सत्यमेव जयते

GOVERNMENT OF INDIA

MINISTRY OF CIVIL AVIATION

COMMISSION OF RAILWAY SAFETY

ANNUAL REPORT FOR 2014-2015

BY

CHIEF COMMISSIONER OF RAILWAY SAFETY

LUCKNOW

As enjoined by section 10 of the Railways Act, 1989 and Section 12 of Metro Railway (Operation & Maintenance) Act, 2002, the Annual Report of the Chief Commissioner of Railway safety, detailing the activities of the Commissioner of Railway safety such as opening of new lines, investigation of serious train accidents and sanction given by them and activities of Commissioner of Metro Railway safety during the financial year 2014-2015, has been prepared and is forwarded herewith.

(S. NAYAK)
Chief Commissioner of Railway safety

PLACE : LUCKNOW
DATE : 10.01.2017

SUMMARY OF THE ACTIVITIES OF COMMISSIONERS OF RAILWAY SAFETY HIGHLIGHTS

I.	Inquiries of serious accidents	(a)	Statutory inquiries conducted by commissioners	**13 Nos.**	Chapter III Para 3.3 and Appendix I
		(b)	No of recommendation made arising out of (a) above	**60 Nos.**	
II.	Statutory Inspections of Lines by Commissioners before authorizing passenger services	(a)	New Lines	**329.938 Kms.**	Chapter II Para 2.1
		(b)	Additional Lines	**621.541 Kms.**	-do-
		(c)	Conversion of gauge	**334.621 Kms.**	-do-
		(d)	Deviation lines	**9.587 Kms.**	-do-
		(e)	Introduction of Electric Traction	**1231.48 Kms.**	-do-
		(f)	Delhi Metro Lines Corridors (Electrified double lines)	**6.148 Kms.**	-do-
		(g)	Bangaluru Metro Rail Corridor	**NIL**	-do-
		(h)	Rapid Metro Limited Gurgaon	**NIL**	-do-
		(i)	Kolkata Metro	**NIL**	
		(j)	Mumbai Metro	**11.230 Kms.**	-do-
III.	Sanction accorded by commissioners	(a)	Sanctioning of proposals for execution of New Minor Works.	**3486 Nos.**	Chapter II Para 2.2
		(b)	Condonation of cases of infringements to Schedule of dimensions.	**14 Nos.**	Chapter II Para 2.3
		(c)	Sanctioning of cases for movement of over dimensioned	**06 Nos.**	Chapter II Para 2.4
		(d)	Consignments sanctioning for running of new types of Rolling stock	**176 Nos.**	Chapter II Para 2.5
IV.	Proposals recommended for sanction by Central Government.	(a)	Application for condonation of infringements to the Schedule of Dimensions.	**24 Nos.**	Chapter II Para 2.3
		(b)	Application for the running of new types of rolling stock	**51 Nos.**	Chapter II Para 2.5
V.	Inspection of Govt. Railways	Periodic inspections		**12615.58 Kms.**	Chapter II Para 2.6

CONTENTS

CHAPTER – I

ORGANISATION AND FUNCTIONS

1. INTRODUCTION –

In 1939, the Pacific Locomotive Committee, set up in connection with the Bihta disaster, recommended that Railway Inspectorate should be separated from the Railway Board, on the principle that those responsible for the inspection of Railways should be independent of the Authority administering the Railways, as contemplated in Section 181(3) of the Government of India Act, 1935. This recommendation was approved by the Legislative Assembly in 1939, the Council of State in 1940 and accepted by the Government. Accordingly in May 1941, Railway Inspectorate was separated from the Railway Board. Post of Chief Government Inspector of Railways, through whom Government Inspectors would report to Government, was created. Inspectorate was placed under the Department of Communication (Now it is under Ministry of Civil Aviation).

Chief Government Inspector of Railways was redesignated as Commissioner of Railway Safety and Government Inspectors of Railways, as Additional Commissioners of Railway Safety on 1.11.1961.

From June, 1979 designation of Commissioner of Railway Safety was changed to Chief Commissioner of Railway Safety (CCRS) and Additional Commissioner of Railway Safety, to Commissioner of Railway Safety (CRS).

Commissioners of Railway Safety are still recruited from amongst officers of Indian Railways, but they do not revert back to Railways and are absorbed in Inspectorate cadre.

2. ORGANISATIONAL STRUCTURE -

2.1 Chief Commissioner of Railway Safety (CCRS), at Lucknow, acts as Principal Technical Advisor to Central Government in all matters with which Commissioners are concerned. There is one Deputy Commissioner of Railway Safety (General) to assist CCRS.

CCRS Office, at Lucknow, is part of Ministry of Civil Aviation and is called Railway Safety wing. It has Sr. Private Secretary (1), Section Officer (1),

Assistants (4), Personal Assistant (1), UDC (2), LDC (2) and Multi Tasking Staff.

2.2 There are 9 Commissioners of Railway Safety (CRS).

Commissioner's offices (called circle offices) have 9 to 11 office staff consisting of Sr. Private Secretary (1), Office Superintendent(1), Safety Assistant(1), UDC(1-2), LDC(2-4) and Multi Tasking Staff.

Metro Railway Safety circle offices have not been sanctioned until now. Some Commissioners have been assigned functions related to Metro Railways.

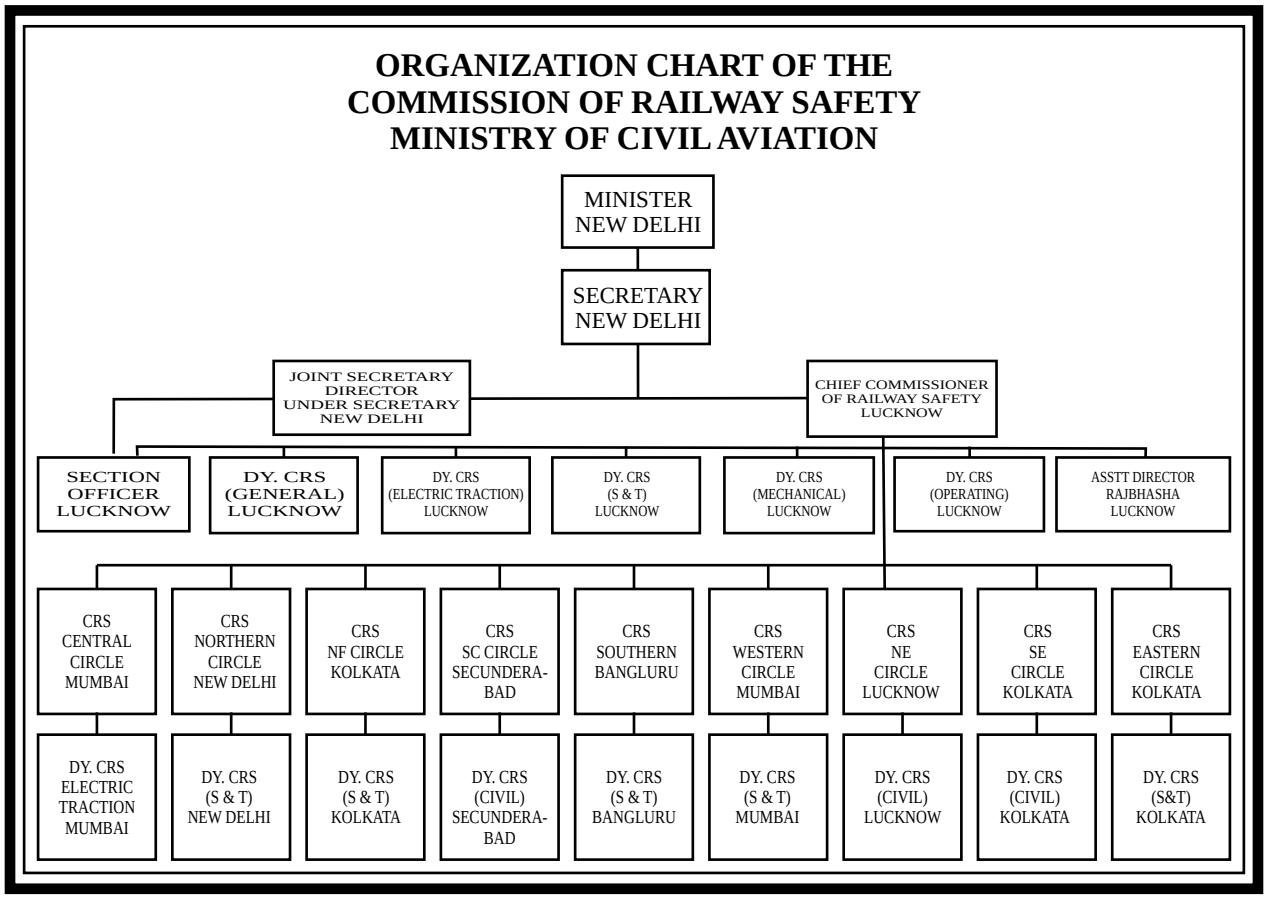
One post of Deputy Commissioner of Railway Safety is sanctioned for each circle. Dy. CRS posts in Northern Eastern Circle, South Central Circle and South Eastern Circle are for Civil Engineering discipline, Dy.CRS in Central Circle is from Electrical Engineering and Dy. CRS posts in Northern, Eastern, Northeast Frontier, Western and Southern Circle are from S&T discipline.

2.3 There is a technical wing consisting of 4 Dy. Commissioners of Railway Safety of various disciplines, in the headquarters at Lucknow for assisting CCRS and Commissioners as and when required. Office of technical wing has one Assistant Director (Official Language), Junior Hindi Translator(1), Technical Assistant (2) LDC(2), Stenographer(2), Staff Car Driver (1) and Multi Tasking Staff (4).

Deputy Commissioners assist Commissioners in matters related to Mechanical Engineering, Electrical Engineering, Signal & Telecommunication Engineering and Transportation.

Deputy Commissioners are not statutory authorities. Deputy Commissioners come from Railways on deputation basis and go back after completion of their deputation period.

2.4 Organizational Chart is given below:-



LEGENDS

CRS : COMMISSIONER OF RAILWAY SAFETY
DY. CRS : DEPUTY COMMISSIONER OF RAILWAY SAFETY
NE : NORTH EASTERN
S&T : SIGNALING & TELECOMMUNICATION
SC : SOUTH CENTRAL
NF : NORTH EAST FRONTIER
SE : SOUTH EASTERN
C : CENTRAL

3. VACANCIES IN THE COMMISSION -

As on 31.03.2015, actual strength of Commissioners was five against nine sanctioned posts. Strength of Deputy Commissioners was eight and there were six vacancies.

4. CHANGE IN ORGANISATION -

4.1 All the posts of Dy. Commissioners (technical) were upgraded to Selection grade w.e.f.14.06.2010. Recruitment rules for Dy. CRS (Technical) in selection grade were notified vide GSR No. 136 dated 29.5.2012.

5.1 Office of Chief Commissioner of Railway Safety, Lucknow

S.No.	Designation	Period	Name
(i)	Chief Commissioner	1.04.14 to 30.04.14 1.05.14 to 31.03.15	Shri. Prashant Kumar Shri. R.K. Kardam
(ii)	Deputy Commissioner (General)	Full period	Shri. L.B Singh

5.2 Commissioner of Railway Safety

S.No.	Circle	Period	Name
(i)	Central Circle, Mumbai	Full period	Shri. Chetan Bakshi
(ii)	Eastern Circle , Kolkata	Full Period	Vacant
(iii)	Northern Circle , New Delhi	1.04.14 to 30.04.14 1.05.14 to 31.03.15	R.K. Kardam Vacant
(iv)	North Eastern Circle , Lucknow	Full Period	Shri. P.K. Bajpai
(v)	Northeast Frontier Circle, Kolkata	Full Period	Vacant
(vi)	Southern Circle, Bengaluru	Full Period	Shri. S.K. Mittal
(vii)	South Central Circle, Secunderabad	Full Period	Shri D.K. Singh
(viii)	South Eastern Circle, Kolkata	Full Period	Shri. S. Nayak
(ix)	Western Circle , Mumbai	1.04.14 to 31.08.14 1.09.14 to 31.03.15	Shri. P.S. Baghel Vacant

5.3 Commissioner of Metro Railway Safety

S.No.	Circle	Period	Name
(i)	Metro Railway Safety, New Delhi	1.04.14 to 30.04.14 1.05.14 to 31.03.15	Shri. R.K. Kardam Vacant
(ii)	Metro Railway Safety, Bangaluru	Full Period	Shri. S.K. Mittal
(iii)	Metro Railway,Kolkata	Full Period	Vacant
(iv)	Metro Railway, Mumbai	1.04.14 to 31.08.14 1.09.14 to 31.03.15	Shri. P.S. Baghel Vacant

5.4 Deputy Commissioner of Metro Railway Safety

S.No.	Dy.CRS Technical	Period	Name
(i)	Operating	Full Period	Smt. Indu Rani Dubey
(ii)	Electric Traction	1.4.2014 to 22.4.2014 23.4.2014 to 31.03.15	Vacant Shri. Shalabh Tyagi
(iii)	Signal & Telecom	Full Period	Vacant
(iv)	Mechanical	Full Period	Shri. Uttam Prakash

