

SOUTH CENTRAL RAILWAY

VIGIL

QUARTERLY SAFETY BULLETIN NO.1

MARCH - 2015

INDEX

Sl. No	Section	Subject	Page No.
1	A	Knowledge – Extracts of Railway Board letters	1 – 5
2	B	Important Rules –	6 – 9
3	C	Details of Amendment Slips	10 – 16
4	D	Checklist – Engineering Activity Centres	17 – 35
5	E	Accident Cases	36 – 55
6	F	Test your knowledge with key	56 – 60
8	G	Safety Drives	61 – 63
9	H	Accident Statistics	64

My dear Railwaymen

The consequential train accidents have come down by 20% (4 against 5) for 2014-15. There are no “averted collisions”, no manned LC Gate accidents and no “breach of block rules”. The UMLC accidents have come down by 50% basically due to the introduction of Road Safety Counsellors / Gate Mitras at all UMLCs both during day and during night apart from various efforts made to eliminate UMLCs.

However, the concerning point is increase in number of “yard accidents”. Out of 50 accidents that have taken place for the year 2014-15, 29 are “Yard derailments” and 11 SPAD Cases. Out of 50 accidents that took place for 2014-15, 43 accidents were due to ‘human failures’ which could have been prevented, had the field staff shown little vigilance, alertness and dedication in performing their duties. LP lapses

increased by 60% (16 against 10 for the previous year).

This Quarterly Safety Bulletin “VIGIL” for the first quarter of 2015 brings out important RB letters, important rules, latest amendment slips, test your knowledge, safety drives launched, checklist and accident statistics which will be of much use in updating your knowledge and keeping track of day-to-day working.

**(S. P. SAHU)
CHIEF SAFETY OFFICER**

Section "A" KNOWLEDGE
Extracts of Railway Board letters

Sub: Head-on collision of 1057 DN Churchgate – Virar fast EMU local with 1022 Borivili – Churchgate UP slow EMU local at Andheri station of Churchgate – Virar section of Mumbai Division of Western Railway on 16.6.2012.

Ref: Railway Board letter No. 2012/Safety (A&R)/1/17 dated 05.3.2015 and Ministry of Civil Aviation letter No. T.11020/1/2012-RS dated 18.02.2015.

In continuation to Ministry of Railways, Railway Board's O.M No. 2012/Safety (A&R)/1/17 dated 19.01.2015, it is reiterated that SR 3.36 (5) (c) (iii) provides for route cancellation without written confirmation in power signaling areas where route cannot be cancelled before 2 minute delay. This ensures that approaching train will surely stop before route is altered. The provision ensures adequate safety, is practically implementable, and also caters to the specific need of running very large number of trains in suburban sections. The same has stood the test of time for all these years.

This particular case happened because the LP firstly moved beyond the signal and secondly stood between the signal and block joint of next track for a period of more than permissible delay and moved again having cleared the signal already at yellow resulting into this accident. This is an isolated case which happened despite providing required safeguards and cannot therefore be generalized as failure of railway administration on account of inadequate of rules.

(Alok Kumar)

Sub: Working of Mail/Express trains by LP (Goods)
in emergency.
Ref: Railway Board letter No. 97/Safety-I/11/9 dated
25.3.2015.

Instructions were issued vide letters under reference for working of Mail/Express trains by LP/Goods in emergency and in case of diverted trains. Board has reviewed these instructions in view of references received from Zonal Railways and it is decided that the following instructions should be followed:-

- i. Rajdhani / Shatabdhi / Duronto Express should not run by LP/Goods under any circumstances. If necessary, trains should be run by withdrawing regular LPs from the scheduled links.
- ii. Generally, Mail/Express trains and diverted Mail/Express trains should be run by LP-Mail/Passenger. If LP-Mail/Passenger is not available to work these trains then,
 - a. All Divisions should prepare a panel of adequate number of LP/Goods holding 'A' grade.
 - b. Panel of such LP/Goods should be drawn duly screening them by traction and Safety Officers.
 - c. These trains will be run by empanelled LP/Goods as per the point (a) above.
 - d. In case an empanelled LP/Goods as per point (a) above is not available, then an LI must accompany the LP on the foot-plate.
- iii. In case competent LP as specified above is not available for running a particular type of locomotive, then the power should be changed with another type for which competent crew is available.

- iv. Even in cases where Mail/Express posts are vacant and the division are not able to conduct selections / suitability due to some reasons, it is to be ensured that they should draw up a panel of LP/Goods holding 'A' grade, who should be engaged to work Mail/Express trains.

The above instructions should be complied strictly.

(P. S. Mishra)

ED/Safety

Sub: Shunting operations performed with diesel locomotives.

**Ref: Railway Board letter No. 2014/M
(L)/466/7101.Misc dated 13.3.2015.**

Dual-cab locomotives are inducted into the system on Indian Railways. There are cases reported to Board that while performing shunting, LPs are not following instructions issued in this regard.

CRS/Northeast Frontier Circle in his report on the accident of dashing of rear SLR No. 11707 of 15960 DN Kamrup Express by light engine No. 40129 WDP4D at Dibrugarh station of Tinsukia Division of NF Railway on 25.8.2014 has recommended as under.

All the crew to be strictly advised not to drive from 'rear cab' in the locomotives having 'dual cab'.

In this regard, all Zonal Railways are advised to ensure strict compliance of following instructions by the LPs during train working as well as shunting on diesel locomotives.

1. **On single cab diesel locomotive, LPs should work from the respective control stand towards the direction of train movement.**
2. **On dual-cab locomotives, LPs should work from the leading cab only.**

All Zonal Railways are advised to instruct / counsel all the LPs by LIs and through Training Centres / general instructions.

(Vivek Kumar)
ED/Mechanical Engineering (Tr)

Sub: Working of Trains by Diesel Engine (Twin Cab).

Ref: No.2014/Safety(A&R)/19/20 New Delhi,Dt:15.01.15

Instructions have been issued to some Zonal Railways conveying Board's sanctions for running of WDP-4D (Twin Cab) Diesel Engines.

