning of air-compressor and rake test rig.	

7	QUALITY OF REPAIRS (i) Whether Wheel profile / diameter / gauge is measured and recorded in the schedule cards and gauge is calibrated or not? (ii) Whether proper attention paid to maintenance of air hoses, DVs, BP & FP lines, Isolation Cocks, COCs and other under-gear/brake gear and suspension items.	
8	Whether coach failure analysis, reporting system and follow-up action is being carried out?	
9	Schedules done/arising/overdue including POH.	
10	Any other observations	
ASPECTS TO BE CHECKED ON COACHES IN SICK LINE		
1	Quality of repairs during sick attentions.	
2	Adequacy of lifting facilities.	
3	Attention to welding practices particularly Earthing.	
4	Brake Power Check by connecting Single Car Test Rig after repairs in	

	sickline.	
5	Road access and availability of material handling equipment.	
6	Any other observations	
ASPECTS TO BE CHECKED ON COACHING RAKE ON PLATFORM		
1	SYSTEM OF ROLLING 'IN' EXAMINATION OF PASSING THROUGH TRAINS – a. Availability of powerful lights for conducting this examination on either side of all platforms. b. Check the availability of non-contact Thermometer, whether it is being used during rolling 'in' examination? c. Availability of shelter for the staff provided or not	
2	Does JE/SE/SSE-C&W record correct levels of air-pressure on loco and SLR? Does he conduct checks for Passenger Alarm Device? Do the Fitters have proper tools, lights, etc.,?	
3	Whether padlocking of terminating trains was done?	
4	Any other observations	

ITEMS TO BE CHECKED DURING IOH OF COACH		
1	Infrastructure availability and adequacies of IOH / Sick line - covered Shed line capacity for IOH / Sick attention, availability of materials, Tools and Plants, Pathway and lighting facility.	
2	Check whether the Centre-Pivot bolt loose or worn out or silent blocks damaged were examined?	
3	Check whether the AR is drained out.	
4	Check whether the bogie frame alignment was checked with trammeling gauge.	
5	Whether the brake power of the coach was tested by connecting Single Car Test Rig with Air Compressor.	
6	Check availability of BV Equipment in Guard compartment and OTL with seal.	
7	Any other observations	
ASPECTS TO BE CHECKED ON PANTRY CARS		
1	Train No., Pantry Car No., Division / Depot	

2	Check for presence of any inflammable material like Gas Cylinders (kept outside the nominated room), Petrol, Kerosene, etc.,	
3	Check whether LPG connections are periodically checked and certified by authorized agent, daily and 15 day check certificates should be available with Pantry Car Manager.	
4	Check whether Gas Regulators, Fire back arresters and pressure gauge is in working order.	
5	Check whether the specified number of outlets only being used.	
6	Check whether the gas cylinders are kept on proper rack duly clamping.	
7	Check whether fire extinguishers (4 nos.) in Pantry Car are kept in proper location and not overdue for refilling.	
8	Check whether the Pantry Car Staff is having adequate knowledge in usage of fire extinguishers.	
9	Check whether ACP apparatus is working in Pantry Car.	

10	Check the Exhaust Fans are available and are in working order.	
11	Check whether all main doors are free to open and the passage kept free for movement.	
12	Check proper rating and types of fuses are used for battery, fan circuit, light circuit in junction boxes. Re-wirable fuses are not to be used in place of HRC fuses.	
13	Check tightness of terminal connections at junction boxes, EFT terminals and battery terminals.	
14	Check for earth in wiring. If any earth is noticed, investigate and remove earth.	
15	Check if any excessive sparking is noticed in fans.	
16	Check whether Electrical equipment provided is as prescribed.	
17	Ensure no perished / damaged cables and no open wiring in the Pantry Car.	
18	Any other observations	

WAGON DEPOT		
ASPECTS TO BE CHECKED ON AIR-BRAKE RAKE (BOX'N' & BCN)		
1	Whether the air brake test rig is being used for testing of brake power and brake system by using the air compressor?	
2	Whether the brake power maintained 100% in case of CC rakes, 95% in case of Premium rakes, 90% in case of End-to-End rakes.	
3	Whether the in quick coupler for fitment of air pressure gauge was available in Guard BV and whether it is in working condition?	
4	Whether the condition of DV Isolating cock, cutoff angle cocks, load/empty device and hand brake wheels were checked and ensured for proper functioning?	
5	Whether the condition of CBC components, brake gear components, wheel profile, springs, elastomeric pads, brake beam, brake block, hangers, brake pins and split pins were checked and ensured for proper fitment and functioning?	
6	Whether all the Brake Cylinders are released manually and ensured the brakes released completely before handing over the rake for Traffic use?	