5.5 Deputy Commissioner in Circle Offices

Deputy Commissioner (Signaling & Telecommunication)			
S.No.	**Circle**	**Period**	**Name**
(i)	Eastern Circle , Kolkata	Full Period	Shri. A.K Dey
(ii)	Western Circle , Mumbai	Full Period	Vacant
(iii)	Northeast Frontier Circle, Kolkata	Full Period	Vacant
(iv)	Northern Circle , New Delhi	Full Period	Shri. Rajmal Khoiwal
(v)	Southern Circle, Bangluru	1.4.2014 to 17.6.14 18.6.2014 to 31.3.15	Vacant Shri. E. Srinivas
Deputy Commissioner (Civil Engg)			
(vi)	South Eastern Circle, Kolkata	Full Period	Vacant
(vii)	South Central Circle, Secunderabad	Full Period	Vacant
(viii)	North Eastern Circle , Lucknow	Full Period	Vacant
Deputy Commissioner(Electric Traction)			
(ix)	Central Circle, Mumbai	1.4.2014 to 29.4.14 30.4.2014 to 31.3.15	Vacant Shri G.P Garg

6. JURISDICTIONS OF CIRCLES -

6.1 Route kilometrage of Railways under the jurisdiction of circles, as on 31st March, 2015 was as under:-

Name of Circle	**HEAD QUARTER**	**Route Km**	**RAILWAY ADMINISTRATIONS**
Central Circle	Mumbai	7813.79	Central Railway, West Central Railway and Konkan Railway
Eastern Circle	Kolkata	6664.887	Eastern Railway & East Central Railway
Northern Circle	New Delhi	7231.858	Northern Railway
North Eastern Circle	Lucknow	6742.051	North Eastern Railway & North Central Railway
Northeast Frontier Circle	Kolkata	4020.526	Northeast Frontier Railway
Southern Circle	Bangaluru	8525.596	Southern Railway & South Western Railway
South Central Circle	Secunderabad	5931.829	South Central Railway
South Eastern Circle	Kolkata	8040.999	South Eastern Railway , South East Central Railway & East Coast Railway
Western Circle	Mumbai	12122.577	Western Railway & North Western Railway

6.2 Some Commissioners of Railway Safety are at present also functioning as Commissioners of Metro Railway Safety. Route Kilometrage of Metro Railways in the jurisdiction of Circles as on 31st March 2015 was as under:-

Name of Circle	**HEAD QUARTER**	**Route Km**	**RAILWAY ADMINISTRATIONS**
Northern Circle	New Delhi	217.271	Delhi Metro Rail Corporation
		6.292	Rapid Metro Rail, Gurgaon
Northeast Frontier Circle	Kolkata	27.280	Metro Railway, Kolkata.
Southern Circle	Bangaluru	9.464	Bangaluru Metro Railway Corporation
Western Circle	Mumbai	11.230	Mumbai Metro Railway

7. FUNCTIONS:-

7.1 Duties of Commissioner of Railway Safety, spelt out in Section 6, Chapter-III of The Railways Act 1989, are as under:-

(a) To inspect new railways with a view to determine whether they are fit to be opened for the public carriage of passengers, and to report thereon to the Central Government as required by or under this Act;

(b) To make such periodical or other inspections of any railway or of any rolling stock used thereon as the Central Government may direct;

(c) To make inquiry under this Act into the cause of any accident on a Railway; and

(d) To discharge such other duties as are conferred on him by or under this Act.

7.2 Functions of a Commissioner of Railway Safety are:-

(a) Examination of references for opening of new railway lines and electrification.

After inspection, he submits reports to CCRS, who forwards it to Railway Board with his remarks.

Commissioners have been delegated powers of Central Government to

sanction opening of a line, if satisfied with it's fitness;

(b) Examination of application before execution of works, affecting the safety of running lines and sanction thereof;

(c) Examination of proposals for movement of over dimensioned consignments and sanction thereof;

(d) Examination of proposals for introduction of new rolling stock.

After examination, he sends proposal, with his recommendations, to CCRS. Commissioners have powers delegated to them to sanction use of rolling stock, running of which has sanction of Central Government on any other railway;

(e) Examination of proposals for sanction of Infringement of Schedule of Dimensions. He sends proposals with his recommendations to CCRS.

(f) Inspection of running lines to keep themselves familiar with Railway working; and

(g) Investigation into Serious Railway Accidents and review of reports of other train accidents, inquired by committee of Railway officers.

7.3 Chief Commissioner of Railway Safety advises Central Government in all matters relating to Railway Safety, recruitment of officers, postings and promotions, budget and expenditure etc. Chief Commissioner deals with: -

(a) Transmission of reports of inspections of new lines done by Commissioners of Railway Safety to Railway Board with his views;

(b) After scrutiny of reports of statutory inquiries into accidents done by Commissioners, he forwards his considered opinion to Railway Board with such recommendations as he considers necessary;

(c) Scrutiny of Railway administration's proposals, received with Commissioner's recommendations and transmission to Railway Board with his opinion;

(d) Examination of Railway Board's proposals for amendments of General Rules, Rules for Opening of a Railway, Schedule of Dimensions, in consultation with Commissioners and convey their views to Railway Board; and

(e) Preparation of the Annual Report on the activities of Commissioners of Railway safety.

CHAPTER-II

ACTIVITIES OF COMMISSIONERS OF RAILWAY SAFETY

2.1 INSPECTION OF NEW LINES:

2.1.1 Section 22 of Railway Act, 1989, prescribes that Central Government shall, before giving its sanction to opening of a railway obtain a report from the Commissioner about fitness of the line for public carriage of passengers.

2.1.2 Section 14 of Metro Railways (O&M) Act, 2002 prescribes that the metro railway in the National Capital Region, metropolitan city and metropolitan area shall not be opened for the public carriage of passengers except with the previous sanction of the Central Government.

2.1.3 In 2014-2015, activities of inspections carried out by Commissioners of Railway Safety were as summarized below:-

(a)	New lines	**329.938** Kms.
(b)	Additional lines	**621.541** Kms.
(C)	Conversion of gauge	**334.621** Kms.
(d)	Deviation lines	**9.587** Kms.
(e)	Introduction of electric traction	**1231.42** Kms.
(f)	Delhi Metro Rail Corridors	**6.148** Kms.
(g)	Bangaluru Metro Rail Corridor	**NIL** Kms.
(h)	Rapid Metro Limited Gurgaon	**NIL** Kms
(i)	Kolkata Metro	**NIL** Kms
(j)	Mumbai Metro Railway	**11.230** Kms

2.1.4 Lines inspected are listed below :-

A – New Lines

S.No.	Date of Authorisation	Section/Line Opened	Railway	Kms
1	23.04.14	Tundla-Etmadpur	North Central	2.647
2	16.05.14	Dumka-Shikaripara	Eastern	24.510

3	19.06.14	Chhpara bye pass line between Saragoan Deori Station of South East Central Railway	South East Central	11.510
4	20.06.14	Ambika Kalna- Dhatrigram	Eastern	8.660
5	15.07.14	Pabai – Gulabaganj	North Central	9.540
6	08.08.14	Krishnagar – Bethuadehri line of Eastern Railway	Eastern	27.920
7	11.08.14	Dudhnoi – Mendipathar Section of Rangiya Division of Northea st Forntier Railway	Northeast Frontier	19.620
8	29.08.14	Manigram – Poradanga line of Eastern Railway	Eastern	14.980
9	07.11.14	Ennore – Attipattu Pudunagar line of southern Railway	Southern	08.608
10	10.12.14	Almanda – Kantakapally	East Coast	9.240
11	18.12.14	Sukhi sewaniya - Dewanganj	West Central	16.320
12	30.12.14	Bhind – Etawah	North Central	36.416
13	12.01.15	Koderma – Hazaribag	East Central	79.600
14	16.02.15	Khurda Road Station - Begonia Station of Khudra Road Division	East Coast	32.000
15	30.03.15	Pinargaria – Shikaripara	Eastern	21.100
16	29.07.15 (Authorization by Ministry of Railways)	Patharkhola - Manderdisa Section of Lumding Division	Northeast Frontier	7.267
			Total	**329.938**

B. ADDITIONAL LINES

S.No.	Date of Authorisation	Section/Line Opened	Railway	Kms
1	29.05.14	Manikpur-Chheoki	North Central	0.800
2	23.05.14	Ambari Falakata- Belakoba	Northeast Frontier	10.289

3	19.06.14	Ariyalur – Jakkajaydu Palganatham	Southern	24.650
4	24.06.14	Noonkhar-Baitalpur	North Eastern	20.583
5	24.06.14	Settihalli – Maddur	South Western	11.389
6	24.06.14	Mandaya -Yeliyur	Western	7.752
7	27.07.14	Lapanga-Rengali	East Coast	10.901
8	11.08.16	Sabli Raod – Lilapur Road	Western	14.00
9	08.08.14	Shyamchak west yard - Kharagpur	South Eastern	16.297
10	19.08.14	Baghat ki Kothi-Luni	North Western	28.120
11	25.08.14	Uki – Songhad – Chinchpada	Western	39.810
12	27.08.14	Baitalpur – Charichaura	North Eastern	16.400
13	27.08.14	Keshavganj – Swarupganj	North Western	26.640
14	16.09.14	Jaithari – Chhulha – Anuppur	South East Central	13.770
15	15.10.14	Taljhari - Tinpahar	Eastern	9.690
16	16.10.14	Bhagwangola - Jiaganj	Eastern	11.52
17	21.10.14	Ajjampura – Hosadurga	South Western	20.446
18	07.11.14	Patuli – Dainhat	Eastern	10.690
19	07.11.14	Tindivanam – Perani	Southern	18.383
20	18.12.14	Kalinarayanpur - Phulia	Eastern	8.572
21	15.12.14	Mulanturutti- Piravam Road	Southern	11.340
22	14.01.15	Viramgam - Sadla	Western	21.440
23	05.01.15	Vani Raod – Sabli Road	Western	7.980
24	22.01.15	Delang – Sakhigopal line of Khudra Road Division	East Coast	13.301
25	05.02.15	Sahibganj – Pirpainti	Eastern	23.580
26	05.02.15	Jakhal - Budhlada station	Northern	29.280
27	10.02.15	Kosgi – Mantralayam Road	South Central	12.418
28	17.02.15	Purbasthali – Patuli	Eastern	13.850
29	20.02.15	Barharwa – Bonidanga	Eastern	5.30
30	20.02.15	Maharajapur – Taljhari	Eastern	14.220
31	24.02.15	Sini Station - Mahalimarup Station	South Eastern	7.616
32	26.02.15	Karunguzhi – Madurantakam	Southern	3.314
33	27.02.15	Apta – Kasu	Central	34.040
34	02.03.15	Tindivanam –Tuzhupedu	Southern	20.004

35	19.03.15	Plassey – Bethuadehri	Eastern	22.150
36	19.03.15	Moregram- Nalhari	Eastern	18.487
37	27.03.15	Cuttak - Barang	East Coast	11.451
38	28.03.15	Ghantikal – Nidhipur-Naraj Marthapur – Chudang Garh Block Cabin	East Coast	12.777
39	30.03.15	Tamluk - Basulya Sutahata	South Eastern	18.291
			Total	**621.541**

C – Gauge Conversion

S.No.	Date of Authorisation	Section/Line Opened	Railway	Kms
1	19.08.14	Fatehabad Chandrawatiganj – Laxmibainagar	Western	35.830
2	08.10.14	Murliganj – Baanmankhi	East Central	19.710
3	27.11.14	Palani –Pollachi	Southern	63.463
4	16.12.14	Harmuti – North Lakhimpur section of Rangiya Division	Northeast Frontier	31.000
5	20.02.15	Mughalsarai Jn Cabin – Flyover Cabin	East Central	7.000
6	23.01.15	Bareilly City – Bareilly Jn.	North Eastern	0.870
7	20.05.15 (Authorized by Ministry of Railways)	Lumding to New Halflong Section of Lumding Division	Northeast Frontier	95.286
8	30.03.15	North Lakhimpur to Sripani section of Rangia Division	Northeast Frotier	81.462
			Total	**334.621**

D - Diversion

S.No.	Date of Authorisation	Section/Line Opened	Railway	Kms
1	10.11.14	Sogaria – Kota “C” cabin	Western Railway	2.490
2	30.12.14	Viramgam – Surendranagar	Western	4.850
3	31.12.14	Mahesana – Palanpur	Western	2.247
			Total	**9.587**

E - Electrification

S.No.	Date of Authorisation	Section/Line Opened	Railway	Kms
1	21.05.14	Villupuram – Vellore Cantonment	Southern	177.00
2	23.06.14	Chappra – Siwan Thawe	North Eastern	88.022
3	07.07.14	Badnera – Walgaon	Central	18.267
4	21.07.14	Barabanki – Gonda	North Eastern	91.636
5	23.07.14	Pathankot to Jammu Tawi on Firozpur division	Northern	100.600
6	11.08.14	Manmad – Patamba – Sai Nagar Shirdi	Central	81.000
7	13.08.14	Khurja City - Meerut City Moradabad Division	Northern	87.380
8	19.11.14	Kachujor(Incl) – Mahishadahari (Incl)	Eastern	22.043
9	10.12.14	Bhatni – Siwan	North Eastern	49.582
10	15.12.14	Virdunagar Jn – Vanchi Maniyachchi Jn – Tuticorin and Vanchi Maniyachchi jn – Tirunelveli jn	Southern	142.181
11	10.12.14	Hajipur(Excl.) – Bachhwara (Excl.)	East Central	140.126
12	14.01.15	Sonpur (Excl.) – Hajipur (excl.)	East Central	4.353
13	05.02.15	Vizianagram – Garudabilli Section UP & DN line including Gotlam and Garudabilli Yard of Waltair Division	East Coast	12.668
14	20.03.15	Kanpur Anwarganj – Kalyanpur	North Eastern	10.000
15	27.03.15	Mathura – Alwar	North Central	122.751
16	31.03.15	Shoranur (Excl.) – Kozhikode(Excl)	Southern	83.811
			Total	**1231.42**

F – Metro Railway, Kolkata

S.No.	Date of Authorisation	Section/Line Opened	Railway	Kms
1.	----	----	----	Nil

G – Delhi Metro Rail Corridors

S.No.	Date of Authorisation	Section/Line Opened	Railway	Kms
1.	20.06.14	Central secretarial (excluding) Mandi House (including) Metro Station of Northern Railway (DMRC)	DMRC	6.148

H – Bangaluru Metro Rail Corridor

S.No.	Date of Authorisation	Section/Line Opened	Railway	Kms
1.	----	----	----	Nil

I – Rapid Metro Limited Gurgaon

S.No.	Date of Authorisation	Section/Line Opened	Railway	Kms
1.	----	----	----	Nil

J – Mumbai Metro

S.No.	Date of Authorisation	Section/Line Opened	Railway	Kms
1.	02.05.2014	Versova – Ghatkopar	Mumbai Metro	11.230

2.1.5 Commissioners under powers delegated to them by Central Government sanctioned public carriage of passengers on these lines.