At present there is no provision of working of trains by diesel engine having twin cab. However, GR 4.21-Driving an electric train-provides rules regarding working of twin cab in electronic engine. It has decided that existing GR 4.21(1) &(2)(b) which is applicable to electric engine shall also be applicable for working of trains by diesel engine having twin cab. Railways are advised to amend their subsidiary rules accordingly.

(Om Prakash)
Executive Director/Safety
Railway Board

Sub: Increase in SPAD cases.

Ref: No.2012/Safety (DM)/7/25 New Delhi,Dt:13.01.15

On perusal of SPAD cases it is seen that the SPAD cases occurred on South Central Railway have increased during current year i.e., 2014-15 (upto 13th Jan, 2015) in comparison to corresponding period of last year. Considering the serious repercussions which may arise due to SPAD, such incidents need to be arrested.

In view of the above it is requested to take necessary preventive action to reduce the cases of SPAD. Action taken in this regard may be initiated to this office at the earliest.

(Sanjiv Garg)
Advisor Safety
Railway Board

No.2014/Safety (A&R)/Battery Operated Cars,09.01.15.

Sub:Safety provisions for operation of Battery operated passenger cars at Railway stations for movement of senior citizens and differently-abled passengers.

Ref: SECR letter No.CSO/Safety/Misc./199/946dated 15.12.2014.

Please find enclosed herewith a copy of SECR letter number CSO/Safety/Misc./199/946 dated 15.12.2014 regarding certain safety issues being faced in regard to operation of battery operated passenger cars for facilitating movement of Senior Citizens and differently-abled passengers on railway station platforms. The issues raised by SECR appear to be very relevant and important and, therefore, require necessary intervention at the appropriate levels. You are required examine the possible safety

hazards in operation of such battery operated passenger cars and send your suggestions to Railway Board so that suitable guidelines may be issued by the concerned nodal Directorate. The same may be sent to the undersigned by 15.01.2015.

(Sanjiv Garg)
Advisor Safety

Sub: Nomination of a Safety officer from departments connected with Safety.

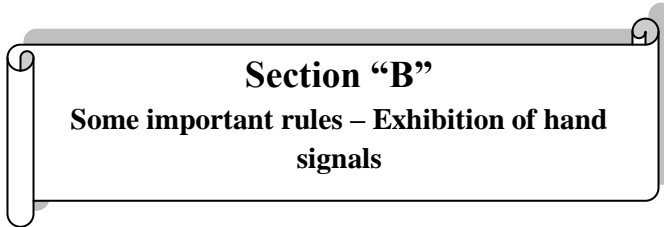
Ref: No.98/Safety-I/27I/Vol.II New Delhi,Date:28.01.2015

Board has decided that SAG officer from each department be nominated as the Safety Officer for that department with whom CSO will coordinate for all safety related aspects.

Accordingly, it has further been decided that the following officers would act as the nodal officer for safety matters for the departments shown against each:

- i. **CTE** Civil Engineering Department.
- ii. **CELE** Electrical Department.
(In the absence of CELE, CESE will be nominated)
- iii. **CSE** Signalling & Telecommunication department.
- iv. **COM/G** Operating Department
- v. **CRSE/CRSE (Chg)** Mechanical Department.

(Sanjiv Garg)
Advisor Safety
Railway Board



Section “B”
Some important rules – Exhibition of hand signals

3.52. Exhibition of hand signals.—

(1) All hand signals shall be exhibited by day, by showing a flag or hand and by night by showing a light as prescribed in these rules.

(2) During day a flag or flags shall normally be used as hand signals.

Hands shall be used in emergencies only, when flags are not available.

(3) During night a hand signal shall normally be given by showing a

red or green light. A white light waved violently shall be used as a Stop signal only, when the red light is not available.

(4) Red or green light referred to in sub-rule (3) shall be either a static or flashing type.

3.53. Stop hand signal— Indication: Stop dead

How given by day: By showing a red flag or by raising both arms with hands above the head.

How given by night: By showing a red light or by violently waving a white light horizontally across the body of the person showing the signal.

3.54. Proceed hand signal.— Indication: Proceed

How given by day: By holding a green flag or by holding one arm steadily.

How given by night: *By holding a green light steadily.*

3.55. Proceed with caution hand signal.— Indication: Proceed slowly reducing speed further if the signal is given at a progressively slower rate.

How given by day: By waving a green flag vertically up and down

or by waving one arm in a similar manner.

How given by night: By waving a green light vertically up and down.

Note.-- When the speed is to be reduced further, this signal shall be given at a slower and slower rate and when a stop is desired, the Stop hand signal shall be shown.

3.56. Hand signals for shunting.— The following hand signals shall be used in shunting operations in addition to the Stop hand signal.

(a) Indication: Move away from the person signalling

How given by day: By a green flag or one arm moved slowly up and down.

How given by night: By a green light moved slowly up and down.

(b) Indication: Move towards the person signalling

How given by day: By a green flag or one arm moved from side to side across the body.

How given by night: By a green light moved from side to side across the body.

(c) Indication: Move slowly for coupling

How given by day: By a green and a red flag held above the head or both hands raised over the head and moved towards and away from each other.

How given by night: By a green light held above the head and moved by twisting the wrist.

3.58. Knowledge and possession of hand signals.—

(1) Every railway servant connected with the movement of trains, shunting operations, maintenance of installations and works of any nature affecting safety of trains shall have—

(a) a correct knowledge of hand signals; and

(b) the requisite hand signals with him while on duty and keep them in good working order and ready for immediate use.

(2) Every railway servant shall see that the staff under him concerned with use of hand signals are adequately supplied with all necessary equipment for hand signalling and have a correct knowledge of their use.

(3) A red flag and a green flag by day or a lamp, which is capable of showing red, green and white lights by night, shall constitute the requisite equipment for hand signalling.

(4) Every Station Master shall see that his station is adequately supplied with all necessary equipment for hand signalling.

**Section “C”
Latest Amendments**

The following amendments to Accident manual – 2012 have been given for implementation.

Item No.1: Add the following as 603.2 (f) below Para No.603.2 (e)

(f) For dispatching ART in time, the points of the line on which ART/140T crane stabled are to be tested once in a week and the results to be noted in the station diary of the concerned station. Any malfunctioning to be got rectified by concerned maintenance staff. SS of the station is responsible for ensuring regular testing as above.