7	Any wagon is due for ROH/POH and allowed in the formation without detachment.	
8	Whether the train was tested for brake continuity before signing the BPC by the Guard?	
9	Whether the BPC issued is in proper format (CC rakes or Premium rake or End to End) and necessary log sheets enclosed?	
10	Whether the doors of empty wagons are in closed and secured condition?	
11	Running of CC-rake and Premium rake trains even after expiry of BPC, without offering for TXR Check at nominated Depot. Further such rakes placing for loading and moving trains on GLP Check by ignoring the JPO of 5/2008.	
12	In case of CC+8 /CC+6 loaded rakes, the individual wagon wise weight particulars copy required to be handed over along with the speed restriction memo.	
13	any other observations	
ASPECTS TO BE CHECKED DURING ROH OF WAGON		
1	Infrastructure availability and adequacies of ROH/Sick line-covered	

	Shed, line capacity for ROH/Sick attention, availability of materials, Tools & Plants, Pathway and lighting.	
2	DURING ROH, THE FOLLOWING BOGIE COMPONENTS TO BE STRIPPED 'OFF', EXAMINED AND IF REQUIRED TO BE REPLACED/REPAIRED. a) Brake beam and brake-gear pins. b) Brake-gear levers and rods. c) Brake-gear pin bushes. d) Brake shoe and hanger. e) Brake beam safety straps. f) Springs and spring suspension arrangement.	
3	Check whether the Centre-pivot was checked with gauge for worn out.	
4	Check whether springs free height measured and grouping made before replacement.	
5	Check whether the AR is drained out.	
6	Check whether the dirt collector filters cleaned.	
7	Check whether the bogie frame alignment was checked with trammeling gauge.	
8	Check whether the CBC components dismantled and examined.	

9	Check whether all the knuckles were subjected for Dye-penetrant test.	
10	Check whether all the wheels are subjected for UST and axle box cap bolts are tightened with torque wrench with proper torque and in no case old locking plates are to be reused.	
11	Whether the brake power of wagon was tested by connecting single car test rig with air compressor.	
12	Any other observations	
ASPECTS TO BE CHECKED ON ART/MRV		
1	Complete ART formation is to be stabled in one hook and the double entry facility to be made available for all ARTs to facilitate quick turn out.	
2	The full-fledged Disaster Management exercise to be organized periodically to have the practical experience to ART nominated staff.	
3	Hydraulic re-railing equipment, running of power pack under load and no load condition and test the jacks for its efficient working.	
4	Condition of wire ropes and rope test certificate.	

5	Check LPG lamps whether they are properly burning, spare mantles available or not.	
6	Check working of hydraulic and electrical operated cold-cutting equipment, availability of spares and maintenance of tools, ask for demonstration and see whether staff is conversant with its usage.	
7	Fire extinguishers general condition and next refilling date.	
8	Check whether staff know as to how to use the fire extinguisher.	
9	Detonators availability and its due date.	
10	Check whether wooden/iron wedges are available in all the coaches.	
11	Check all the measuring instruments and gauges are kept as per the requirement. Check whether the calibration dates are due.	
12	Check whether standard items list display board is provided with location plan by the Mechanical, S&T, Engineering, Electrical and Medical Departments.	

13	Check the compliance of last inspections.	
14	Check AMC is available for critical items like HRE, HRD, and inflatable lights etc.	
15	Check whether joint inspections are carried out as per schedule.	
16	Check whether mock drills are conducted or not and number of staff present during mock drill	
17	Availability of spare kits for all types of jacks.	
18	Functioning of inflatable air-bags.	
19	Whether AMC is available for HRE & HRD?	
20	Any other observations	
ASPECTS TO BE CHECKED ON 140 T CRANE		
1	Check for cranes working, propping beam and its hydraulic piston jacks and its seals for leakage.	
2	Whether all maintenance schedules have been carried out.	