2.2 NEW MINOR WORKS:

2.2.1 Structural works affecting the safety of trains on running lines, such as provision of additional bridges, rebuilding or re-girdering of existing bridges, re-modeling of station yards, modification to signalling can be carried out by Railways only after obtaining the sanction of the Commissioner of Railway Safety. Such works, after being sanctioned by the Commissioner, are executed by the Railway Administration and opened to traffic under safety certificate signed by concerned railway officers, unless the Commissioner of Railway Safety decides to inspect them before these being brought into use.

2.2.2 During the year, 3486 minor works were sanctioned by Commissioners of Railway Safety.

2.3 WORKS INVOLVING INFRINGEMENTS OF STANDARD DIMENSIONS:

2.3.1 Certain minimum and maximum dimensions for location of structures near railway lines and maximum and minimum dimensions in respect of rolling stock have been prescribed and are laid down in "Schedule of Dimensions". Railways are required to obtain sanction of the Central Government or Commissioner of Railway Safety for deviation from these standard dimensions in any work/line.

2.3.2 During the year 2014-15, 24 cases for condonation of infringements to Schedule of Dimensions were recommended by Commissioners for sanction by the Central Government.

2.3.3 14 cases, which were within powers of Commissioners of Railway Safety, were sanctioned by them.

2.4 MOVEMENT OF OVER-DIMENSIONED CONSIGNMENTS:

2.4.1 Sometimes, Railways have to transport oversized consignments. Movements of some of these consignments require sanction of Commissioners of Railway Safety.

2.4.2 In 2014-15, movements of 06 over-dimensioned consignments were sanctioned by Commissioners of Railway Safety.

2.5 NEW TYPES OF LOCOMOTIVES AND ROLLING STOCK:

2.5.1 Section 27 of Railways Act, 1989, prescribes that new rolling stock can be introduced only after prior sanction by the Central Government and before

sanctioning, Central Government shall obtain a report from Commissioner of Railway Safety.

During the year, 51 new types of rolling stock were recommended by Commissioners for sanction by the Central Government.

2.5.2 As per Railway (Opening for public carriage of passengers) rules, 2000, Commissioners of Railway Safety can sanction movement of new rolling stock on sections of the railway, provided the previous sanction of the Central Government for their running on any other Railway line is available.

During the year, 176 such cases were sanctioned by Commissioners under these powers.

2.6 INSPECTIONS:

During the year, Commissioners carried out inspections of 12615.58 kms. of Govt. Railways either on their own or in the company of General Managers. Significant defects and deficiencies noticed during inspections were discussed with Railway Officers during such inspections and inspection reports were sent to General Managers.

2.7 Activities of Commissioners in respect of inquiries into accidents are given in Chapter – III.

CHAPTER – III

ACTIVITIES OF INVESTIGATION INTO ACCIDENTS

3.1 Commissioners of Railway Safety investigate Serious Railway accidents.

Other train accidents are investigated by committee of Railway officers. Reports of these inquiries are sent by Railways for review by concerned Commissioner of Railway Safety.

3.2 RULES FOR INQUIRIES BY COMMISSIONERS :-

Rules for holding Inquiries into railway accidents are contained in 'Statutory Investigation into Railway Accidents Rules -1998' notified by the Ministry of Civil Aviation in the Gazette vide G.S.R.No. 257 dated 26.12.98 and G.S.R. No. 63, dated 06.03.99. Gist of some rules and procedures for statutory investigations by Commissioners are given below:-

(i) When should a Statutory Inquiry be held?

Inquiry by the Commissioner is obligatory in every accident to a passenger carrying train, which is attended with loss of human life, or with grievous hurt as defined in the Indian Penal Code, to a passenger or passengers in the train or with damage to railway property of the value exceeding Rs. 2 crores.

Inquiry shall be obligatory only in those cases, where passengers killed or grievously hurt, were travelling inside the train. If a person travelling on the foot-board or roof of a passenger train is killed or grievously hurt or if a person is run over at a level crossing or elsewhere on the railway track, inquiry is not obligatory. Workmen's trains and ballast trains carrying workmen are passenger trains for this purpose and in the event of a workman getting killed or grievously hurt as a result of an accident to such train, inquiry is obligatory.

Commissioner can inquire into any accident, which in the opinion of the Chief Commissioner or the Commissioner, requires the holding of an inquiry.

(ii) Procedure when a Commissioner is unable to hold an inquiry:-

When a Commissioner is unable to take up an inquiry, he is required to inform Chief Commissioner of Railway Safety of the reasons as to why the inquiry cannot be done by him. In such a case, Chief Commissioner can direct another Commissioner to inquire into the accident or the inquiry can be entrusted to the Railway itself, which will then appoint a Committee of Railway Officers to inquire into the accident. The Committee's inquiry report is submitted to the

Commissioner of Railway Safety, who scrutinizes it and in case he agrees with findings, forwards it to Chief Commissioner of Railway Safety along with his views on findings and recommendations made.

(iii) Procedure for conducting a Statutory Inquiry:-

When Commissioner of Railway Safety receives intimation of occurrence of a serious accident, he proceeds to the site and conducts inspection of the accident site. He notifies Chief Commissioner of Railway Safety, Railway Board and head of Railway administration concerned of his intention to hold an inquiry and at the same time, fixes and communicates the date, time and place of inquiry. Notice of inquiry is published in Newspapers to invite public to give evidence in the inquiry in person or to write to the Commissioner. Officers of the local Magistracy and police are also notified of the dates, time and place of the inquiry.

(iv) When shall the Commissioner stop or discontinue his inquiry?

Whenever the Central Government appoints a Commission of inquiry under the Commission of Inquiries Act, the Commissioner shall discontinue his inquiry.

(v) Scope: -

The Commissioner holds inquiries into accidents with a view to ascertain the causes. Investigations are also carried out into the question, whether prompt and adequate steps were taken by the railway administration for relief measures such as provision of first aid, medical treatment and refreshments to passengers, evacuation of injured passengers and other facilities like arrangements for transshipment, completion of their journey to destination, running of duplicate trains etc. As a result of his inquiry, the Commissioner may also make recommendations, which are designed to prevent the recurrence of similar accidents, and which may suggest laying down new rules or modifying existing rules of working, and improved standards of signaling, installation and maintenance of track, bridges, etc. He also comments on matters, observed by him during the course of his inquiry, which may not have any direct bearing on the cause of the accident under investigation, but which may, in some cases, affect the safe working of the railway and lead to accidents.

3.3 INQUIRIES OF SERIOUS TRAIN ACCIDENTS IN 2014-15

3.3.1 During the year 2014-15, 13 serious accidents were inquired by Commissioners. In these accidents, 9 accidents had resulted in passenger (or crew) fatalities and 4 accidents had resulted in grievous injuries to passengers.

Out of 13 accidents inquired by Commissioners, 4 were collisions between trains, 5 were derailments, 2 involved dashing of trains with road vehicles at Level Crossings, and 2 were unusual occurrences.

3.3.2 Brief details of 13 accident inquiries are given in Appendix - I. 60 recommendations were made by Commissioners in these inquiries.

3.3.3 Inquiry reports of 151 accidents of 2014-15 were sent by Railways to Commissioners and reports were reviewed by Commissioners.

3.3.4 Below mentioned 4 accidents attracted considerable attention either due to high number of fatalities and injuries to passengers and/or due to extraordinary nature of accident :-

a) **Para 12 of Appendix-I: -** Derailment of 14266 Dn. Dehradun Varanasi Janata Express at Bachhrawan station of Lucknow division of Northern Railway on 20.03.2015.

As a result of the accident, 39 passengers were killed, 24 train passengers were grievously injured and 14 train passengers sustained simple injuries.

b) **Para 9 of Appendix-I: -** Collision of 12556 Dn. Gorakhdham Express derailed and dashed with brake van of Dn. JEA Goods at Chureb station of Lucknow Division of North Eastern Railway on 26.05.2014.

As a result of this accident, 29 passengers were killed, 16 passengers were grievously injured while 55 sustained simple injuries.

c) **Para 8 of Appendix-I :-** Derailment of 50105 Dn. Diva-Sawantwadi passenger on Panvel – Roha section of Mumbai Division of Central Railway on 04.05.2014.

As a result of this accident, 23 passengers were killed, 37 passengers were grievously injured and 50 passenger sustained simple injuries.

d) **Para 6 of Appendix-I :-**Collision of train no. 15007 UP Krishak Express dashed with train no. 15204 Dn. Lucknow Barauni express in Gorakhpur yard in Lucknow division of North Eastern Railway on 30.09.2014.

As a result of this accident, 13 passengers were killed, 17 passengers were grievously injured and 30 passenger sustained simple injuries.

Derailment & Collision of 12556 Dn. Gorakhdham Express with brake van of Dn. JEA Goods at Chureb station of Lucknow Division of North Eastern Railway on 26.05.2014

View of derailed Engine and coaches

View of derailed Engine and coaches

CHAPTER-IV

ANALYSIS OF TRENDS OF ACCIDENTS

4.1 ACCIDENTS:

The term 'accident' means an accident for which a notice is required to be issued by Railway administration under section 113 of The Railways Act, 1989. Relevant part of section 113 is reproduced below:-

"(1) Where, in the course of working a railway,-

(a) any accident attended with loss of human life, or with grievous hurt, as defined in the Indian Penal code(45 of 1860), or with such serious injury to property as may be prescribed; or

(b) any collision between trains of which one is a train carrying passengers; or

(c) the derailment of any train carrying passengers, or any part of such train; or

(d) any accident of a description usually attended with loss of human life or with such grievous hurt as aforesaid or with serious injury to property; or

(e) any accident of any other description which the Central Government may notify in this behalf in the Official Gazette, occurs, the station master of the station nearest to the place at which the accident occurs or where there is no station master, the railway servant in charge of the section of the railway on which the accident occurs, shall, without delay, give notice of the accident to the District Magistrate and Superintendent of Police, within whose jurisdiction the accident occurs, the officer in charge of the police station within the local limits of which the accident occurs and to such other Magistrate or police officer as may be appointed in this behalf by the Central Government.

(2) The railway administration within whose jurisdiction the accident occurs, as also the railway administration to whom the train involved in the accident belongs, shall without delay, give notice of the accident to the State Government and the Commissioner having jurisdiction over the place of the accident."

Train Accidents, under section 113 of the Act, and as per Explanation in Rule (3) of Railway(Notices of and Inquiries into Accidents)Rules,1998, include

those railway accidents, which occur in the course of working of a Railway and usually attended with loss of human life (such as accidents to passenger trains involving collisions, derailments, train wrecking, or attempted train wrecking, cases of running over obstructions placed on line, of passengers falling out of trains or of fires in trains), or grievous hurt as defined in the Indian Penal Code or serious injury to Railway property of the value exceeding two crore rupees which have not actually occurred but which by the nature of the accident might reasonably have been expected to occur; and also cases of land slides or of breach by rain or flood which cause the interruption of any important through line of communication for at least 24 hours.

4.2 SERIOUS TRAIN ACCIDENTS

Accidents, referred to in Section 114 of the Railways Act 1989, are investigated by Commissioner of Railway Safety. This section is reproduced below:

"(1) On the receipt of a notice under Section 113 of the occurrence of an accident to a train carrying passengers resulting in loss of human life or grievous hurt causing total or partial disablement of permanent nature to a passenger or serious damage to railway property, the Commissioner shall, as soon as may be, notify the railway administration in whose jurisdiction the accident occurred of his intention to hold an inquiry into the causes that led to the accident and shall at the same time fix and communicate the date, time and place of inquiry :

Provided that it shall be open to the Commissioner to hold an inquiry into any other accident which, in his opinion, requires the holding of such an inquiry.

(2) If for any reason, the Commissioner is not able to hold any inquiry as soon as may be after the occurrence of the accident, he shall notify the railway administration accordingly."