Item No.2: Add the following as 605.3 (v) below Para No.605. (iv)

(v) The points of the line on which MRT stabled are to be tested once in a week and the results to be noted in the station diary of the concerned station. Any malfunctioning to be got rectified by concerned maintenance staff. SS of the station is responsible for ensuring regular testing as above.

Item No.3: Replace the proforma under 504.2 – Track measurements with the following proforma.

Pro-forma after amendment

504.2 Track Measurements

STN No.	Distance apart in metres	Gauge slack or tight in exact mm	Cross level (mm) Under no load condition	Marks on sleeper or rail top	Grinding or rubbing marks on rails
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1	2	3	4	5	6

		Versine in mm			
Examination of alignment for perceptible kinds of track distortion in the vicinity of the point of derailment.	Subsidence of track	On 20 M. or 10 M. chord depending on practice prevalent on the Railway for flat curves more than 600 M. radius.	On 10 M. or such shorter Chords as considered necessary for sharp curves (less than 600 M. radius on B.G. and M.G.	Remarks regarding length of transition, degree of curve and specified super elevation general alignment etc.	Longitudinal level to be recorded in the case of M.G. and N.G. in case of sags and curves.
7	8	9	10	11	12

To be jointly signed by		
Supervisor (P.Way)	Supervisor (Traffic)	Supervisor (C&W)

This is issued with the approval of the Competent Authority.

Necessary printed page replacement correction to the relevant pages will be issued later.

All concerned may please be notified.

for Chief Operations Manager

Addendum & Corrigendum Slip No. 10 to IRSEM, Part I (1988 edition)

Chapter IX, Para 9.6

New Paras 9.6.1 & 9.6.2 may replace the existing Para of SEM, Part I which shall read as under:-

Para 9.6.1:

“Works requiring notice to and sanction of the CRS – under Section 20 of Railways Act and Chapter VI of the “Rules for opening of a Railway or Section of a Railway for public carriage of passengers, the approval of CRS is required for the execution of any work on the open line which will affect running of passenger trains and any temporary arrangement necessary, for carrying it out except in cases of emergency. The following signal and interlocking works, when they are connected with or form part of a Railway already opened for carriage of passengers require the sanction of CRS before they are commenced or opened:-

- (i) Additions, extensions or alterations to existing block, signaling and interlocking installations.**
- (ii) Change in block, signaling and interlocking scheme.**
- (iii) New stations temporary or permanent.**
- (iv) Interlocking of level crossing, catch siding, slip sidings, etc.,**

Para 9.6.2

The following works shall, which enhance level of safety, however, not require the sanction of the CRS:-

- (i) Provision of telephones at already manned level crossings.**
- (ii) Provision of lifting barriers in place of already interlocked leaf gates.**
- (iii) Interlocking of existing LC Gates within an already existing interlocked station yard by existing signals in the same or shifted location.**
- (iv) Provision of all categories of track circuits in the station section.**
- (v) The replacement of signaling assets without any change in the yard layout or signaling and interlocking scheme.**
- (vi) Provision of block proving through axle counters or track circuiting using existing block instruments.**

The personal approval of CSTE will be required for sanction of the works mentioned in (i) to (vi) of Para 9.6.2. This power will not be re-delegated to lower levels. CSTE of the Railway will submit completion diagram / safety certificates and quarterly statement of all such sanctions accorded by him to the concerned CRS”.

**(N. K. GOEL)
AM (Signals)**

Addendum and corrigendum Slip No.22 to IRSEM Part I (1988 edition)

Chapter IX Para 9.6.2

Modification to existing Sub Para (ii), (v) and (vi) of Para 9.6.2, note after 9.6.2 (vii) of SEM, Part I, 1988 edition of Annexure 44 is as under;-

Para 9.6.2

- (ii) Provision of electrical or mechanical lifting barrier including emergency interlocked arrangements at already interlocked LC Gates.**
- (v) Replacement of signaling assets without any change in the yard layout or signaling interlocking scheme either in station or at mid-section LC Gates.**

- (vi) Replacement of block instruments by any other approved type of instrument or provision of block providing through axle counters or track circuiting using existing block instruments.

Note:

- (a) The provisional approval of CSTE will be required for sanction of the works mentioned in (i) to(vii) of Para 9.6.2. This will not be re-delegated to lower level. CSTE of the Railway will submit completion diagrams / safety certificates and quarterly statements of all such sanctions accorded by him to the concerned CRS.
- (b) CSTE shall ensure compliance of instructions attached as Annexure – 44.

(Arun Saxena)
Advisor/Signals

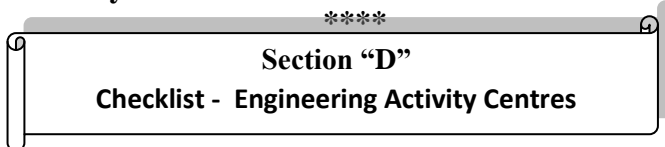
ANNEXURE – 44 Para 9.6.2 Note (b)

CSTE's sanctions are not given in an routine manner but following collaborate procedures. It is, therefore, suggested that while giving sanctions by CSTEs, following must be ensured:-

- a) All relevant documents that are prepared by field units (for submission to CRS for his sanction) for commissioning of the works would be submitted to CSTE for his sanction. This included Engineering scales / Signalling plans, SWR diagrams and SWR.
- b) Format as per Annexure 44/1 shall be submitted duly filled up by the JAG Officer, in-charge of the work for applying for CSTE's sanctions in terms of Para 9.6.2 of IRSEM Part I. Similarly, CSTE sanctions shall also be

communicated in the defined format enclosed as Annexure 44/2.

- c) Application for CSTE's sanction received in headquarters office shall be scrutinized as per the checklist laid down as Annexure 44/3 by Dy.CSTE/in-charge of design or CSTE (Planning) and put up for the consideration of the CSTE.
- d) Personal approval of CSTEs would be required and it shall not be delegated to any lower level.
- e) Sections would be recorded by CSTEs as numbered sanction maintaining a register for the same similar to sanction numbers being maintained by CRS.
- f) The validity of the CSTEs sanction shall be for a period of six months only. Re-validation of the sanction after six months may be considered based on unavoidable reasons.