3	Check whether 'special safety precautions for operation of 140 T crane' are prominently displayed in the driver's cab both in English and Vernacular language.	
4	Availability of at least two sets of well trained staff who can operate the crane with valid competency certificate.	
5	Check for proper working of safe load indicator.	
6	Check all the systems lift/lower, derrick in/out, slew, haul and travel are working.	
7	Check whether AMC is available for main engine.	
8	Check whether joint inspections are carried out as per schedule	
9	Check whether mock drills are conducted or not and number of staff present during mock drill.	
10	Any other observations	
ASPECTS TO BE CHECKED ON S&T EQUIPMENT		
1	Whether PA System is in working condition.	

2	VHF sets are in working condition or not.	
3	Walkie-talkie sets for its working, condition of dry cells and expiry date.	
4	Field telephones for its proper working and condition of cables.	
5	Any other observations	
ASPECTS TO BE CHECKED ON ELECTRICAL EQUIPMENT		
1	Check for the running of generators both fixed and portable and its related spares availability.	
2	Check all lighting equipment, stands, reflectors, condition of cables, switches, etc.,	
3	Check for the functioning of inflatable lighting towers.	
4	Any other observations	
Activity Centre: LOCOMOTIVE		
DURING FOOTPLATE		
1	Rest availed by crew before signing "on" as per eligibility.	
2	Whether crew in sober condition and whether they are in the list of prone alcoholic.	

3	Whether the LP/ALP are ensuring that proper authorities are issued by SM before starting their train during normal and abnormal conditions	
3	Endorsement by Mechanical staff where available or by the LP/GD on BPC after performing shunting operation about the air-continuity test is made?	
4	Referring the loco log book remarks after taking over charge of the train / loco	
5	Testing the brake power at the first block section.	
6	Whether personal mobile and CUG is switched 'off' by the LP?	
7	Availability of VCD in the loco, its functioning & position of isolation switch.	
8	Functioning of AFL & knowledge of the crew on testing the same	
9	VHF communication between Guard & Loco crew, whether working or not?	
10	Availability of valid competency both G&SR and technical; & PME certificates of LP and ALP	

11	Ensuring the validity of fire extinguishers in the loco by the crew	
12	Functioning of loco hand brake & ensuring the same by crew	
13	Functioning of loco parking brake (if provided)	
14	Whether caution order is legible and corrections, if any are signed and stamped?	
15	Habit of looking back frequently on curves to ensure safe running of train	
16	Whether the crew are ensuring the stoppage of passenger carrying train within the platform ends (duly ensuring fouling clearances); and in regard to freight trains and light engines the crew shall draw ahead upto the foot of the Starter Signal or not?	
17	Habit of exchanging 'all-right' signals with the crew of trains passing on adjacent line in block section and as well at stations.	
18	Whether any un-authorized person travelling in loco	
19	Habit of recording & repeating any	

	un-usual noticed related to track or signals or any other unsafe condition en-route	
20	Alertness of crew and their performance: does the ALP get down from the cab to take round of the loco, examine its under-gear visually, and take corrective action required, if any, at stations where the train has its schedule stoppage.	
21	LP/ALP safety consciousness & knowledge of safety rules	
22	Any other irregularities noticed during run related with other departments (like Operating, S&T, Engineering and Commercial)	
CREW BOOKING LOBBY		
1	SIGN 'ON'/'OFF' ACTIVITY: i. Whether through CMS or manual or both. ii. Whether the crew is subjected for BA test while signing 'on'/'off' duty and the same is ensured by on-duty Crew Controller.	
2	BREATHALYZER INSTRUMENT i. Whether available with printing facility along with spare unit ii. Whether spare unit in working condition available iii. RDSO approval unit or not	