Rule 2(2) of 'Statutory Investigation into Railway Accidents Rules-1998', defines serious train accidents. It says that:-

every accident to a train carrying passenger which is attended with loss of life of a passenger or passengers in the train or with grievous hurt, as defined in the Indian Penal Code (herein after referred to as the grievously hurt) to a passenger or passengers in the train or with serious damage to railway property of a value exceeding rupees two crore rupees and any other accident which in the opinion of Chief Commissioner of Railway safety or the Commissioner of Railway safety requires the holding of an inquiry shall be deemed to be an accident of such a serious nature as to require the holding of an inquiry.

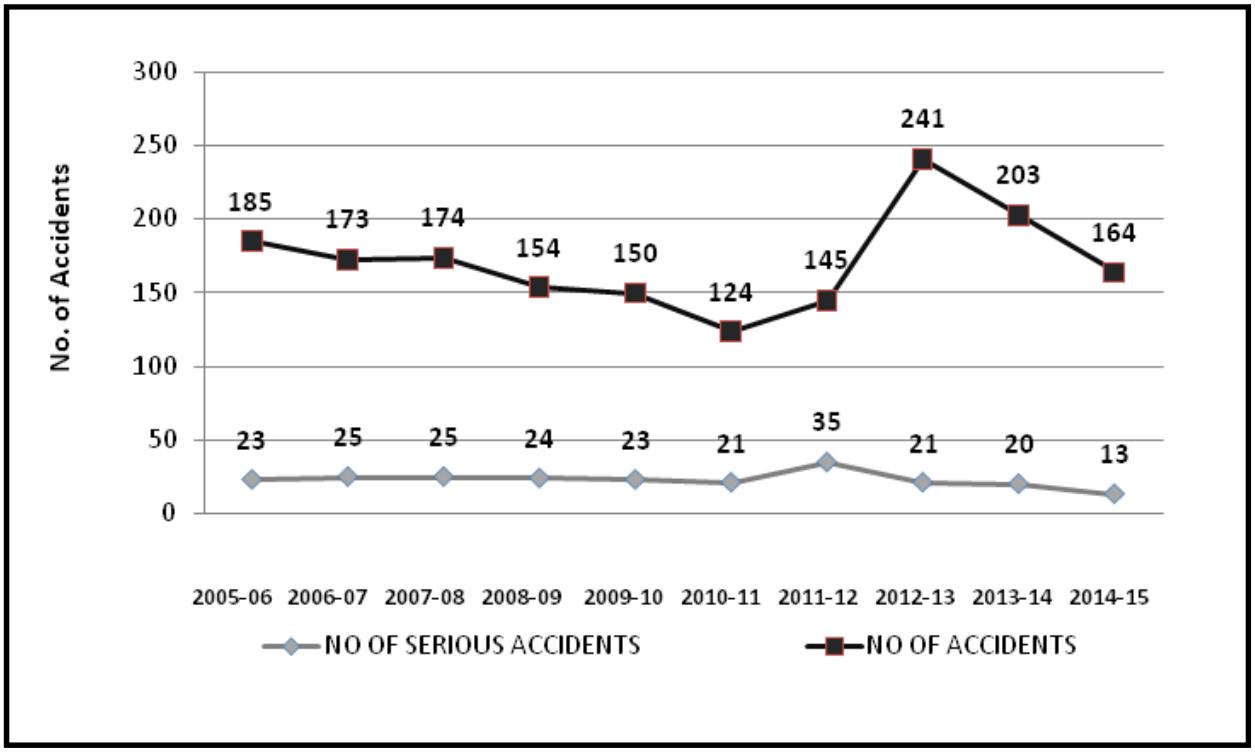
These accidents shall be termed as 'Serious train accidents'.

4.3 TREND OF TRAIN ACCIDENTS

4.3.1 Nos. of train accidents and serious train accidents in last ten years is shown in Figure-1.

Figure-1

Nos. of Accidents



Number of train accidents had reduced in the year 2014-15 to 164 as against 203 during the year 2013-14. Similarly, the number of serious train accidents has reduced to 13 against 20 during the year 2013-14.

4.3.2 Statistics of accidents for the year 2014-15, as compiled by the Commission of Railway Safety, were sent to Railway Board for reconciliation of the figures vide Commissioner's letter no. S.13011/1/2015-RS dated 16.11.2016 and reminder of even no. dated 20.12.2016. Further to this there was a coordination meeting at Railway Board on 05.01.2017 & 06.01.2017 to reconcile all the statistics of Accidents.

The clarification of Ministry of Railways regarding variation in figures of Section 113 accidents was considered. However, the figures of accidents compiled by the Commission on the basis of data available with Commissioners, has been taken as final and the same has been analyzed for the purpose of this Chapter.

4.3.3 Breakup of passenger and goods train accidents in 2013-14 and 2014-15 is shown in Table 1.

TABLE 1

SN	Description	2013-14	2014-15
1.	No. of Train Accidents	203	164
2.	No. of Passenger train Accidents	166	144
3.	No. of Goods Train Accidents	37	20
4.	No. of accidents Per million train -Kilometers (Million train -Kilometers as per Ministry of Railways Annua l Statistical report for 2014 - 15)	0.10	0.11

4.4 RAILWAY-WISE TREND OF ACCIDENTS

4.4.1 Number of accidents, which occurred in each zonal railway in the years 2013-14 and 2014-15, are shown in Table 2 below:

SN	Railway	No. of train accidents	
		2013-14	**2014-15**
1.	Central	15	13
2.	Eastern	07	05
3.	East Central	17	19
4.	East Coast	06	07
5.	Northern	42	22
6.	North Central	10	09
7.	North Eastern	07	13
8.	Northeast Frontier	06	05
9.	North Western	17	16
10.	Southern	06	07
11.	South Central	16	08
12.	South East Central	04	01

13.	South Eastern	10	05
14.	South Western	16	09
15.	Western	16	19
16.	West Central	05	05
17.	Kolkata Metro	-	0
18.	Konkan Rly.	03	1
19.	Delhi Metro	-	0
Total		**203**	164

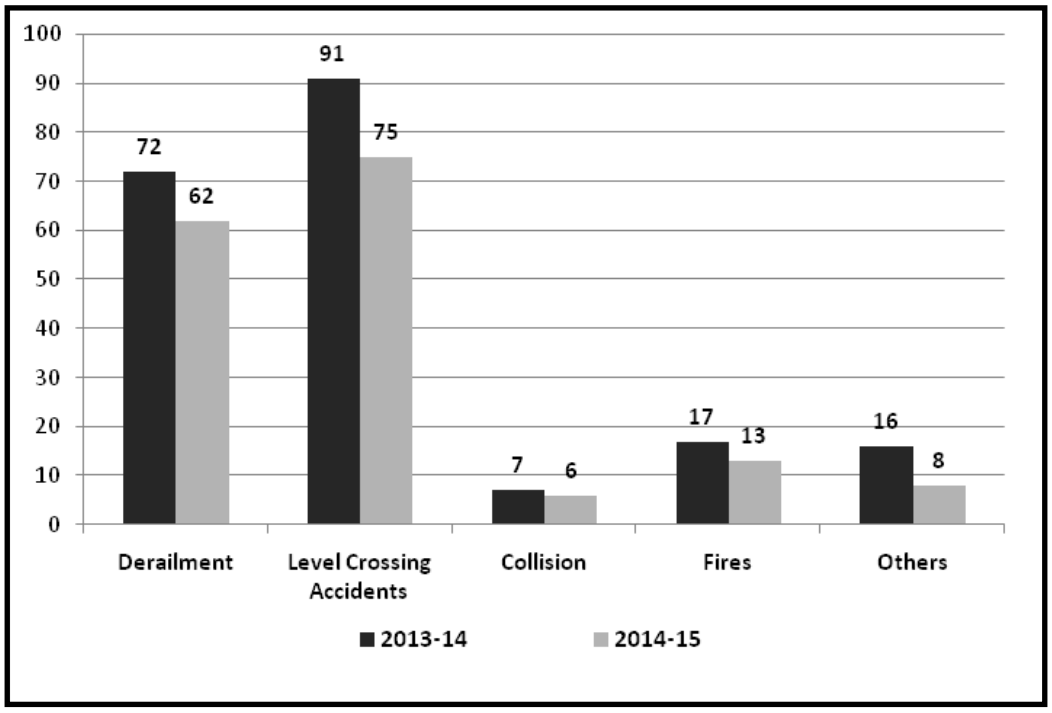
Number of accidents reduced on Central, Eastern, Northern, North Central, North Western, South Central, Northeast Frontier, South East Central, South Western, South Eastern Circle & Konkan Railway.

Number of accidents increased on North Eastern, East Coast, Southern, Western & East Central Railway.

4.5 ANALYSIS OF TRAIN ACCIDENTS

Figure 2 shows break-up of accidents in 2013-14 and 2014-15 into various types of accidents.

Figure-2



Level Crossing accidents continued to be biggest chunk of train accidents, 45.73% in the year 2014-15 an against 44.82% in the year 2013-14.

Derailment accidents were next, accounting for 37.80% in the year 2014-15 against 35.46% during the year 2013-14.

Collisions, Fire in trains & other accidents (Miscellaneous Accidents) were 3.65%, 7.92% and 4.87% against 3.44%, 8.37% and 7.88% respectively in the year 2013-14.

CAUSE-WISE ANALYSIS OF VARIOUS TYPES OF TRAIN ACCIDENTS

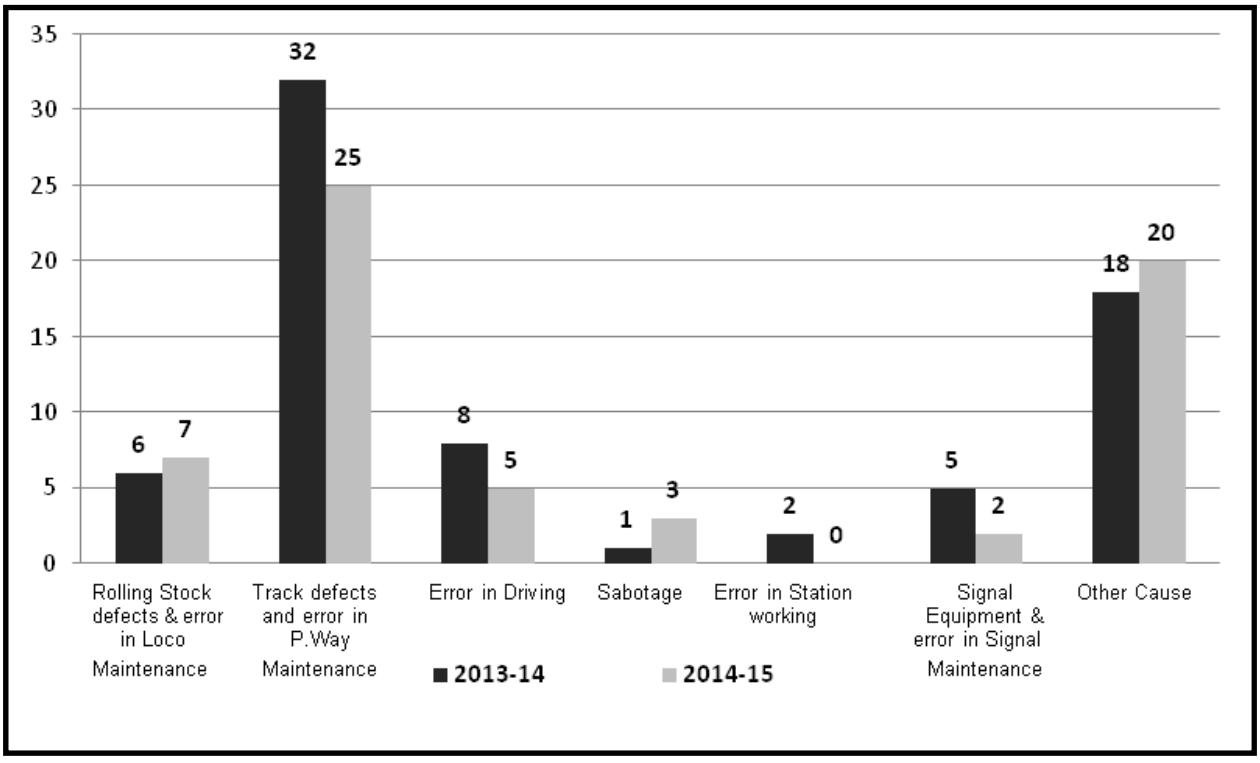
4.6.1 DERAILMENTS

Numbers of derailments were as follows:-

2013-2014	72
2014-2015	62

Cause-wise analysis of derailments in the years 2013-14 and 2014-15 is shown in Fig.3

Figure-3



There were total 62 derailments, in notified train accidents. The cause wise analysis/break ups of derailment is as follows:

25 derailments occurred due to P. Way defects.

7 derailments occurred due to rolling stock defects.

5 derailments were due to error in driving.

3 derailment was caused by Sabotage.

2 derailments occurred due to Signal Equipment and error in Signal maintenance.

20 derailments occurred due to combination of errors in working of more than one department and other causes.