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: <ul style="list-style-type: none"> • Double strip (200m) • Single strip (50-100m) • Road warning board (within railway boundary) • Speed breaker board (5-10m from Speed breaker) & • Speed breaker (at 20 m distance 	

	from rail post) 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: <ul style="list-style-type: none"> • Double strip (200m) • Single strip (50-100m) • Road warning board (within railway boundary) • Speed breaker board (5-10m from speed breaker) & • Speed breaker (at 20 m distance from rail post) 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. Whether R W/L board is available at	

	250m before UMLC or not?	
6	Whether the existing TVUs qualify for manning?	
7	Feasibility for closure by diverting or by providing limited height subway or for clubbing.	
8	Whether approach road gradient (beyond 8m) is 1 in 20 for Class III roads; 1 in 15 for Class IV roads?	
9	Any other observations	
ACTIVITY CENTRE / EQUIPMENT – POINTS & CROSSINGS		
1	<p>Check the gauge (-5mm to +3mm in straight portion) & cross level (variation not permitted)at following important locations:</p> <ul style="list-style-type: none"> • In switch portion, 450mm ahead ATS, at ATS between two stock rails. • 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: <ul style="list-style-type: none"> • 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? • Whether signed by both the Supervisors in prescribed columns in summary sheet and respective pages? 	
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 with clamps two far end bolts on good AT weld shall be provided on curve of 3 ⁰ or sharper (ACS 131 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, (-6mm to +15mm on curves with radius 440m or more; upto +20mm on curves with radius less than 440m).	
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 (in ordinary SEJs)?	
7	Any other observation	
ACTIVITY CENTRE / EQUIPMENT – BRIDGES		
1	<ul style="list-style-type: none"> • Whether danger level is marked as prescribed for the type of bridge? • Whether HFL marked with year or not & • Whether availability of flood gauge or not for important bridges? 	
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 ((-6mm to +15mm on curves with radius 440m or more; upto +20mm on curves with radius less than 440m).	
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. Whether 1m fishplates are provided for rail joints on bridge proper and its approaches?	
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	Ensure adequate ballast profile on approaches and on bridge proper of ballast deck bridges.	
13	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?	

Section "E"
Accident cases

- 1. Brief of the incident (bumping case):** On 20th January 2015, at NLPD station of GNT Division in the course of shunting, i.e., while attaching loco No. 12074+312 SDG4/UBL to Train No. MOO/N Goods, the Shunter gave bump to the formation resulting in damages to loco + first two wagons.

Cause: Shunter failed to control the loco before attaching and given a bump.

Rules violated: GR 2.11 Failed to ensure securing for safety.

Staff held responsible: Shunter / GNT Sri. Sk. Mehboob Valli

- 2. Brief of the incident (Derailment):** On 29th January 2015 at 18.00 hours, while Train No. JSWT Goods was admitted on Road No.5 of RLO station of GTL Division, one wagon next to train engine derailed.

Cause: Train JSWT Goods while rolling onto Road No-5, next to train engine wagon derailed due to infringing heap of dolomite by the side of outer rail and a stone in the heap which entangled with the side frame of front trolley of the wagon.

Staff held responsible:

Primary:

 - a. Sri. E. Nagaraju, Commercial Clerk/RLO who failed to ensure removal of the infringing heap of dolomite all along the outer rail of Road No.5 before giving release memo.
 - b. Sri. Rajasimha, SSE/P.Way/GY who failed to maintain Road No.5 of RLO station to the required standards. There was no ballast on the track. Wild

plants were allowed to grow in between the track. Failed to record the abnormality of dolomite heaps due to loading on the running line in the TMS during his earlier inspection on 8th January 2015.

Secondary:

Sri. B. Ramachandra Reddy, LP/Goods/NRE who failed to notice the derailment from the decrease in speed in spite of his notching up and drawing more load current after derailment. He failed to know that Road No.5 is a running line and not a siding line.

Matters brought to light:

1. At RLO, loading is permitted on a running line and with regard to the procedure to be followed during loading and after unloading is not incorporated in the SWR. On Road No.5, the OHE is isolated as and when a rake is placed for loading and is made through after loading is completed. This is not stipulated in SWR and no entries are made in the OHE Isolator Register.
2. Soling boulders of loading platform are getting lifted due to sweeping process of residual dolomite by poclainers. The loading platform is at rail level height without a proper retaining wall. A suitable retaining wall of eight of 1 ½ feet need to be constructed.
3. The track is at low level when compared to other Road No.4 and other running lines. The track is to be lifted along with the necessary modifications to OHE. The lines that are used for loading shall always be at higher level than that of loading platform.
4. Between Road No. 4 and 5, lot of left over material and loose earth towards Road – 5.
5. Senior Supervisors attending the accident spot are not recording the evidences like distance of stone travel marks, heap of dolomite adjacent to track, etc., correctly in joint observations and sketch prepared.

Suggestions & Recommendations:

1. If loading is done by private agencies, special clauses should be incorporated in contract agreement regarding ensuring proper stacking, loading and cleaning of loading platform / track. If such special clauses are violated, penalty shall be imposed on these agencies.
2. Stations where running lines are used for loading / unloading, shall be inspected jointly by TI, CCI, SSE/P.Way and certify that loading / unloading is carried as per the JPO / instructions laid ensuring safe passage of trains.
3. **Brief of the incident** (SPAD leading to derailment): On 8th February 2015 at 04.35 hours, at West Inter Cabin of BZA station yard of BZA Division, AC light engine passed Shunt Signal No.37 at “ON” and trailed through Point No.22. Subsequently, the Shunter backed on the trailed through point leading to derailment of the loco.
Cause: Passing Shunt Signal at “ON” and trailing through the point; and further backing on trailed through points leading to derailment of loco.
Rules violated:SR 3.77 (2) which stipulate that “Whenever a train trails through points, the LP shall, immediately bring the train to a stand consult the Guard and SM and then proceed onward only if he is satisfied that the train can pass safely over the points without any accident. Under no circumstances should a train be backed over trailed through points.”