3	RECORDS: i. Crew bio-data & due particulars of PME/RC ii. Whether crew are booked only after completion of their rest iii. Record of longer hours working at a stretch iv. Whether crew are getting sufficient no. of PRs. v. List of alcohol prone staff vi. Record of 'staff tested positive', if any; action taken on them. vii. Whether adequate number of speed guns is available?	
4	SAFETY LITERATURE: i. Availability of latest safety literature & acknowledgement. ii. Availability of adjacent railway / division safety literature / circulars if our crew is entering other railway territory.	
5	AVAILABILITY OF REGISTERS: i. TRACK DEFECT/SIGNAL DEFECT & UN-USUAL REGISTERS: Whether remarks are repeated immediately to the control under exchange of PN & getting the feedback. (it was observed at many lobbies that the remarks are repeated once at 10hrs daily with a single PN). ii. LR & GRADATION REGISTER: Whether total crew have taken proper LR; and gradation particulars along with nominated LI available and updating the same or not. iii. OUT STATION CREW DETAIL	

	REGISTER: Entries like staff arrival, off duty, total working hours and rest completion time and booked time. Is any crew booked under rest?. iv. G&SR: Availability of G&SR with latest Amendment Slips posted up to date with CC/Lobby in-charge or not. v. Whether crew are counseled by LIs as per their gradation?	
6	Any other observations	
RUNNING ROOM		
1	Registers: a. Complaint Register: Action taken against complaints made by occupants and its compliance. b. Officers/Supervisors Inspection Registers: Proper schedules are maintained by them and its compliance available are or not. c. Bed Occupancy Register: Occupants are making entries proper or not and any crew waiting for bed and waiting period action taken. d. Standing Committee Report: Standing Committee Inspection report of Running Room & its compliance available with Running Room in-charge or not.	
2	Numbering of Beds & Rooms: Whether each room having two beds or cubicles available or not and whether each bed should be	

	numbered and occupancy board shall be updated at frequent intervals.	
3	Backup facility: Whether power backup through standby DG Set is provided or not.	
4	Meditation Room: How many crew utilizing the same and entries are made in the register.	
5	Reading Room: Newspapers & magazines are available or not.	
6	Frequency of changing linen: a. Whether linen is changed for each occupant or not. b. Condition of linen and adequate space for storing the same available or not.	
7	Drinking water: Water purification system availability. Whether water filtering arrangement through RO Plant/Aqua-guard provided. Its periodical maintenance.	
8	Medical Certification: Possession of valid medical certificates by the Catering staff or not.	
9	Uniform: Whether Running Room staff is provided with uniform, laminated badges with their photographs and using apron by the kitchen staff.	

10	Cooling System: Whether centralized air cooling system provided. If not, adequate number of desert coolers provided or not.	
11	Cooking facility: Departmental or out sourced. Cooking facilities to meet the needs of Running Staff. If outsourced, check for the quality & quantity of food supplied to Running Staff and availability of menu card. Separate kitchen for Vegetarian & Non-Vegetarian is provided or not.	
12	Availing rest by crew: Whether staff could take proper rest or not; if not, reasons for not availing rest.	
13	Availability of mosquito nets for each bed, pesto-killer in the dining hall.	
14	Condition of toiles and cleaning arrangement.	
15	Availability of hot water supply with solar / geyser.	
13	Any other observations	

Engineering Aspects

ACTIVITY CENTRE – MANNED LC GATE (OPERATING OR ENGINEERING INTERLOCKED OR NON-INTERLOCKED)		
S. No.	Items to be checked	Observations made
1	AVAILABILITY OF ROAD SIGN BOARDS: • Double strip (200m) • Single strip (50-100m) • Road warning board (within railway boundary) • Speed breaker board (5-10m from Speed breaker) & • Speed breaker (rail post to 20 m distance or within railway boundary) whether provided as per standards?	
2	Provision of wicket gates (mandatory at manned LC Gates).	
3	Whether vertical clearances of lifting barriers (from bottom of lifting barrier to road surface) is between 0.8 - 1m.	
4	Lateral, Vertical clearances of check rails (lateral - 51 to 57mm; Vertical - >38mm).	
5	Whether length of check rail & road width is as per standards (length of check rail = road width + 2.0m).	
6	Whether the length of the safety chain is suiting the width of the LC, make the Gateman to physically put the chain across the LC Gate and	

	observe the length whether it is correct or not, also make the Gateman to padlock.	
7	Cross check the LC Gate Register entries with station – at least last 3 trains; in case if it is non-interlocked LC Gate, the PNs should be checked & in case of interlocked LC Gate, check for the availability of PN Sheet.	
8	Check for the availability of competency certificate and medical certificate of Gateman.	
9	Check the record for the last damages caused to lifting barrier – in case of interlocked LC Gate, whether PN was exchanged by Gateman with SM till the lifting barrier is restored / repaired.	
10	Check the general condition of the gate lodge with regard to Civil / fabricated structure and Electrical fittings, alternate power supply, water source, etc.,	
11	Test the efficacy of the interlocking in case of interlocked LC Gate by trying to lift the lifting barrier after transmitting the EKT.	
12	Knowledge of the Gateman during normal working and abnormal working.	