4.6.2 COLLISIONS

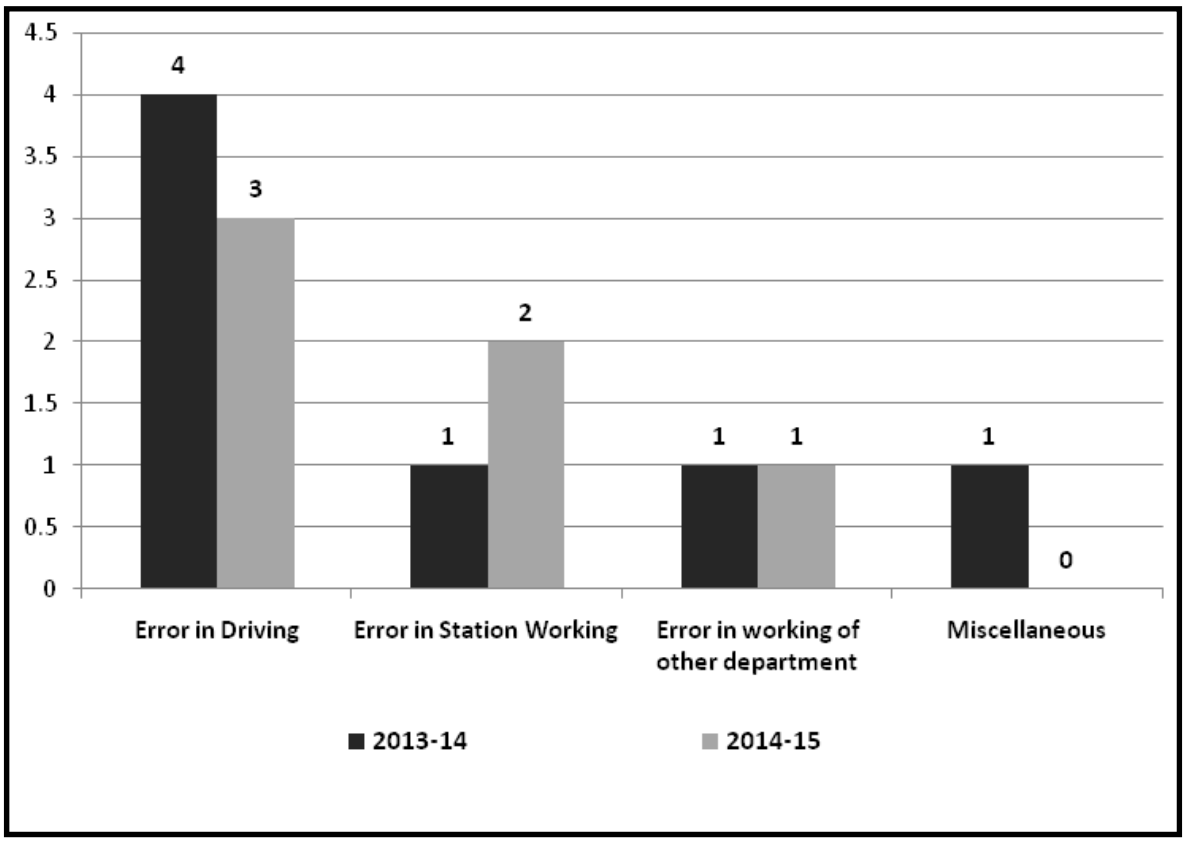
Numbers of collisions was as follows:-

2013-2014 - 7

2014-2015 - 6

Figure 4 shows cause-wise analysis of collisions during 2013-14 and 2014-15.

Figure-4



There were 6 collision accidents during the year. The details are as under:-

In three cases of collision occurred due to error by Driver.

In two cases collision occurred due to failure of station staff.

One case occurred due to failure of other staff (C&W).

4.6.3 ACCIDENTS AT LEVEL CROSSINGS

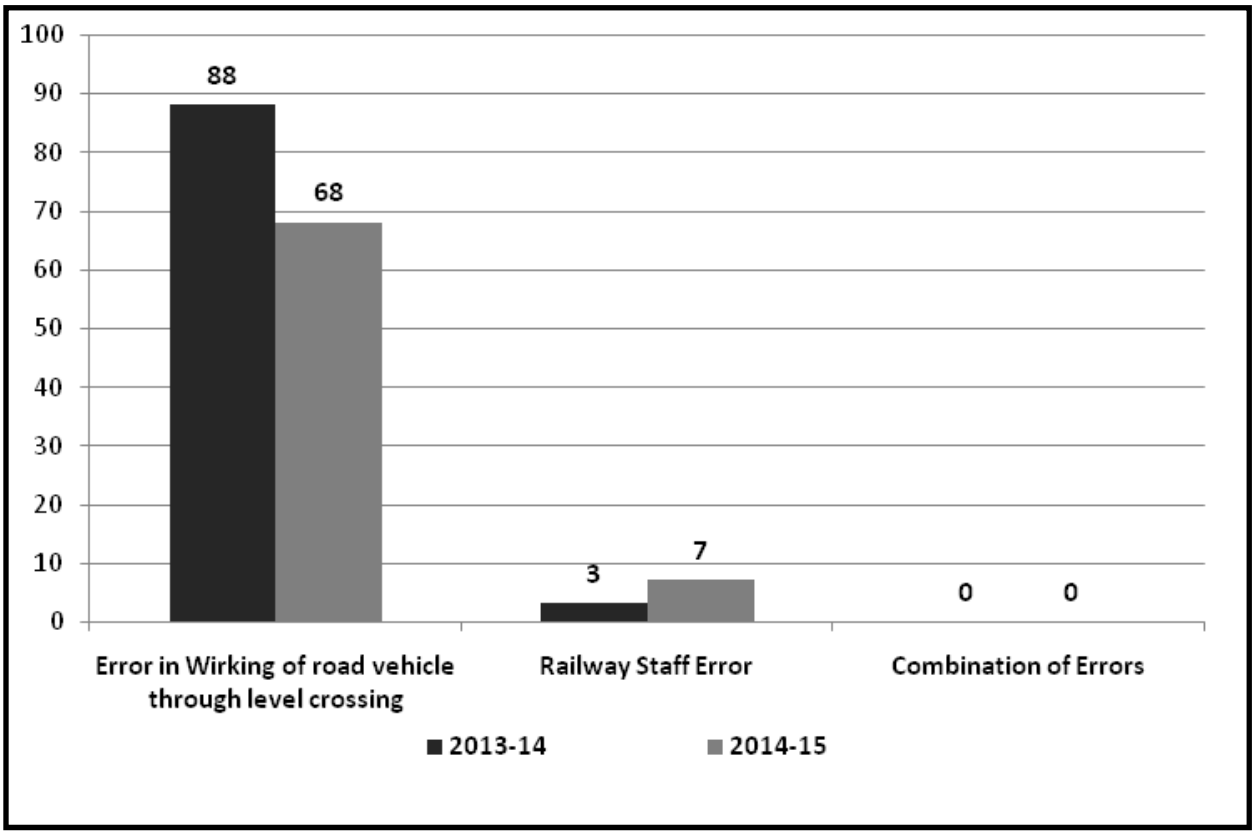
Numbers of level crossing accidents were as follows:-

2013-2014 - 91

2014-2015 - 75

Cause-wise analysis of train accidents at level crossings in the years 2013-14 and 2014-15 is shown below.

Figure 5



75 level crossing accidents were notified during the year. Out of these 68 were on unmanned LCs, where right of way conflict has to be resolved by road vehicle driver and trains have first right of way. It was error in working of road vehicles, due to which these accidents occurred.

Such accidents can be reduced by either providing gates or guard or by providing grade crossings in lieu of level crossing.

These can also be reduced if road user is warned by some active device about approaching train. Work in this direction is not being done now.

In 68 cases accident occurred due to Road User's failure while in 07 cases accident occurred due to failure of Railway staff.

4.6.4 FIRES IN TRAINS

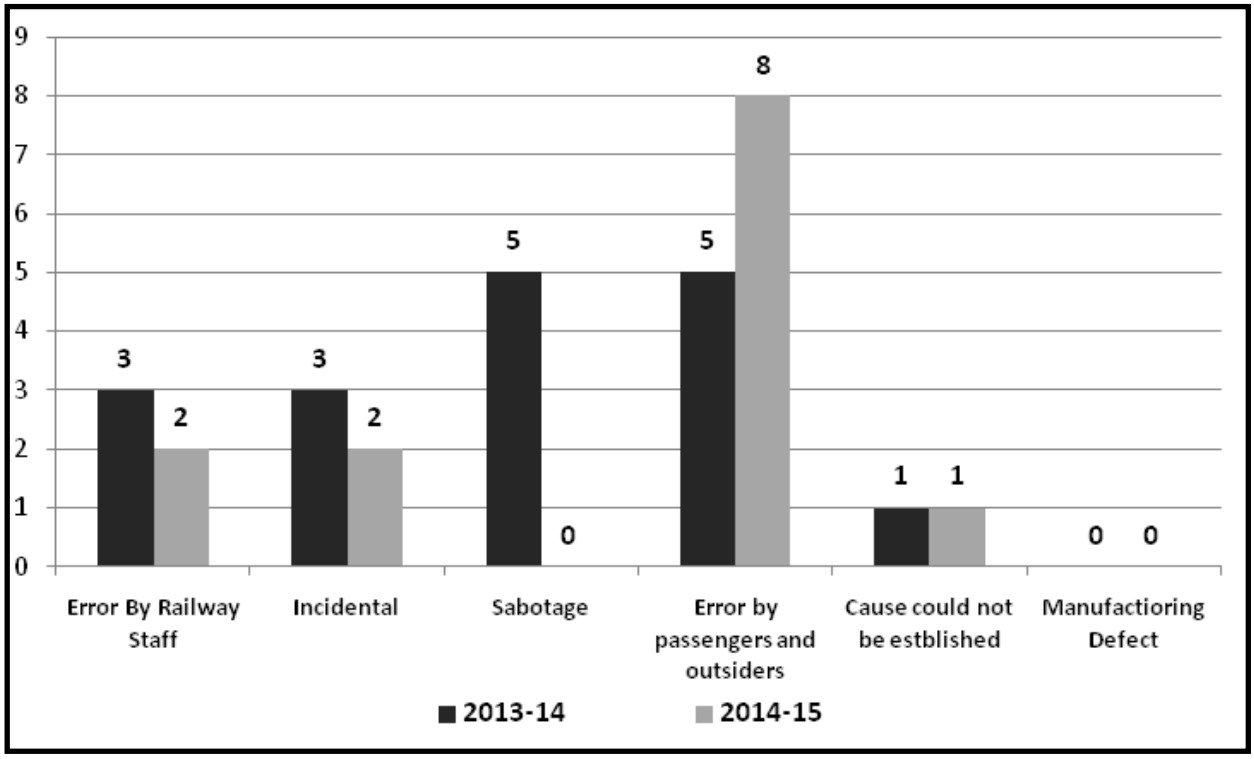
Numbers of Fire cases are as follows:-

2013-2014 - 17

2014-2015 - 13

Figure 6 shows cause-wise analysis of fire accidents in trains during 2013-14 and 2014-15.

Figure 6



There were 13 accidents of fire in trains during the year 2014-15.The details are as under:-

In two cases error by Railway staff was found to be the cause of fire.

In two cases fire was (caused) incidental.

In eight cases, error by passengers or outsider negligence was found to be the cause of fire.

In one case cause of fire could not be established.

However, none of the cases of fire were caused by sabotage.

4.7 TRAIN ACCIDENTS DUE TO HUMAN ERROR

4.7.1 No. of train accidents and contribution of human error (by Railway staff as well as other than Railway Staff) during the year 2013-14 and 2014-15 is shown in Table 4:-

TABLE – 4

SN	Item	2013-14	2014-15
1.	No. of train accidents	203	164
2.	No. of train accidents due to error in working of Railway Staff.	60	53
3.	No. of train accidents due to error in working by persons other than Railway Staff.	87	76
4.	No. of train accidents due to error in working by persons (2+3)	147	129
5.	% of train accidents due to error in working of Railway Staff (2÷1)	29.55	32.31
6.	% of train accidents due to human error (Both Railway and other than Railway Staff) (4÷1)	72.41	78.65

4.7.2 Percentage of train accidents, attributable to error in working by Railway Staff is 32.31% in the year 2013-14 against 29.55% during the year 2013-14. The error by human, comprising both Railway Staff as well as other than Railway Staff such as road users, passengers, miscreants etc. was responsible for 78.65% of train accidents in the year 2014-15 against 72.41% during the year 2013-14.

4.8 TREND OF SERIOUS TRAIN ACCIDENTS.

4.8.1 Total number of train accidents, serious train accidents including train accidents resulting in fatalities to passengers (including Railway Staff), travelling in trains (as distinct from other fatalities, such as, those occurring among trespassers, Level Crossing Road users etc) for last 5 years are compared in Table 5 below:

TABLE 5

SN	Year	No. of accidents	No. of serious accidents	No. of accidents resulting in passenger fatalities	No. of Passenger fatalities including railway crew
1.	2010-11	124	21	09	265
2.	2011-12	145	35	17	127
3.	2012-13	241	21	09	65
4.	2013-14	203	20	12	52
5.	2014-15	164	13	08	123
Average for 5 years		175	22	11	126

4.8.2 Number of accidents resulting in passenger fatalities has not come down in this period of five years. Though there was a significant reduction in passenger fatalities in 2012-13 and 2013-14, the trend was reversed in 2014-15.

4.8.3 Numbers of serious train accidents were 13 in 2014-15 as compared to 20 in 2013-14. Numbers of train accidents resulting in passenger fatalities were 08 in 2014-15 as against 12 in 2013-14. In 2014-15, number of passenger fatalities increased to 123 from 52 in 2013-14.