Suggestions & Recommendations: All the Shunters to be educated in keeping clear watch to ensure all points both interlocked / non-interlocked while shunting and it should be further enlightened that backing the train over a trailed through point will lead to derailment.

Staff held responsible: Sri. V. Rajendra Prasad, Sr. Shunter / TRSO / BZA is held responsible for non-observing of Shunt Signal No. S-37 and trailed through Point No.22 which was not set his movement and further backing over the trailed through point leading to derailment.

4. **Brief of the incident:** On 14th February 2015 at 11.55 hours, when DN NMG Goods was signalled for reception onto Road No.8 of RU station of GTL Division, 18th vehicle from loco derailed by all wheels on Point No. 20B.

Cause: The screw coupling between 18th vehicle and 19th vehicle found to be slack. Due to this, buffing forces increased during deceleration. While negotiating series of turnouts and train was in deceleration, the increased buffing forces caused sudden jumping of R3 wheel and all wheels of rear bogie of 18th vehicle derailed.

Staff held responsible: Sri. C. Govindraj, Guard / TVT, Sri. T. Thyagarajan, Pointsman / TRL and Sri. Lalan Kumar Sha, Pointsman / TRL as ‘primary’ and Sri. Siva Satya Prakash Ragi, LP / TVT as ‘secondary’.

5. **Brief of the incident:** On 16th February 2015, at 20.45 hours, while empty rake of 17025 MUGR – SC Express was being backed from Road No.3 to Road No. 1 (loop line), loco and three coaches derailed on Point No. 101.

Cause: The cause of the derailment was due to lack of alertness of Pointsman and the reason for the derailment was non-setting of Point correctly by the Pointsman.

Matters brought to light: No Shunt Signals. Non-interlocked points, no point indication on the panel to SM since it is non-interlocked point, SM is not having any control over the shunt movements once ‘x’ key is given to Pointsman.

Suggestions and Recommendations:

- a. Point indications on SM panel shall be provided.
- b. Interlocking of points may be planned.

Staff held responsible:

- a. Sri. Sravan Kumar, Pointsman in rear for not ensuring proper setting of point correctly.
 - b. LP Sri. K. M. Rao who pushed back the formation did not clear all the points and stopped the formation on Point No. 101.
 - c. Sri. Sambasiva Rao, Pointsman who was in the engine for not clearing the formation beyond Point No. 101 and gave exchange from Point No. 101.
 - d. SS / MUGR who did not notice such short-cut practices which is being followed at this station and giving all shunt movements at a time which has confused Pointsmen who is new to the station (3 months service completed).
 - e. TI / BDCR who did not notice such shortcut method of shunting.
6. **Brief of the incident:** On 26th February 2015, at 08.40 hours, while JSWT Goods was rolling on to Road No. 1 of GTL station of GTL Division, 5 wagons derailed from train engine.

Cause: Track deficiencies coupled with uneven loading.

Staff held responsible:

Primary:

- a. Sri. M. Ramesh Reddy, SSE/P.Way/GTL for failing to maintain LH curve between Point No. 77B and 70A which is common for Road No. 1 & 2. Sinkage of RH rail due to water stagnation was allowed causing super elevation of RH rail beyond permissible limits. He did not attend the curve and take reading of the curve periodically. As a result of this, spread gauge and abrupt versine variation were existing on the track.

The deficiencies led to derailment. He violated GR 15.02(a)

- b. Sri. Satyakumar, Goods Supervisor / PKPK of BZA Division for failing to ensure even loading of iron ore. As per the joint report of Supervisors who inspected the loading pattern of wagons on the train noticed as many as 22 wagons out of 59 wagons are with uneven loading.

Secondary:

- a. Sri. V. Appala Naidu, CC/PKPK of BZA for signing release memo on behalf of GSR without ensuring levelling of the contents in as many as 22 wagons as per the loading statement of Joint Supervisory Committee.
- b. COA Authorities for not ensuring even loading in all the wagons.

7. **Brief of the incident:** On 11th February 2015, NRT station of GNT Division, LP of RE Special (Tower Car+2 coaches) passed DN Home Signal and entered onto loop line which was luckily vacant.

Cause: Disregard of signal by the LP of RE Department.

Staff held responsible: Sri. Ashwini Kumar Sinha, LP.

Matters brought to light:

- a. LP is overdue for RC.
- b. Datalogger snapshots does not cover the presence of LC No. 282 between Distant and Home Signals (interlocked with station signals).
- c. No sign 'on' / 'off' practice by the LPs of Tower Car.

8. **Brief of the incident:** On 20th February 2015, at 17.40 hours, while performing shunting at PBN station of NED Division, multi-locos derailed on Point No.30.

Cause: Dy.SS and Pointsmen handed over T. 369 (3b) without ensuring correct setting, clamping and

padlocking of points to the LP of HBT Goods to draw beyond Starter and back the formation onto HBT Siding which led to the derailment of locos.

Staff held responsible: Dy.SS and Pointsmen for handing over paper authority to pass Starter Signal and Shunt Signal below Starter at 'on' without ensuring correct setting and clamping the points.

9. **Brief of the incident:** On 13.3.2015, at 2327 hours, LP of Train No. UP 12735 SC – YPR Garibrath Express passed UP Mainline Starter Signal No. S-35 of MQR station in SC Division at 'ON' and cleared into next station CT. The train was regulated on Mainline of MQR for precedence of one Goods and one Express train (Bombay Express) since the Garibrath Express was running ahead of schedule. When loop line signals for run through of UP RTPS Goods was cleared by Dy.SS/MQR, LP & ALP of Garibrath Express mistook the signals and started their train from Mainline duly trailing through the points and entered block section towards CT station.

Cause: Disregard of signals by LP & ALP of Garibrath Express.