13	Whether the check rail clearances are clean?	
14	Whether the Gateman are functioning as per official roster? Whether Gateman are available in three shifts (in case of 'Special' class and class 'A' LC Gates only)?	
15	Whether GWR instructions are available in vernacular and English / Hindi languages.	
16	Observations made by Engineering / Traffic Officials in the LC Gate Inspection Register.	
17	Drainage facility is available and has clear passage or not.	
18	Fencing available in both ways, i.e., road and rail directions.	
19	General condition of the road within the track portion and on the approach locations. Road surface is level upto 15m or beyond in Special Class (class I road). In case of other class of roads, 8m surface shall be level.	
20	Availability of gate equipment as per the SWR and its condition.	

21	Whether sliding boom provision is available and in working condition which will be used during damages to lifting barrier. Whether the sliding boom is also having interlocking proving, if so, whether it is working or not.	
22	Whether the audio buzzer is properly functioning and audible while closing / opening the lifting barrier. Is the buzzer is interlinked with the movement of lifting barrier or to be switched on manually.	
23	Whether the infrastructure is enhanced according to the class of LC Gate as per Annexure 9 of IRPWM?	
24	Any other observations	
ACTIVITY CENTRE – UNMANNED LEVEL CROSSINGS		
1	Check for the minimum visibility of 800m for both road & rail user. If not, whether any speed restriction is imposed or not.	
2	AVAILABILITY OF ROAD SIGN BOARDS: • Double strip (200m) • Single strip (50-100m) • Road warning board (within railway boundary) • Speed breaker board (5-10m from speed breaker) &	

	Speed breaker (rail post to 20 m distance or within railway boundary) whether provided as per standards?	
3	Lateral, vertical clearances of check rails (lateral - 51 to 57mm; vertical - >38mm).	
4	Length of check rail & road width should be as per standards (length of check rail = road width + 2.0m). (road width for class – I 9.0m, class – II 7.5m, class – III 5.0m)	
5	Whether “W/L” board is available at 600m. In case of single line sections, where the visibility is clear, whether the “W/L” board distances is reduced to 350m or not?	
6	Whether the existing TVUs qualify for manning?	
7	Whether barricading is available for both road and rail side.	
8	Feasibility for closure by diverting or by providing limited height subway or for clubbing.	
9	Whether approach road gradient (beyond 8m) is 1 in 20 for Class III	

	roads; 1 in 15 for Class IV roads?	
10	Any other observations	
ACTIVITY CENTRE / EQUIPMENT – POINTS & CROSSINGS		
1	Check the gauge (-5mm to +3mm in straight portion) & cross level (variation not permitted) at following important locations: • In switch portion, 450mm ahead ATS, at ATS, at 150mm behind ATS, at heel block. • In lead portion all the stations Versine, gauge & cross-levels. • In crossing portion 1m ahead of ANC, 150mm behind ANC, 1m behind ANC, wear of crossing both wing rails & nose.	
2	Observe the housing of stock/tongue rails (for 1 in 12 -upto 4 sleepers, 1 in 8 ½ - upto 3 sleepers).	
3	Measure the throw of switch on both LH & RH (permitted 95 - 118 mm).	
4	Whether joints are gapless joints in crossing portion or not.	
5	Whether 'J' type ERCs are provided in prescribed locations or not.	