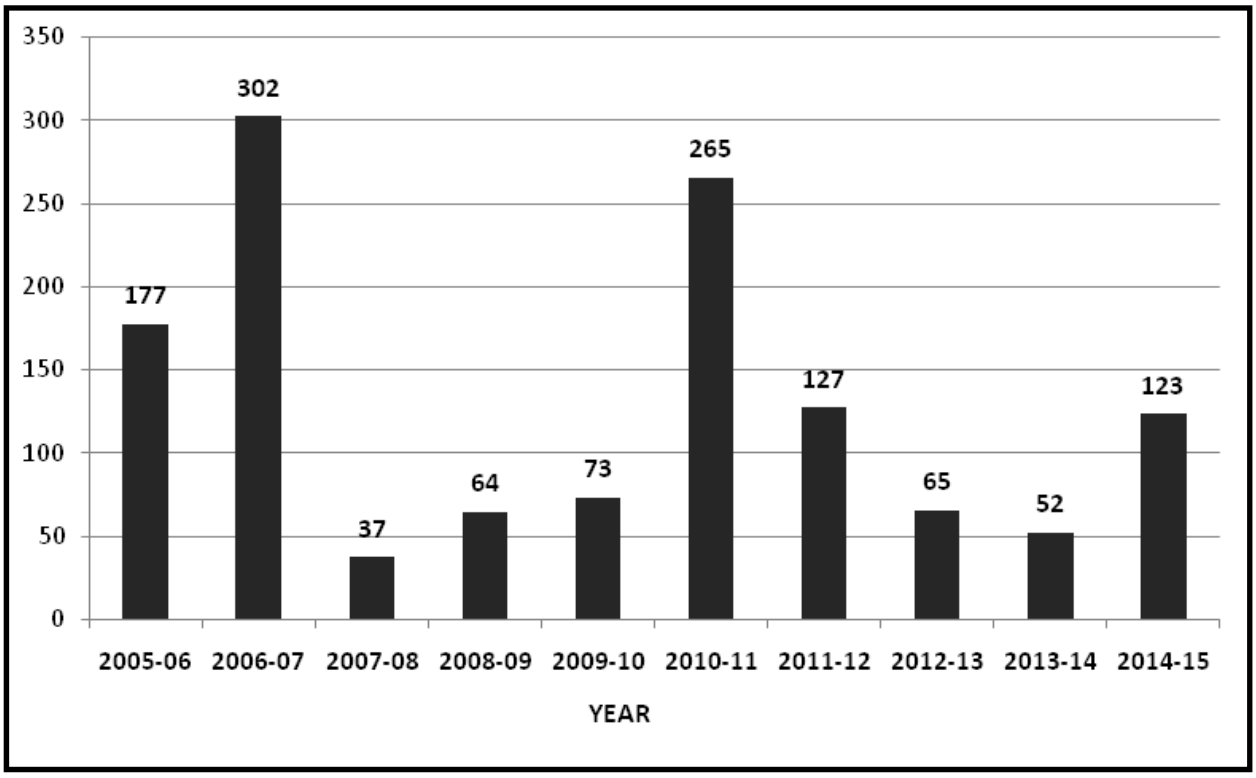
4.8.4 Number of accidents has decreased to 164 in the year 2014-15 as against 203 during the year 2013-14. Number of serious train accidents has gone down to 08 during the year as against 12 during the last year.

4.9 PASSENGER FATALITIES IN TRAIN ACCIDENTS

Nos. of passenger fatalities in train accidents in last ten years are shown in figure-7.

Figure – 7

Passenger fatalities, including Railway Crew in Serious Train Accidents



In 2013-14, the number of passenger fatalities in train accidents was less than the passenger fatalities during the year 2014-15.

Accidents resulting in high passenger fatalities were:

(i) Derailment of 14266 Dn. Dehradun Varanasi Janta Express at Bachhrawan station of Lucknow Division of Northern Railway.

As result of this accident, 39 passengers were killed, while 24 passengers were grievously injured and 14 passengers sustained simple injuries.

(ii) Collision of train no. 12556 Dn. Gorakhdam Express dashed with brake van of Dn. JEA Goods at Chureb station of Lucknow Division of North Eastern Railway.

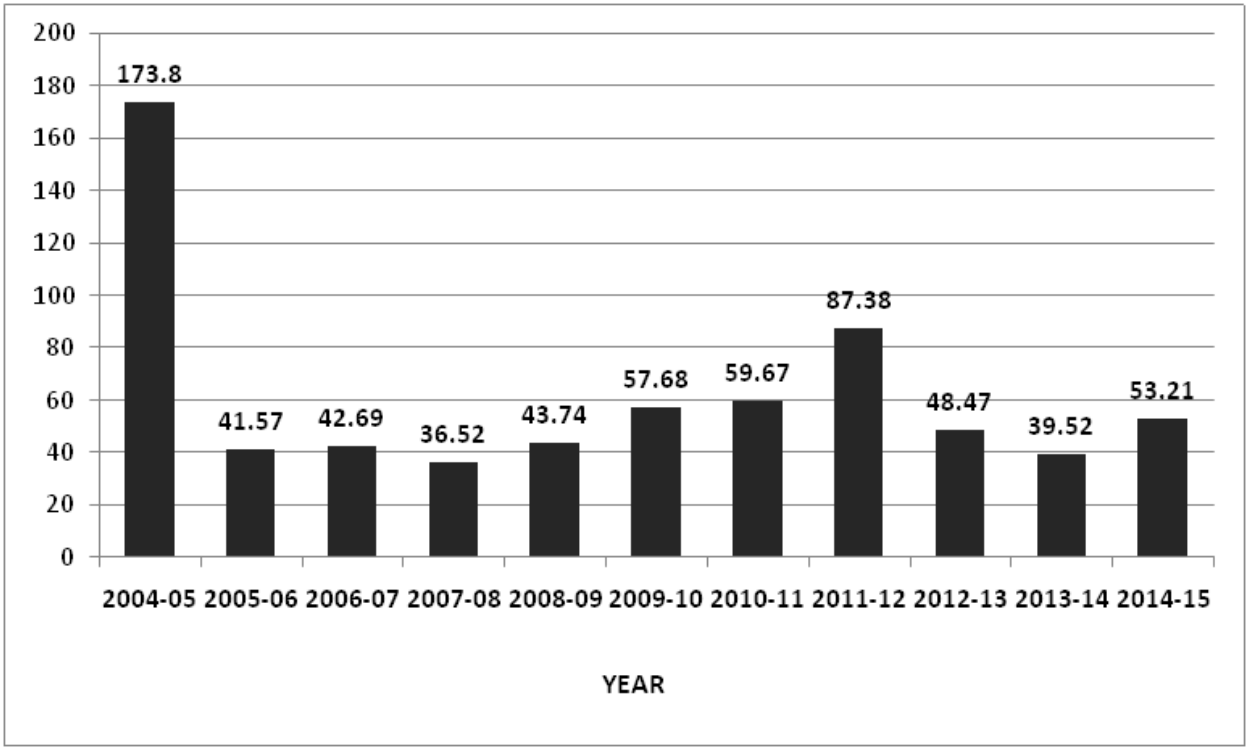
As result of this accident, 29 passengers were killed, while 16 passengers were grievously injured and 55 passengers sustained simple injuries.

4.10 LOSS OF RAILWAY PROPERTY IN ACCIDENTS

Estimated cost of damages to Railway property resulting from train accidents during last ten years are given in Figure-8.

Figure – 8

Loss of Railway Property in train accidents during last 10 years



CHAPTER V

RAILWAY RESPONSE ON ACCIDENT INQUIRY REPORTS

5.1 In the year 2014-15, Railway conveyed their response on CCRS note on 29 accident inquiry reports. These reports pertains to 1 accidents of 2007-08, 2 accidents of 2008-09, 5 accidents of 2009-10, 5 accidents of 2010-11, 7 accidents of 2011-12 and 9 accidents of 2012-13.

Comments of Ministry of Railways

Efforts were being made to furnish action taken comments on CCRS note on accident inquiry reports as soon as possible. As a result of these efforts, in the year 2014-15, action taken comments were furnished to the Commission of Railway Safety, Ministry of Civil Aviation on CCRS Note on 29 accident inquiry reports pertaining to accidents of the year 2007-08 to 2012-13. These reports pertain to 1 accident of 2007-08, 2 accidents of 2008-09, 5 accidents of 2009-10, 5 accidents of 2010-11, 7 accidents of 2011-12 and 9 accidents of 2012-13. Total 170 recommendations were made.

Commission's further View

Noted

5.2 Action taken/position explained by concerned Railway administrations on 110 recommendations was satisfactory. These recommendations were generally related to ensuring compliance of extant instructions or some local action.

Comments of Ministry of Railways.

Action taken by the Railway Administration on 110 recommendations was found to be satisfactory and no comments are offered.

Commission's further View

Noted

5.3 Railway Board accepted 30 recommendations and action taken by Railway Board was satisfactory.

Comments of Ministry of Railways

Since action taken by the Ministry of Railways, Railway Board on 30 recommendations was found to be satisfactory, no further comments are offered.

Commission's further View

No further comments

5.4 Railway Board has not accepted 10 recommendations.

These recommendations were related to four regarding maintenance practices, three for change in system of working, two for reporting practices and one was partially accepted.

Further 20 recommendations are under consideration of Railway Board.

5.5 At the end of 2014-15, response from Railway was awaited on 11 accident inquiry reports submitted up to 2013-14. These reports pertain to, 1 accident of 2010-11, 1 accident of the year 2011-12, 2 accidents of 2012-13, 7 accidents of 2013-14. Total 137 recommendations were made in these inquiry reports which are under consideration by Ministry of Railways.

5.6 During the year 2014-15 thirteen (13) accident inquiries were entrusted to the Commissioners out of which four (4) were finalized during that year. Further thirteen (13) accident inquiries pertaining to previous years were also finalized by the Commissioners in the year 2014-15. Thus a total of seventeen (17) accident enquiry reports were finalized during the year. These reports were finalized as per Revised Procedure Circular No.5 issued by the commission on 27.12.2012 for compilation and submission of Railway accident inquiry reports.

All these 17 enquiry reports finalized by the Commissioners during the year were submitted to Railway Board and Board was advised to communicate Action Taken Report on all the 17 inquiry reports. Total 76 recommendations were made in these inquiry reports.

Comments of Ministry of Railways

Recommendations made by the Commission of Railway Safety relate to the whole spectrum of rail operation and maintenance. While majority of the recommendations have been accepted and implemented, some of them need thorough and detailed examination from various angles i.e. technical suitability, operational feasibility, evaluation of extent of enhancement of safety, assimilation in the prevailing field environment and financial viability etc. Some of them also require design and development of technology, import, trials and experiments etc. involving considerable time, period and funds.

Efforts are being made to clear the pending cases soon.

Commission's further View

Noted

5.7 There is always some backlog in receipt of 'Action Taken Report' from the Ministry of Railways. The issue of non reporting of ATR/status of the recommendations to the commission has been raised many times in the past. Ministry of Railways has mentioned that administration/implementation of the provisions connected with the Safety of train operations requires deliberation at various levels, hence the delay.

Comments of Ministry of Railways

Efforts are being made to furnish action taken comments on CCRS Note on accident inquiry reports as soon as possible. Recommendations pertain to various Directorates of Ministry of Railways and are under examination by them. Some of the recommendations have far reaching implications. The concerned Directorates are being impressed upon to expedite their action taken comments. Only after firm action is taken by them, Office Memorandum containing Ministry of Railways' action taken comments can be issued to the Ministry of Civil Aviation (Commission of Railway Safety)

Commission's Further View

Noted, however there is greater need of expediency in this regard being in public interest.

5.8 Most of the recommendations made in the accident inquiries are for ensuring compliance of rules and provisions for working and maintenance. Action is taken by the Railways on such recommendations.

Comments of Ministry of Railways.

This is a matter of fact and no comments are offered.

Commission's further View

Noted.

5.9 In the ATRs received during the year 2014-15 some of the important recommendations received positive response and were implemented by the Ministry of Railways.

Some of such recommendations are given below:-

I. Issue of detailed instructions and Correction Bridge Manual(IRBWM) recommended in derailment of 11 coaches of N-30 Kasara-CSTM Up EMU Local & collision of 12105 Vidarbha Express in Mumbai Division on 19.07.2012.

Ministry of Railways constituted a five member committee to go into various aspects of inspection and maintenance of deep cuttings including the method of inspection, modern technique of identifying the loose mass/boulder etc which may fall on track. Accordingly Advance correction slip no. 28 dt 20/3/2014 has been issued by Indian Railways.

II. The recommendation regarding amendment in General Rule 3.36 in Head-on-collision of 1057 Dn Churchgate-Virar fast EMU Local with 1022 Up slow EMU Local in Mumbai Division on 16.06.2012

The recommendation was accepted by the Ministry of Railways and accordingly instructions have been issued by Board to denotify SR 3.36 (5)(c)(iii) of Western Railway and similar SR of other Railways. The proposal of amendment of GR3.36 was also approved and notification issued subsequently.

Commission is of the view that due to delays in action on recommendations the basic purpose of accident investigation gets defeated. Therefore Ministry of Railways should take urgent action on the recommendations made in inquiry reports and also communicate the status to the commission.