Matters brought to light:

1. From the statements deposed by LP, ALP & Guard, and cross-examination results, it is concluded that the LP of UP 12735 SC – YPR Garibrath Express stopped the train immediately after clearing the rear fouling **instead of drawing the train upto the Starter Signal / Stop Boards as per SR 4.49.1.**
2. SM/MQR claimed that he was busy in issuing tickets from the other room **but the UTS statement print out taken out and scrutinized which showed that no tickets were issued between 22.52 hours of 12.3.2015 to 00.05 hours of 13.3.2015.**

3. Call data of the LP, ALP, Guard and ASM/MQR was called for from the Private Service providers. The call data records show that the LP, ALP & Guard did not speak to anybody. **However, the call data of ASM/MQR show that he was busy in talking to 4 persons after the incident of SPAD and trail through of points. He made a call to TI/MQR, Gateman of LC Gate No.4, PWI/MQR and Ex-SM/MQR. Probably, this was the reason that he was not responding on walkie-talkie and also had not responded to the rings given by the Gateman. It would have been proper, if the ASM/MQR had contacted the SCOR for proper guidance.**
4. SM/MQR failed to react swiftly after hearing to the LSS buzzer in putting back the UP IBS which was originally taken 'off' for RTPS Goods and instruct the LP of 12735 Garibrath Express to speak to him from IB telephone.
5. SM/CT should not have directly received the Garibrath Express by taking 'off' Home Signal into the station when he knew that the train for which he had granted line clear, i.e., UP RTPS Goods is not coming; instead other train, i.e., Garibrath Express is coming.
6. **SM/CT also committed the grave mistake of manipulating the train entry in TSR of CT by scoring 'off' two PNs** (one for Axle Counter section and another for IB Section) on his own for UP 12735 Garibrath Express when he had not given line clear at all for this train.
7. SM/CT also failed to intimate the LP, ALP & Guard of UP 12735 that they are being relieved with fresh crew for the reason that they have passed UP Mainline Starter of MQR at 'on' and bursted points. The crew came to know only when they enquired SM/CT as to why the departure signals are not taken 'off' in spite of completing the public departure time.

8. **Signal Sighting Committee Reports** – Though the Signal Sighting Committee in their previous reports **brought out the visibility problem of UP Loop line** Starter signal due to the presence of station name board, the **Division did not take any action for the last so many months,** the details are given below;
- a. 22.8.2014
 - b. 04.9.2014
 - c. 06.11.2014
 - d. 22.12.2014
 - e. 27.01.2015 and
 - f. 16.02.2015.

However, when the Accident Enquiry Committee visited the station, i.e., on 16.3.2015, the board was got removed as per CSO's instructions.

9. From the entry made in the Joint Inspection of Points & Crossings Register on 30.01.2015, Point No.17B was having excessive opening of 122mm on RH side against the permitted 115±3mm and the same was not rectified. The Enquiry Committee also noticed the gap as 122mm during site visit on 16.3.2015.
10. After trail through of Point No.17B by Train No. 12735 Garibrath Express, it was observed that there were no damages on the tongue rail except creation of a gap as shown in photograph placed as Annexure "A". It was however surprising to note that detection of Point No. 17B was intact after the passage of the train despite gap between switch rail and stock rail. Measurements of gap were however, not taken prior to the restoration but by seeing the photograph at Annexure "A" which shows a clear separation between switch and stock rail, the gap was substantial. The throw rod which has taken the pressure of movement of switches was got bent. Through the datalogger report, it was noticed that during the passage of Train No. 12735 Express over Point No.

17B, the Point No. 17 'reverse' detection was breaking and making; and after complete passage of the train over the Point No.17B, the detection was made permanently and the corresponding track circuit 17BT was picked up. After complete passage of the train beyond LSS No. S-36, the UP Loop line Starter Signal No. S-38 and UP Home Signal No. S-40 have gone back to 'off' aspect with route set through common loop No.1 (Road No.4). From the datalogger report it is noted that the UP Home Signal was in "ON" position for a spell of 1 minute 11 seconds during which Garibrath Express has occupied the track between Starter & Advanced Starter. Subsequently, UP Home Signal and UP Starter have picked up "OFF" position. A trial was conducted on 16th March 2015 simulating the similar trail through of point with the same loco and it was observed that under similar trail through situation with a gap of 3.5mm between switch and stock rail (photograph kept as Annexure "B"), point machine contact has broken with Home & Starter Signals flowing back to 'danger' thus creating a failsafe situation. But on the day of SPAD, situation was different as brought out in the preceding Para.

The issue of not breaking of motor detection contact allowing signals (UP Home & UP Loop Starter) to go back to 'off' position despite switch gapping after the SPAD incidence requires further investigation. This is not considered a 'failsafe condition'.

11. S&T Disconnection Notice (T. 351) given for attending the bursted Point No.17B at 00.30 hours of 13.3.2015 was reconnected at 03.30 hours of 13.3.2015. **However, it is a joint work with Engineering Department and no remark to that effect was made on the face of the Disconnection Notice which is in violation of SR 3.51.6. Secondly, before issuing Reconnection Notice, "Track fit" certification was not obtained which is in violation**

- of SR 3.51.7.4. ASM on duty shall insist for track certification in case of such joint works.
12. SCOR Sri. K. L. Chandrakanth who was working on Board No.1 (SKP-WADI) is a Mail/Express Guard working in Control Office for the last fortnight. **He is not a trained person to work as Controller. Permitting non-trained person to work as Controller is not in conformity with Railway Board letter No. 99/Safety-I/25/1 dated 10.3.2000. It is also noted that 10 such untrained persons are utilized to work as Controller. Division need to streamline the procedure of early selection and utilizing trained Controllers only.**
 13. SCOR Sri. K. L. Chandrakanth and CHC/Punctuality Sri. G. Nageswara Rao's reaction subsequent to getting the information of SPAD appears to be very slow. Control Voicelogger output reveal that they have not instructed and guided SM/CT about the necessity of conducting BA test immediately on arrival at CT (instead of conducting BA test immediately on arrival at 23.41 hours, they have done at 00.09 hours of 13.3.2015 after 30 minutes), collecting blood samples, etc.,
 14. Divisional Officials failed to conduct brake power test for Train No. 12735 Garibrath Express before permitting it to start at CT station subsequent to the incident of SPAD at MQR which is in violation of Para 902.1 (vi) of Accident Manual.