6	Whether clean cushion maintained or not (minimum 300 mm - maximum 350 mm).	
7	Whether ZMF is available in lead & crossing portions.	
8	JOINT INSPECTION OF POINTS & CROSSINGS: • Whether the schedule is being followed or not? • Deficiencies noticed during the inspection – whether they have attended and remarked to that effect? • If the nature of deficiency is similar type at similar location, whether any action plan is initiated for rectification of the same or not?	
9	Any other observation	
ACTIVITY CENTRE / EQUIPMENT – CURVES		
1	Whether curve particular boards, TB, TE Rail posts etc., provided in prescribed locations or not.	
2	Whether joggled fish plates for the Themit welds on the outer rails of the curve provided with proper clamps or not (as per ACS 116 of IRPWM, Para 429)	
3	Whether greasing of ERC (inside every	

	one year & outside every two years in identified corrosion prone areas), gauge face corner (every fortnight) done as per schedule or not.	
4	Check the gauge & super-elevation in transition portion especially, (upto + 10mm for curves less than 350 m radius).	
5	Whether adequate ballast provided for outer rail of the curve, any deficiency of ballast noticed.	
6	Any other observation	
ACTIVITY CENTRE / EQUIPMENT – LWR / SEJ		
1	Whether SEJ/LWR particular board provided or not?	
2	Whether reference pillars are correctly positioned or not (mean position should coincidence with reference mark & centre of the chair plate).	
3	Whether the total gaps are tallying as per temperature range or not.	
4	Check the squaring of tongue rails, tightness of bolts/nuts.	
5	Whether any discontinuation of track	

	noticed (fish plated joint) in LWR track which is not permitted.	
6	Whether angle tie provided or not?	
7	Any other observation	
ACTIVITY CENTRE / EQUIPMENT – BRIDGES		
1	• Whether danger level is marked; • Whether HFL marked or not & • Whether availability of flood gauge or not.	
2	Whether Guard rails are provided in major bridges or not. Check the lateral clearance between Guard rail & running rail ($250 \pm 50\text{mm}$).	
3	Top table of the Guard rail should not be lower than that of the running rail, by more than 25mm or not.	
4	Check the gauge & cross-levels on the bridge (straight including curves of 350m radius or more - 5mm to + 3mm, for curves less than 350m radius upto + 10mm i.e., 1686 mm).	
5	Whether pathway provided in the centre of track over sleepers properly/intact or not for the purpose of inspection of Engineering Officials. Ensure overlapping pathway plates are fixed properly.	

6	Whether the entire hook bolts are intact and position of arrows on top of the bolts should be at right angle to the rails pointing towards the rail.	
7	Whether all the nuts, hook bolts etc., are oiled periodically or not.(to avoid rusting)	
8	Whether vent-way is clear of obstruction or not.	
9	Whether joggled fish plates of the Thermit weld on the bridge along with its approaches up to 100m is done using proper clamps or not.	
10	Whether prescribed trolley refuges/man refuges are provided or not (on bridge with main spans of <100m - 100m, on bridge with main spans of 100m or more - a refuge over each pier, on ballasted deck bridges- 50m).	
11	Whether anti-sabotage device with nut and special keys in all the identified sabotage prone locations on important/major bridges and their approaches provided or not as per engineering standing order no. 66.	
12	Any other observation	

ACTIVITY CENTRE / EQUIPMENT - SOD		
1	Check the horizontal distance from centre of track to passenger platform coping which should be 1670 - 1680mm.	
2	Check the horizontal distance from centre of track to face of any platform wall which shall be 1675 - 1905mm.	
3	Check the height above rail level for passenger platform which shall be 760 - 840mm.	
4	Check the height of cover over platform above rail level which shall be 4470 - 6250mm.	
5	Check the minimum distance centre to centre of tracks (for existing works - 4265mm, for new works or alterations to existing works - 5300mm).	
6	Any other observation	
TRACK MACHINES LIKE TTM, BCM, UTV, PQRS CRANE, UNIMAT, DUOMAT, Etc.,		
1	Whether the Operator is trained and in possession of competency certificate?	
2	Does the Operator possess sectional knowledge?	

3	Whether the Operator underwent PME on par with train LP and having the certificate?	
4	Knowledge of the Operator in observation of G&SR rules (normal and abnormal).	
5	Whether the prescribed equipment is available in working condition or not?	