CHAPTER VI

SOME ISSUE CONCERNING SAFETY ON INDIAN RAILWAY

6.1 Level Crossing Accidents:-

Out of total 164 accidents reported under section 113 during the year 2014-15, there were 75 accidents at Level Crossing gates, while some of these accidents were at Manned LC gates, majority of accidents were at UMLCs. In most cases the road user is either killed or injured. The total number of accidents at LC gates during the year has been 75 as against 91 in the previous year. However, the number remains very high & the death/injury of road users hold a particular grief in public memory. Society holds it as an unpardonable safety infringement by the Railways despite the majority of accidents being due to failure of road users in observance of safety precautions & warning while negotiating the level crossings.

The ongoing expansion & strengthening of road network across the length & breadth of the country, mostly in rural areas, have created enhanced pressure on the use of manned & unmanned level crossing which in turn has increased the potential for accident. There is therefore urgent need for addressing this issue & ensure drastic reduction in number of accidents at LC gates.

Various safety issues related to level crossings have been raised by the Commission from time to time. These are basically concerned with manning/interlocking of LCs and elimination of rail-road surface crossings by means of grade separation through construction of Road Over Bridge (ROB), Limited Height Subway (LHS), Road Under Bridge (RUB) etc.

The following issues require urgent attention in this regard:-

a) Elimination of unmanned level crossings in a programmed manner either by manning of crossings or by closing some unmanned crossing where traffic is very less and providing grade separators or limited height subways in place of other crossings.

b) The pace of manning should not be at the cost of maintenance of the Railway assets. The proper creation of gatemen's posts, their requirements and training are pre-conditions for effective manning of LCs. The detailed policy guidelines in this regard also need to be issued by Railway Board to replace ad-hoc manning by withdrawing manpower from existing staff strength.

c) In previous communication railway has intimated that Train activated Warning device(TAWD) for giving audio-visual warning to road users about an

approaching train was undertaken in the past by the railways and was not found workable and unsuitable due to various reasons such as law and order, theft and inaccessibility of site etc. Further, Railway has communicated that RDSO conducted trials of an Advanced Train Warning System at unmanned level crossing gates as an off shoot of Satellite Imaging of Rail Navigation (SIMRAN). But SIMRAN was discontinued and it has now been proposed to implement Real-time train Information System (RTIS) using satellite communication and adding controlling Office Application Component for automatic train control charting. Provision of Train Actuated Warning System at unmanned level Crossings is still under trial stage.

d) Considering the limitation of new technologies for warning the road users at UMLCs, the Railways have decided to engage 'Gate Mitra' at UMLCs to warn the road users. There has been large scale deployment of 'Gate-Mitras' on the entire Railway system. This deployment is certainly helping in reducing the number of accidents at UMLCs.

e) Replacement of all unmanned level crossings by ROB/RUB or conversion into manned level crossings will definitely take many years thus delaying the total elimination of unmanned LCs. Warning to road users about approaching train can improve safety level at unmanned level crossings. Commission has been raising this issue for quite some time but the progress achieved until now is limited. Statistics of accidents reveals that UMLC accidents have shown an upward trend over a period of time. Warning to road users about approaching train can help in minimizing accidents and improve safety level at the unmanned level crossing. Audio Visual indicators are one of the requirements for enhancing the road user safety and also for minimizing accidents on level crossings. Provision of the above may be considered as an interim measure till all the UMLCs are eliminated.

f) The Railways have adopted an ambitious plan for the elimination of all the UMLCs by the year 2018-19. The present progress of works in this regard is very encouraging in most of the Railway systems. The Railways need to keep very close focus on the progress of these works so that complete elimination of UMLCs becomes a reality thus reducing one of the major causes of accidents on the Railway system.

Comments Of Ministry Of Railways :-

Level crossing gates are meant to facilitate the smooth running of traffic in regulated manner governed by specific rules but keeping in mind the safety concerns, the Railways have decided to progressively eliminate all the LC gates.

I. Closure -

During the year 2014-15, total 1148 number of UMLCs have been eliminated. During the same period, total number of 310 manned level crossings have been eliminated.

II. Road Over/Under Bridge -

To avoid heavy detention to road traffic, busy level crossing gates having more than one lakh Train vehicle Unit (TVU) are being replaced by construction of Road Over/Under Bridges in phased manner on cost sharing basis with the State Governments. During the year 2014-15, total 185 ROBs and 923 RUBs/Subways have been constructed over Indian Railways.

III. Interlocking Of Level Crossing Gates –

Interlocking of gates is being done on the volume of road-cum-rail traffic to enhance safety. The Interlocking of 10513 level crossing gates has been completed up to 31.3.2015.

Instructions have already been issued to Zonal Railways to create posts wherever manning is being done from the vacancy bank of Zonal Railway.

<u>Train Actuated Warning Device :</u>

Design and development of Train Warning Device (TAWD) for giving warning to road users about an approaching train was undertaken in the past on Indian Railways. TAWD was found unworkable and unsuitable due to various reasons such as law and order, theft, inaccessibility of site, poor power supply and public vandalism resulting in non availability of system. In September '05 Board (ML & MT) has decided that no further work of TAWD will be taken up.

A Project of development of GPS based Unmanned Level Crossing Gate Warning System integrated with SIMRAN has been taken up by Telecom Directorate of RDSO jointly with IIT Kanpur. Prototype has been developed and Trial of SIMRAN/RTIS based Level Crossing Gate Warning System are at an initial stages.

High Level Safety Review Committee has recommended for total closing of all manned and unmanned gates.

In view of all the facts, it has been decided that provision of Train Actuated Warning System at Unmanned Level Crossings shall be

implemented after an effective and theft proof system is developed by RDSO.

Commission's further View

Noted

6.2 Provision of TCAS/TPWS to prevent Collision:-

During the year 2014-15, there were six cases of collision. Moreover there were large number of cases of 'Signal Passed At Danger' (SPAD) as reported by the Railway. With increase in signal density due to proliferation of 'Automatic Signalling' territory, IBH, 'Interlocking of LC Gates' as well as increase in the frequency of trains, there is every possibility of increase in number of incidences of collision/SPAD.

To prevent such accidents, the Commission had strongly recommended adoption of modern technology as a safeguard against these. While the Railways have universally provided Vigilance Control Devices (VCD) in the electric and diesel locomotives, the progress of TPWS (Train Protection and Warning System) and TCAS (Train Collision Avoidance System) have been rather slow. The Railways are urged to accelerate provision of these modern technologies to prevent incidences of SPAD as well as collision.

Comments Of Ministry Of Railways :-

TPWS prevents train accidents caused by human error like Signal Passing at Danger (SPAD) and Over Speeding. Pilot project of TPWS (ETCS Level-1) (European Train Control System) has been commissioned on 50 RKms suburban section of Southern Railway. Commercial trials of pilot project on 200 Rkms of Northern / North Central Railway have been conducted with 35 locomotives on nominated trains. During 2014-15, TPWS system has also been introduced in commercial service on all the rakes on Dum Dum- Kavi Shubhash section of Kolkata Metro (25 RKMs). Work for provision of TPWS on Basin Bridge-Arakonam Section (67 RKms) of Southern Railway is in progress.

Train Collision Avoidance System (TCAS):

TCAS has dual capability of preventing train accidents caused due to Signal Passing at Danger (SPAD) or non observance of speed restrictions by train drivers as well as preventing train collisions. Development of TCAS is being carried out as an indigenous, multi-vendor, interoperable cost-effective system by RDSO. Subsequent to Proof of concept field trials of the prototype TCAS equipment developed by RDSO in association with

an Indian Vendor. Extended field trials with multi-vendor, interoperability features are in progress by RDSO on Lingamapalli-Vikarabad-Wadi-Bidar section, SCR (250 km). Initial field trials of TCAS on a limited section have established the functioning of various train protection scenarios including multi-supplier inter-operability. Extended field trials on 250 Km section with 40 locomotives are planned during 2015-16.

Further to this, the progress made in respect of provision of important safety aids to prevent such incidences is as under:

I. Track Circuits(No. of Locations) – From 30509 as on 31.3.2014 to 31073 as on 31.3.2015

II. LED Signals(No. of Stations) – From 5449 as on 31.3.2014 to 5599 as on 31.3.2015

III. Fog Pass Device- Further to facilitate detection of signals by audio warning in foggy weather by the crew, a Global Positioning System (GPS) based 'Fog Pass device' has been developed which displays the name and distance of approaching signals and other critical landmarks in advance during poor visibility condition. This device is a portable device carried by the Loco Pilot and is not fixed on any locomotive. The fog Pass device is under various stages of service trials and deployment over different Zones of Indian Railways would be considered on completion of trials.

Commission's further View

Noted

6.3 Fire Incidences in train:-

There were total of thirteen incidences of fire over the Indian Railways which is unusually high. Fire accidents are perhaps one of the worst kinds of train accidents and thus need to be completely eliminated. The Commission had made a large number of recommendations to ensure future prevention of such incidences. The Commissioner had recommended the following measures in accidents of :-

1. Fire in AC-3 Tire coach No. SWR WG ACCN 97105 of 16594 Up Bangalore-Hazur Sahib Nanded Express on Bangalore Division of South Western Railway on 28.12.2013,

2. Fire in Train No. 19019 Dn Dehradun Exp on Mumbai Division of Western Railway on 08.01.2014

A. It is recommended to remove mobile charging power points from passenger area of AC coaches and provide few nos. outside the passenger area by the side of coach attendant. As an immediate measure, they should be kept switched off in the night from 22.00 hrs. to 6.00 hrs.

B. Railways should ensure that material used for furnishing the coaches should have 'fire retardancy' and 'resistance to spread of flame' and such properties should not be compromised.

C. Paint used in exterior/interior of coaches should be of fire retardant type to minimize the spread of fire in trains.

D. Smoke/carbon monoxide alarms should be provided in coaches to give timely warning of fire/smoldering.

Comments Of Ministry of Railways:-

I. Improving Fire Retardancy in Coaches:

Coaches are being provided with fire retardant furnishing materials such as Fire retardant curtains, partition panelling, roof ceiling, flooring, seat and berths along with cushioning material and seat covers, Windows and UIC Vestibules etc. The specifications of these items are being upgraded from time to time as a part of continual improvement. Tests for Heat release Rate based on latest European norms EN45545 has been added to specifications.

II. Comprehensive Automatic Fire and Smoke Detection System in Coaches:

A pilot project for field trial with Automatic Fire and Smoke Detection system was taken up in one rake of New Delhi- Bhubaneswar Rajdhani. Besides this, one LHB rake in New Delhi – Jammu Tawi Rajdhani train and one rake of LHB AC Double Decker rake running between Kacheguda - Tirupati/Guntakal of South Central Railway have been provided with Automatic Fire and Smoke Detection system. Extended field trials on representative population of coaches are planned to be conducted further with revised specification. In the revised specification Air brake system has been interfaced with Fire and Smoke detection system for stoppage of trains in emergency situations.

III. Provision of Water mist type Fire suppression in pantry cars and power cars:

Pantry cars and power cars are relatively more prone to fire. Accordingly, it has been planned to provide Water-Mist type fire suppression on these coaches including retro fitment in phased manner.

Commission's further View

Noted

6.4 Derailments :-

Accidents due to derailments constituted a major portion of total number of accidents reported under Section 113. Nearly 50% of derailments were caused due to poor track structure and maintenance.

The Commission had made a large number of recommendations for the prevention of derailments. Some of the major recommendations are as follows:-

1) Replacement of '52 kg D Marked' rails.

2) USFD Testing of rails and weld.

3) Liquidating arrears in Track Renewal programme.

4) Analysis of rail/weld failure intensively to eliminate such failures in future.

5) A system of periodic technical audit of track maintenance practices by a specialized team should be introduced to ensure implementation of laid down practices at the field level.

Comments Of Ministry of Railways:-

The track forms the backbone of railway transportation system and therefore needs to be maintained in a safe and fit condition. To this end, it is essential to carry out not only the track maintenance operations, but also to renew the track as and when it becomes due for renewal. The track renewal/replacement is carried out under Depreciation Reserve Fund.

I. Track structure is upgraded at the time of renewals. Sleepers are being upgraded from wooden, steel and CST-9 to PSC sleepers. Heavier section and high tensile strength rails are being used during renewals. Presently 52 kg/60kg 90 UTS rails are being used in place of 90R, 72UTS rails. Similarly, long rail panels or welded rails are predominantly used in place of fish plated joints.

As on 31.3.2015 following track structure exist on BG (Main line):

- **Long Welded Rails are laid in about 89.12% length.**
- **PSC sleepers are laid in about 98.74% length.**
- **52 kg/60 kg rails are laid in about 99.28% length.**

II. For improving maintenance and better asset reliability, Railways are consistently eliminating fish plated joints on tracks by welding joints to convert all single rails into long welded rails to the extent possible. Mobile Flash Butt Welding has been introduced in construction projects and Through Weld Renewals works. Turnouts are also being improved systematically. Now Thick Web Swithces along with Weldable Cast Manganese Steel Crossings have been planned to be provided on identified routes in a phased manner to improve asset reliability and to cope with higher axle load and increased volume of traffic.

III. Other measures taken in this direction include use of modern diagnostic aids like Digital Ultrasonic Rail Flaw Detectors (USFD), track recording cars, use of on-track machines for maintenance of track to higher standards, controlling/reducing rail and weld failures and ensuring quality of rails during manufacture. Existing analogue type USFD machines are being replaced with digital type machines which have the facility of freezing scan and storing data during rail and weld testing. Vehicle Borne USFD Testing of Rails/Welds is also planned to test about 30400 Track Km length on Rajdhani route which is capable of on line recording of data and run over analysis, by which defect growth rate can be monitored and timely action taken to remove such defects before it actually fails.