Suggestions and recommendations:

1. In spite of repeated instructions issued from time to time such as Safety Flash News letter dated 14.3.2014 as per the instructions of General Manager and previous SPAD cases, the instructions given under SR 4.49.1, i.e., "drawing the train upto stop board or end of platform or foot of the Starter while stopping" is not being followed by the crew of trains. Divisions are instructed to issue SOBs to all Crew Booking

- points to follow the above rule and give wide publicity and intensive counseling on the subject to prevent cases of SPAD.
2. Divisions shall also issue SOB re-iterating the contents given in GR 3.83 (3) which stipulate that LP is solely responsible to observe and comply the aspect of signals. The instruction needs to be issued as a Safety Drive and organize seminars and counseling sessions to make the LPs to understand the spirit of the rule.
 3. Division needs to study and delink the Commercial duties from SMs wherever feasible. Also, it is not proper to expect SMs to issue general tickets and reservation tickets from another room leaving the panel room.
 4. Divisional Authorities shall take immediate and appropriate action on the deficiencies noticed by the Signal Sighting Committee. DRMs to closely monitor and rectify the shortfalls noticed in a timeframe. These should be discussed in weekly safety meetings in the Divisions.
 5. There is a need to look into the crew links (involving GTL Division). While scrutinizing the 'on duty' hours of crew (from CMS) for the period from 12.12.2014 to 10.3.2015, for this train, i.e., 12735/36 – **as many as 17 times Train No. 12735 bursted 10 hour rule and 3 times in the opposite direction.** Also, it was noticed that Train Nos. 57473/74, 57273/27274, 16214, 16593, 12592, 12628, 15015 and 16571 are taking more than 10 hours in their crew link.
 6. **Engine Turn Table:** The provision of engine turn tables at 3 locations (i.e., at MLY, KZJ & GTL stations) though sanctioned way back, there is **no progress on these works.** **This provision is felt essential to minimize the cases of diesel loco working with long hood.** The Committee felt that this work should be expedited with monitoring at DRMs level.
 7. Action may be taken to maintain 8 hours shift duties of ASMs as per roster and avoid over hours working.

8. Special monitoring of newly recruited and posted ASMs to be ensured by TIs. Committee also felt that the training module of ASMs may be reviewed to include more inputs of field training particularly, hands on training for handling unusual situations.
9. Crew to be sensitized about the need to have constant look out on signal aspect till they pass it.
10. LIs to monitor their nominated LPs working in foreign Divisions / Railways.
11. **Timetabling Section of Division & Headquarters:** For this particular train, the departure time of the train at SC is 19.50 and departure time from CT is 00.10 hours, i.e., **260 minutes for covering a distance of 169 KMs for Superfast Express. The given running time needs to be revised by Headquarters not only for this train but also for other trains having similar timings in the zone.**

Staff held responsible:

Primary:

- a. Shri. Shaik Sher Khan, Mail/Express LP/GTL who was working the UP Garibrath Express (Train No. 12735) at MQR station at 23.32 hours for passing UP Mainline Starter Signal No. S-39 at “ON” (**Rules violated GR 3.83, 3.81, SR 4.49.1**).
- b. Shri. ChandanKumar, ALP/GTL who was working the UP Garibrath Express (Train No. 12735) at MQR station at 23.32 hours for passing UP Mainline Starter Signal No. S-39 at “ON” (**Rules violated GR 3.83, 3.81, SR 4.49.1**)

Secondary: - NIL -

Blameworthy:

- a. **ASM/MQR (Sri. Jitendra Kumar Choubey):** For not reacting swiftly in understanding the situation and not putting back IBS. Also, for not responding to the calls made by the LP/ALP & Guard, Gateman of LC Gate No.4/T.

- b. **ASM/CT (Sri. Sanjeev Kumar):** For manipulating the train entry made in TSR of CT of Train No. 12735 Garibrath Express. Secondly, for not intimating the GLP of Train No.12735 immediately that they are being relieved for the reason that their train has passed UP Mainline Starter Signal of MQR at ‘ ON’ and for trailing through the Point at MQR.
 - c. **Guard of Garibrath Express (Sri. Robinson Thomas):** For not asking the LP to draw the train upto the foot of the Starter being in-charge of the train and knowing the rule provision.
 - d. **CLI/GTL (Sri. Sk. Mannan Shareef):** For not making the LPs to follow the laid down instructions of SR 4.49.1.
 - e. **Signal Sighting Committee:** Though the Committee noticed the visibility problem at MQR due to the presence of station name board, they did not comment on the previous inspections in which the same problem was repeated. They should have written the compliance of previous inspection / non-compliance before beginning the report of the fresh inspection.
 - f. **SC Division Safety Department:** For not monitoring the defects noticed / irregularities noticed by the Signal Sighting Committee.
- 10. Brief of the accident:** On 29.3.2015, at 03.07 hours, LP of BJW / BTPN Goods passed UP Home Signal at ‘ON’ of SKZR station of SC Division and entered into station loop line.
- Cause:** Disregard of signals by LP & ALP who slept on duty.
- Matters brought to light:** Enquiry report awaited.
- Suggestions & recommendations:** Enquiry report awaited.
- Staff held responsible:** Enquiry report awaited.

Section “F”
Test Your Knowledge

1. What is the originating freight loading achieved by SC Railway for 2014-15?
2. What is the Operating Ratio of SC Railway for 2014-15?
3. On enhanced loop line speeds station, what is permitted speed of Goods train containing BCACBM auto-car goods wagons (double-decker) as per Joint Safety Certificate?
4. What is PFT, brief details?
5. What is LWIS, brief details?
6. What are the four goals for IR to transform over next five years as declared in the Railway Budget 2015-16?
7. What is CTS scheme?
8. What is OBHS?
9. What is AFTO & what is SFTO?
10. What is EPS & PMS?