S&T Installations

ACTIVITY CENTRE / EQUIPMENT – CONTROL PANEL		
S. No.	Items to be checked	Observations made
1	Whether yard diagram on the panel, the actual yard layout and the location of the signals as well as the SWR is matching with the Signal Interlocking Plan.	
2	whether SM's key is 'IN', set the relevant points for the required route, check the track clear indications in the route as well as the overlap, LC Gates are closed if any, in the route as well as the overlap, and then take 'OFF' the concerned signal. Whether the signal had correctly responded as per the laid down conditions or not.	
3	Initiate route cancellation when required and observe whether the time taken for the same is 120 seconds or less.	
4	Calling-on signal – ensure the calling 'on' track is occupied, Home Signal knob is 'normal', points in the route are correctly set before taking 'off' Calling-on Signal. After 60 (as per amendment to IRSEM) seconds, Calling-on Signal shall clear. Initiate Calling-'on' signal Cancellation; wait for 240 seconds for releasing the route. Notice whether route is released after 240 seconds or not.	

	Also notice whether points in the trailing direction is proved or not (not necessary to prove)	
5	Whether entry is made in the calling 'on' cancellation register along with reasons and remarks or not.	
6	Whether Veeder counters are separately provided for UP and DN directions or not?	
7	Similarly, whether separate counters (for up and down) are provided for Calling-'on' Cancellation or not.	
8	Any other observation	
ACTIVITY CENTRE / EQUIPMENT – ELECTRIC POINT MACHINES		
1	Whether crank handle is kept in a glass box with EKT provision and provided with Veeder counter or not? Whether the removal of crank handle is linked with data-logger or not.	
2	Whether free indication near point knob is disappearing when concerned track relay is dropped or not.	
3	Point should not stop in-between even if that point zone track relay is dropped after the point operation had already started. Check this.	

4	Whether point TJLB is causing any inconvenience for crank handling.	
5	Place an obstruction test piece of 5 mm between stock and tongue rail at 150 mm from the toe of the switch and observe that the point does not get locked and its 'N' or 'R' indication flashes on the panel or not.	
6	Whether opening of the point is around 115 mm or not and housing is satisfactory or not.	
7	Whether the readings of the point machine are recorded and kept in the respective point machine or not.	
8	Any other observation	
ACTIVITY CENTRE / EQUIPMENT – TRACK CIRCUIT		
1	Whether POH of track relay is carried out once in 10-12 years. a) Whether track relay voltage is not more than 300% of the pickup value for QT relays. b) Whether 'J' clips are provided on the glued joints. c) Whether cross protection and double cutting is available or not.	
ACTIVITY CENTRE / EQUIPMENT – CRANK HANDLE		
1	Whether the crank handle is able to be extracted only when the relevant	

	signal is in 'on' position?	
2	Extract crank handle when the concerned signal knob in the normal position and observe crank handle out indication appeared or not.	
3	Attempt to take off that signal and observe that it should not respond.	
4	Any other observation	
ACTIVITY CENTRE / EQUIPMENT – SGE DOUBLE LINE BLOCK		
1	Keep the commutator in 'TOL' position and try to take 'off' LSS which should not assume 'off' position.	
2	Whether block instrument is provided with double lock arrangement and sealed or not.	
3	Whether line voltage and line current incoming and outgoing recorded or not.	
4	Any other observation	
ACTIVITY CENTRE – RELAY ROOM		
1	Whether double lock arrangement is available ND effective or not?	
2	Whether the relays are clean and in sealed condition or not?	

3	Whether the relay room opening and closing is linked with data logger or not?	
4	Any other observation	
ACTIVITY CENTRE – BATTERY ROOM		
1	Specific gravity should be 1180-1220 when the battery cells are fully charged. SPG < 1180 implies that those cells are discharged and normally charged cell voltages would be 2 – 2.2 v and discharged cell voltage would be < 1.8 V.	
2	Any other observation	
ACTIVITY CENTRE – INTERLOCKED LC GATE		
1	Whether interlocked LC Gate indications (i.e. open, close & free) is available on the panel or not?	
2	If the interlocked LC is open in the route, the corresponding signal should not assume 'off' aspect, even if its knob is turned to reverse position.	
3	The signal is taken 'off' duly closing the concerned LC Gate, the free indication of that gate should disappear.	
4	Any other observation.	