Commission's further View

Noted

6.5 Introduction of New Technology:-

The Railways are under pressure to carry additional passengers and freight traffic without commensurate increase in infrastructure. Therefore there is urgent need for introduction of new technology to enhance throughput and accelerate maintenance works.

The Commission had urged the Railways for adoption of new technologies to achieve the twin objective of enhancing throughput and ensuring safety.

Comments Of Ministry of Railways:-

In order to lift more originating traffic during the coming years, there is growing emphasis on strengthening of infrastructure and introduction of new technology on the Railways. Some of the new technologies introduced are as follows :-

I. Wheel Impact Load Detector (WILD):

Wheel Impact Load Detectors (WILDs) are being provided alongside track to monitor the impact of load on track when a train passes over the track. The alarms are triggered when the identified parameters exceed the set limits. This system provides advance intimation about the condition of rolling stock so that informed decision can be taken. A total of 15 WILD systems have been installed. The proliferation of WILD in Indian Railways will be done in conjunction with implementation of Automatic Vehicle Identification using RFID tags.

II. Indigenous High Capacity Centre Buffer couplers:

Indigenous high capacity centre Buffer couplers have been developed for high speed heavy haul wagons. These couplers are expected to reduce cases of train parting and make operation of longer trains safer.

III. Online Monitoring of Rolling Stock (OMRS):

Wheel Impact Load Detector (WILD) along with acoustic bearing detectors is known as online monitoring of rolling stock systems (OMRS). OMRS systems enhances safety by predicting and giving an early warning about bearing condition of rolling stock. OMRS systems have been implemented at one pilot location. A master plan has been prepared to install OMRS system at important locations by investing Rs.250 crores on 65 instruments. Global tender for procurement of 25 equipments in phase-1 is under finalization.

IV. Heavy Haul Track Friendly Bogies:

In order to reduce forces on track during running of rolling stock of higher axle load at higher speed, track-friendly bogies are being purchased. These bogies will have track-friendly features such as low dynamic forces on rails, reduced wheel, rail wear and longer intervals between successive maintenance schedules. These bogies have speed potential of achieving 110kmph in both loaded and empty condition. Indian Railways has entered into transfer of technology-cum-supply contract of 25T/32.5T track-friendly bogies with M/s Amsted, USA. Under this contract, 4 bogies and 2 numbers of instrumented wheel sets have been received and these bogies are under oscillation trials. Trials of double stack container on BLC25M have been conducted at 125kmph in Kanakpura - Fulera of NWR. Further BOXN25M have recently been completed on 30.06.2015 and test report is under deliberation.

<u>Commission's further View</u>

Introduction of identified modern technologies should be done in a time bound manner and its progress should be closely monitored.

APPENDIX - I
Ref. Para 3.3.2

DETAILS OF SERIOUS RAILWAY ACCIDENTS/INCIDENCE INQUIRED INTO BY COMMISSIONERS OF RAILWAY SAFETY DURING THE YEAR 2014-15

1. Rear-end-Collision of 51676 Up Chopan Katni Passenger with 23345 Up Varanasi-Shaktinagar Intercity Express at Obra Dam Station on Chopan-Singrauli Section of Dhanbad Division of East Central Railway on 02.04.2014.

A)	CAUSE	:	Due to error in working of station by the operating staff.
B)	CASUALTIES		
	KILLED	:	02 (Train Passenger)
	GRIEVOUS INJURY	:	02 (Train Passenger)
	SIMPLE INJURY	:	06 (Train Passengers)
C)	COST OF DAMAGES TO RAILWAY PROPERTY	:	` 49.91,154/-
D)	CATEGORY	:	Error in working of Station.
E)	NO. OF RECOMMENDATIONS MADE BY THE COMMISSIONER	:	04

2. Derailment of 15666 DN B.G. Express at KM72/0-717 between Aujuri and Jagi Road Stations on Lumding- Guwahati single non electrified main line section of Lumding division of Northeast Frontier Railway at 02.09 hrs of 16.04.2014.

(A)	CAUSE	:	Failure of Equipment (P.Way)
B)	CASUALTIES		
	KILLED	:	None
	GRIEVOUS INJURY	:	01 (Train Passenger)
	SIMPLE INJURYTRIVIAL INJURY	:	10 (Train Passengers) 47 (Train Passengers)
C)	COST OF DAMAGES TO RAILWAY PROPERTY	:	` 2,33,22,753/-
D)	CATEGORY	:	Failure of Equipment.
E)	NO. OF RECOMMENDATIONS MADE BY THE COMMISSIONER	:	06

3. Incidents of bomb blasts in S4 coach (No. NF GSCN 08208) and S5 coach (No. NF GSCN 07662) of train no. 12509 Up Bangalore-Guwahati Express on Platform 9 at Chennai station in Chennai Division of Southern Railway at about 07.14 hrs. on 01.05.2014

A)	CAUSE	:	Due to explosive material/bombs planted and detonated.
B)	CASUALTIES		
	KILLED	:	01(Train Passengers)
	GRIEVOUS INJURY	:	07 (Train Passengers)
	SIMPLE INJURY	:	07 (Train Passengers)
C)	COST OF DAMAGES TO RAILWAY PROPERTY	:	` 69,408/-
D)	CATEGORY	:	Sabotage
E)	NO. OF RECOMMENDATIONS MADE BY THE COMMISSIONER	:	02

4. Derailment of 12236 Dn. New Delhi-Dibrugarh Town Exp. At Km 319/14-06 between Chhapra Kacheri-Goldenganj Stations of Chhapra Sonpur Electrified BG Double Line section of Sonpur Division of East Central Railway on 25.06.2014.

A)	CAUSE	:	Most Probably due to material defect in broken rail or due to miscreant activity or both.
B)	CASUALTIES		
	KILLED	:	04
	GRIEVOUS INJURY	:	06 (Train passengers)
	SIMPLE INJURY	:	17 (Train passengers)
C)	COST OF DAMAGES TO RAILWAY PROPERTY	:	` 2040.48/- Lacs-
D)	NO. OF RECOMMENDATIONS MADE BY THE COMMISSIONER	:	04

5. Dashing of rear SLR No. 11707 of 15960 DN Kamrup Express by Light Engine No. 40129 WDP4D at 18:15 hours of 25.08.2014 at Km. 2/90 on line No.1(Platform No.1) at Dibrugarh Station in board gauge signal non electrified main line station on 'E' route of Tinsukia division of Northeast Frontier Railway

A)	CAUSE	:	Due to error in Station Working.
B)	CASUALTIES		
	KILLED	:	None
	GRIEVOUS INJURY	:	01 (Train Passengers)
	SIMPLE INJURY TRIVIAL INJURY	:	02 (Train Passengers, Railway Employees)12(Train Passengers)
C)	COST OF DAMAGES TO	:	1,01,620/-
	RAILWAY PROPERTY		
D)	CATEGORY	:	Error in Station Working
E)	NO. OF RECOMMENDATIONS	:	06
	MADE BY THE COMMISSIONER		

6. Side collision between 15007 Manduadih-Lucknow Krishak Express 15204 Dn. Barauni Express at Km. 500/1-3 in Gorakhpur Cantt. yard at 22.52 hrs. on 30-09-2014 between Gorakhpur Cantt.-Kusumhi Station of Gorakhpur Cantt.-Gonda Broad Guage Double Line Section of Lucknow Division of North Eastern Railway.

A)	CAUSE	:	Error in working of Train.
B)	CASUALTIES		
	KILLED	:	13 (Train Passengers)
	GRIEVOUS INJURY	:	17 (Train Passengers)
	SIMPLE INJURY	:	30 (Passengers)
C)	COST OF DAMAGES TO RAILWAY PROPERTY	:	85,09,661.99/-
D)	CATEGORY	:	Error in train working.
E)	NO. OF RECOMMENDATIONS MADE BY THE COMMISSIONER	:	02

7. Dashing of 55202 DN Gorakhpur-Narkatiaganj passenger train with Tractor Trolley at unmanned level crossing No. 2A between Gorakhpur Cantt.-Unaula stations at Gorakhpur Cantt.-Panyahwa BG non-electrified single line section at KM 385/4-5 of Varanasi Division of N.E. Railway at about 08.07 hrs. on 09.03.2015.

A)	CAUSE	:	Due to error by road vehicle driver in passing through the unmanned railway level crossing.
B)	CASUALTIES		
	KILLED	:	Nil
	GRIEVOUS INJURY	:	01(Passengers)
	SIMPLE INJURY	:	02(Passengers)
C)	COST OF DAMAGES TO RAILWAY PROPERTY	:	31,500/-
D)	CATEGORY	:	Error by road vehicle driver in passing through the unmanned railway level crossing
E)	NO.OFRECOMMENDATIONS MADE BY THE COMMISSIONER	:	02

8. Derailment of 50105 Dn Diva-Sawantwadi Road Passenger at 09.33 hours on 04.05.2014 between Nagothane and Roha stations at Km. 135/4-5 on Panvel-Roha single line BG non electrified section of Mumbai Division of Central Railway.

A) CAUSE : System Failure.

B) CASUALTIES

KILLED	:	23
GRIEVOUS INJURY	:	37
SIMPLE INJURY	:	50

C) COST OF DAMAGES TO RAILWAY PROPERTY : ` 2,98,00,000/-

D) CATEGORY : -

E) NO. OF RECOMMENDATIONS MADE BY THE COMMISSIONER : 7

9. Derailment of 12556 DN Gorakhdham Express at Chureb Station on Gonda-Gorakhpur BG non-electrified double line section of Lucknow Division of North Eastern Railway at 10.34 hrs on 26.05.2014.

A)	CAUSE	:	Failure of Equipment-P. Way.
B)	CASUALTIES		
	KILLED	:	29
	GRIEVOUS INJURY	:	16
	SIMPLE INJURY	:	55
C)	COST OF DAMAGES TO RAILWAY PROPERTY	:	` 964.57 lakhs
D)	CATEGORY	:	-
E)	NO. OF RECOMMENDATIONS MADE BY THE COMMISSIONER	:	3

10. Accident of 12052 Up Karmi-DR Janshatabdi Express at 16.22 hrs on 07.12.2014 at km. 320/1-2 between Sindhudurg Road and Kankavali Stations on Madgaon-Ratnagiri BG Single line non electrified section of Ratnagiri Region of Konkan Railway.

A)	CAUSE	:	Error in working near Railway Line.
B)	CASUALTIES		
	KILLED	:	NIL
	GRIEVOUS INJURY	:	03
	SIMPLE INJURY	:	13
C)	COST OF DAMAGES TO RAILWAY PROPERTY	:	` 45,00,000/-
D)	CATEGORY	:	Error in working near Railway Line.
E)	NO. OF RECOMMENDATIONS MADE BY THE COMMISSIONER	:	03

11. Derailment of Train No. 12677 Up Bangalore City Jn-Ernakulam Jn. Intercity Express at Km. 169/900-600 between Anekal Road and Hosur stations in Bangalore City Jn-Salem Jn BG non electrified single line section of Bangalore Division of South Western Railway on 13.02.2015.

A)	CAUSE	:	Due to Rail Fracture.
B)	CASUALTIES		
	KILLED	:	09
	GRIEVOUS INJURY	:	09
	SIMPLE INJURY	:	11
C)	COST OF DAMAGES TO RAILWAY PROPERTY	:	` 1,11,12,392/-.
D)	CATEGORY	:	Due to Rail Fracture
E)	NO. OF RECOMMENDATIONS MADE BY THE COMMISSIONER	:	03

12. Derailment of Locomotive and 3 coaches of Train No. 14266 DN Dehradun-Varansi Janta Express at km. 1025/3-5 on the sand hump on loop line no. 1 of Bachhrawan station on Lucknow Raibareli section of Lucknow Division of Northern Railway at 09.10 hrs on 20.03.2015.

A)	CAUSE	:	Error in Train Working.
B)	CASUALTIES		
	KILLED	:	39
	GRIEVOUS INJURY	:	24
	SIMPLE INJURY	:	14
C)	COST OF DAMAGES TO RAILWAY PROPERTY	:	` 89,40,378/-
D)	CATEGORY	:	Error in train Working
E)	NO. OF RECOMMENDATIONS MADE BY THE COMMISSIONER	:	6

13. Collision of Diesel Multiple Unit Train No. 74934 Down Firozpur Cantonment-Jalandhar City Jn. With Tractor Trolley No. PB 08 CP 3616 on manned non interlocked level crossing no. C-6 at km. 6/9-8 between Khojewala and Jalandhar City Jn. Stations on Firozpur Cantonment-Jalandhar City Jn. BG single line non electrified section of Firozpur Division of Northern Railway at 8.39 hrs of 03.01.2015.

A)	CAUSE	:	Due to manned non interlocked level crossing no. C-6 remaining open to road traffic in face of approaching train owing to failure of Gateman to close the gate before giving assurance to SM/Khojewala in the form of PN that he has closed the same.
B)	CASUALTIES		
	KILLED	:	03
	GRIEVOUS INJURY	:	02
	SIMPLE INJURY	:	01
C)	COST OF DAMAGES TO RAILWAY PROPERTY	:	` 2,00,000/-
D)	CATEGORY	:	Error in working near Railway line
E)	NO. OF RECOMMENDATIONS MADE BY THE COMMISSIONER	:	01