KEY

1. **116.81 MT.**
2. **76.55%**
3. **Max. 15 KMPH.**
4. **Private Freight Terminals – to facilitate rapid development of the network of freight terminals with private investment to provide efficient and effective logistics services with warehousing solution to end-users, this scheme was launched on 31.5.2010 which was further revised on 23.4.2012. So far 47 proposals have been received and approvals are given at 28 locations by Zonal Railways.**
5. **Liberalised Wagon Investment Scheme – this policy was issued on 15.4.2008 to allow investment in Special Purpose Wagons (SPW) and High Capacity Wagons (HCW) by end-users. Broad policy guidelines are that each rake procured by investor will have an associated loading and unloading point/s over specific route/s or close circuit/s as approved by IR. Wagon leading companies can also procure wagons under this scheme. A freight concession of 15% will be granted for 20 years on each loading of SPW operating in approved close circuits. So far, approval for procurement of 54 rakes by 13 firms was accorded by Ministry of Railways and 21 rakes are already plying in different circuits of IR.**
 6. A) **To deliver a sustained and measurable improvement in customer experience.**
 - B) **To make rail a safer means of transport.**
 - C) **To expand IR capacity substantially and modernize infrastructure: Increase daily passenger carrying capacity from 21 million to 30 millions: Increase track length by 20% from 1,14,000 KMs to 1,38,000 KMs: Grow our**

annual freight carrying capacity from 1 billion to 1.5 billion tones.

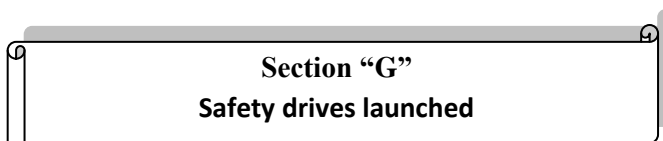
- D) Finally, to make IR financially self-sustainable. Generate large surpluses from operations not only to service the debt needed to fund our capacity expansion, but also to invest on an on-going basis to replace our depreciating assets.**
- 7. Clean Train Stations – To bring about improvement in enroute cleaning of trains, “CTS” scheme was launched for mechanized cleaning attention to passing through trains during their halts at selected stations. 36 such CTS stations have been operational so far.**
 - 8. On-Board House Keeping Scheme – OBHS scheme has also been launched by the Railways in about 416 Mail/Express trains to carry out frequent on-board cleaning of Mail/Express coaches through professional agencies.**
 - 9. AFTO – Automobile Freight Train Operator Scheme. With a view to increase IR’s market share in transportation of automobile, i.e., two/three wheelers, cars and tractors, etc., inviting private participation for procurement and operation of special purpose wagons, a new scheme namely AFTO was issued on 19.7.2010 and revised scheme was again issued on 22.2.2013. Two firms have been registered and the design for new type of automobile wagons (BCACBM) has been developed by RDSO.**

SFTO – Special Freight Train Operator Scheme – To increase rail share in the commodities like fertilizers, molasses, edible oils, caustic soda, chemicals, petrochemicals, alumina, bulk cement and fly ash, etc., where rail co-efficient is traditionally very low, a new scheme SFTO has been launched on 31.5.2010 which was again revised on 24.6.2013 to attract private

investment in special purpose wagons required for transportation of these commodities.

- 10. EPS – E-procurement System including e-auction and revenue auction. Nearly, 1500 tenders are issued each month through this system. Till date 5.67 lakh tenders have been issued and scrap worth 4,339.61 crores has been sold through this system so far.**

PMS – Parcel Management System – Booking, delivery and tracking of parcels is possible through this system, presently covering Delhi – Howrah corridor. This system is being expanded to 200 stations in a phased manner.



1. A fortnightly safety drive was launched subsequent to the derailment of a passenger carrying train No. 14266 on Northern Railway due to the failure of LP to control and stop the train resulting into passing Starter Signal at 'on' and entered into sand hump where the loco and coaches were derailed / capsized in which several passengers were injured. GM advised all DRMs to conduct a safety drive on SPAD prevention with special emphasis on the following;
- All SPAD related checks and counseling to be done to crew.
 - Brake power of the train to be checked.
 - LIs and Officers from Division as well as from Headquarters should conduct ambush check on working of train crew.
 - All training institutes to be advised for discussing 'case studies on SPAD' during training programmes. Ensure that all crew are covered during the drive.

2. A fortnightly safety drive was launched on “prevention of fire in empty coaches” subsequent to the incident of fire in empty rake at ADB station of NED Division on 5th March 2015 at 03.00 hours. Safety drive was launched with immediate effect i.e., from 10.3.2015 for a period of 15 days. In order to ensure no coach is allowed to be kept in ‘open’ in empty condition at stations, GM has ordered a drive on ‘stabled coaching rakes’ for fire prevention. Special emphasis shall be shown on;
 - Doors and windows of al SLRs, PCs and coaches of stabled coaching rake should be closed when they are kept at stations.
 - In order to facilitate shunting staff to travel in the SLRs, it was found that the SLR door is kept ‘open’. In this connection, it shall be ensured by the SMR of the station that subsequent to the shunting movement is completed, the door of the SLR is closed. Security and Mechanical Officials to co-ordinate in this aspect.
3. A month long safety drive was launched as per the directives of CRB to improve the condition of the road surface at UMLCs. Railway Board have observed that train accidents at UMLCs continue to be a cause of serious concern. Hence, RB directed Zonal Railways to immediately launch a month long safety drive to improve the condition of the road surface at UMLCs. During the drive, it should be ensured that speed breakers on either side of the level crossing with rumble strips are available in good condition. Provision of full complement of whistle boards, road signs and stop boards as laid down in IRPWM may also be ensured. Suitable follow-up action should be taken on all deficiencies and irregularities noticed during the drive. A compliance report should be sent to the undersigned by 27th March 2015. Also, the photographs of the road at UMLCs before and after the repairs to road surface should be uploaded.

Section “H”
Accident Statistics 2014-15 comparing with
2013-14

- a. Consequential train accidents declined by 20% (4 as against 5).
- b. Total passenger train accidents declined by 14% (12 as against 14).
- c. There was no Averted Collision or Breach of block rules as against one each during the previous year.
- d. There was no accident at Manned LC as against 1 of previous year.
- e. Unmanned LC accidents decreased by 50% (6 as against 3).
- f. Total accidents including Yard increased by 25% (50 as against 40).
- g. 54% of the total accidents were yard accidents & 22% SPAD cases.
- h. Cases of SPAD increased by 83% (11 as against 6).
- i. Yard accidents increased by 80% (27 as against 15).
- j. **Out of 50 accidents, 42 (84%) were due to human failures.**
- k. **LP lapses increased by 60% (16 as against 10).**
- l. Traffic/Commercial staff lapses have increased by 50% (6 as against 4).