ACTIVITY CENTRE / EQUIPMENT – SIGNAL POST		
1	Implantation distance should be painted on all signal posts and it should be more than 2.36 m.	
2	Whether arrow marks are provided for Starter signals, if they are placed on the right hand side of the track.	
3	Any other observation	
ACTIVITY CENTRE /EQUIPMENT – LED SIGNALS		
1	Whether minimum 90V/118 MA at the regulator is available or not.	
2	Whether AC/DC, conventional CR/LED, blanking/non-blanking selection in current regulator correct setting is done or not.	
3	Where IPS is provided or not, whether inverters are provided for signals to avoid their blanking or not.	
4	ANY OTHER OBSERVATION	
ACTIVITY CENTRE / EQUIPMENT – LOCATION BOXES		
1	Whether opening of the door from the centre of track is more than 2.5m or not?	

2	Whether the value of the earth is painted on the location earth enclosure or not; and it should be less than 10 ohms or not?	
3	Whether the value of maintenance free earth (ring earth) is below 1 OHM or not?	
4	Any other observation	
ACTIVITY CENTRE / EQUIPMENT– ELECTRONIC INTERLOCKING		
1	WHEN VDU IS AVAILABLE: a) WHETHER SM'S KEY EQUIVALENT IS EFFECTIVE, b) WHETHER ALL OPERATIONS ARE POSSIBLE WITH THAT c) WHETHER PANEL / VDU OPERATION SELECTION IS AVAILABLE. d) WHETHER AUTOMATIC CHANGE OVER TO PANEL OPERATION IS POSSIBLE WHEN VDU FAILS, e) WHETHER CHECKSUMS / CRC OF APPLICATION SOFTWARE AND STATION SPECIFIC SOFTWARE IS AVAILABLE. f) WHETHER PROPER MAINTENANCE FREE EARTHING AND SURGE PROTECTION DEVICE IS AVAILABLE. g) WHETHER MAIN TERMINAL AS WELL AS THE STAND BY SYSTEM IS IN WORKING CONDITION.	

ACTIVITY CENTRE / EQUIPMENT - MULTI SECTION DIGITAL AXLE COUNTER		
1	WHETHER SURGE PROTECTION DEVICE AND MAINTENANCE FREE EARTHING ARE AVAILABLE AND WORKING	
2	WHETHER CHECKSUM / CRC OF WORKING SYSTEM VERIFIED.	
3	WHETHER DATA DOWNLOADING / ANALYZING PORT – MAIN TERMINAL IS AVAILABLE AND WORKING.	
4	ANY OTHER OBSERVATION	
ACTIVITY CENTRE / EQUIPMENT - BPAC		
1	WHETHER MAINTENANCE REGISTER, AND MAINTENANCE AS PER MANUFACTURERS/RDSO FORMAT AVAILABLE OR NOT?	
2	WHETHER PROPER EARTHING EQUIPMENTS AND RESET COUNTERS ARE WORKING OR NOT?	
3	WHETHER RESETTING DATA ENTRY IN RESETTING REGISTER / SIGNAL FAILURE REGISTER IS RECORDED OR NOT?	
4	ANY OTHER OBSERVATION	

ACTIVITY CENTRE / EQUIPMENT – EMERGENCY SOCKETS		
1	WHETHER TESTING OF EMERGENCY SOCKETS ONCE IN EVERY 10 DAYS AND NOTIFYING THE CONTROL REGARDING THE DEFECTIVE SOCKETS IS FOLLOWED OR NOT?	
2	ARRANGE FOR THEIR RECTIFICATION AT THE EARLIEST AND ALSO NOTIFY THE CONTROL REGARDING THE SAME.	
3	WHETHER EMERGENCY CIRCUIT IS CONNECTED TO THE SECTION CONTROLLER DIRECTLY AND NOT THROUGH THE TEST ROOM?	
4	WHETHER THE TESTING OF PORTABLE EMERGENCY TELEPHONE LOADED IN SLRs OF TRAINS DULY CONNECTING THEM TO THE EMERGENCY SOCKETS AS PER THE SCHEDULE IS BEING DONE OR NOT?	
5	ANY OTHER OBSERVATION	
ACTIVITY CENTRE / EQUIPMENT - CHANGE OVER PANEL ROOM AND GENERATORS		
1	Whether self-starting arrangement is available and working or not?	
2	Procedure for change over is painted near the power board or not?	
3	Whether description about changeover of power supply and	

	status monitoring panel of DCDP is included in SWR?	
4	Any other observation	