### GOVERNMENT OF INDIA MINISTRY OF RAILWAYS

## LOK SABHA UNSTARRED QUESTION NO. 596 TO BE ANSWERED ON 20.07.2022

#### TRAIN ACCIDENTS

†596. SHRI VIJAY BAGHEL:

**SHRI SUNIL KUMAR SONI:** 

**SHRI ARUN SAO:** 

Will the Minister of RAILWAYS be pleased to state:

- (a) the number of railway accidents that occurred in the country during the last five years and the current year and the loss of life and property due to the said accidents, incident-wise and location-wise;
- (b) whether the Government has made efforts to reduce rail accidents;
- (c) if so, the details thereof;
- (d) the results of testing of 'Kavach' technology to prevent collision between trains;
- (e) the number of kilometres of railway section and the number of locomotives provided with 'Kavach' technology; and
- (f) the details of the target set for the next five years, zone-wise including South East Central Zone, Bilaspur?

#### **ANSWER**

# MINISTER OF RAILWAYS, COMMUNICATIONS AND ELECTRONICS & INFORMATION TECHNOLOGY

(SHRI ASHWINI VAISHNAW)

(a) to (f): A Statement is laid on the Table of the House.

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STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (f) OF UNSTARRED QUESTION NO 596 BY SHRI VIJAY BAGHEL, SHRI SUNIL KUMAR SONI AND SHRI ARUN SAO TO BE ANSWERED IN LOK SABHA ON 20.07.2022 REGARDING TRAIN ACCIDENTS

(a): The year-wise details of number of consequential train accidents along with the loss of life and property during the last five years i.e. 2017-18 to 2021-22 and in the current year i.e. 2022-23 (from 1<sup>st</sup> April, 2022 to 30 June, 2022) are given as under:-

Year	Number of consequen	sequen their lives			Loss/damage to property	
	tial Train Accidents	Passengers	Others	Total	(₹ in lakhs)	
2017-18	73	28	30	58	3355.93	
2018-19	59	16	21	37	2855.88	
2019-20	55	0	5	5	2698.70	
2020-21	22	0	4	4	2845.83	
2021-22	35	9	8	17	7958.24	
2022-23*	4	0	1	1	2534.58	

<sup>\*(</sup>from 1<sup>st</sup> April,2022 to 30 June, 2022)

The incident-wise and location-wise details of consequential train accidents involving loss of life and property during the last five years and in the current year are appended.

(b) & (c): Safety is accorded the highest priority by Indian Railways and all possible steps are undertaken on a continuous basis to prevent accidents and to enhance safety of passengers. Following steps/measures have been taken to reduce rail accidents:-

- 1. Rashtriya Rail Sanraksha Kosh (RRSK) has been introduced in 2017-18 for replacement/renewal/upgradation of critical safety assets, with a corpus of ₹1 lakh crore for five years, having an annual outlay of ₹20,000 crore. It has been further extended for a period of five years starting from the financial year 2022-23.
- 2. Electrical/Electronic Interlocking Systems with centralized operation of points and signals have been provided at 6261 stations upto 31.05.2022 to eliminate accident due to human failure.
- 3. Track Circuiting of stations to enhance safety for verification of track occupancy by electrical means instead of human element has been provided at 6325 stations as on 31.05.2022.
- 4. Block Proving Axle Counter (BPAC) to ensure complete arrival of train without manual intervention before granting line clear to the next train have been provided on 6036 block sections up to 31.05.2022.
- 5. Interlocking of Level Crossing (LC) Gates has been provided at 10869 level Crossing Gates up to 31.05.2022 for enhancing safety at LC gates.
- 6. Indian Railways have developed Indigenous Automatic Train Protection System 'KAVACH' to prevent collisions.
- 7. All locomotives are equipped with Vigilance Control Devices (VCD) to ensure alertness of Loco Pilots.
- 8. Provision of Retro-reflective sigma boards are being provided on the mast which is located two OHE masts prior to the signals in electrified territories to warn the crew about signal ahead when visibility is low due to foggy weather.
- 9. A GPS based Fog Safety Device (FSD) is being provided to loco pilots in fog affected areas which enables loco pilots to know the

- exact distance of the approaching landmarks like signals, level crossing gates etc.
- 10. Modern track structure consisting of 60kg, 90 Ultimate Tensile Strength (UTS) rails, Prestressed Concrete Sleeper (PSC) Normal/Wide base sleepers with elastic fastening, fanshaped layout turnout on PSC sleepers, Steel Channel/H-beam Sleepers on girder bridges is used, while carrying out primary track renewals.
- 11. Long rail panels of 260 M/130M length are being manufactured at the steel plant to minimize number of Alumino Thermit joints in the track.
- 12. Patrolling of railway tracks is done to look out for weld/rail fractures.
- 13. Ultrasonic Flaw Detection (USFD) testing of rails is done to detect flaws and timely removal defective rails.
- 14. Mechanization of track maintenance is being carried out to reduce human errors.
- 15. Adoption of web based online monitoring system of track assets viz.

  Track database and decision support system and to decide rationalize maintenance requirement and optimize inputs.
- 16. Preventive maintenance of the railway assets (Coaches & Wagons) is undertaken to ensure safe train operations and to keep a check on Rail Accidents across the country.
- 17. Replacement of conventional ICF design coaches with LHB design coaches.
- 18. All unmanned level crossings (UMLCs) on Broad Gauge (BG) route have been eliminated by January 2019.

- 19. Safety of Railway Bridges is ensured through regular inspection of Bridges. The requirement of repair/rehabilitation of Bridges is taken up based upon the conditions assessed during these inspections.
- 20. Inspections at regular intervals are carried out to monitor and educate staff for observance of safe practices.
- 21. Regular counseling and training of staff.
- (d): Based on trials, 'Kavach' has been certified as Safety Integrity Level-4 (SIL-4) by Independent Safety Assessor (ISA).
- (e): 1140 Rkm and 90 Nos of Locomotives have been provided with 'Kavach' Technology over South Central Railway.
- (f): 'Kavach' Technology has been included in Works Programme on 35736 Rkm on Indian Railways, out of which 601 Rkm pertains to South East Central Railway. Tenders have been invited for Delhi-Mumbai & Delhi- Howrah corridors (having a total Route Km of around 3000 Km).

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APPENDIX REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 596 BY SHRI VIJAY BAGHEL, SHRI SUNIL KUMAR SONI AND SHRI ARUN SAO TO BE ANSWERED IN LOK SABHA ON 20.07.2022 REGARDING TRAIN ACCIDENTS

(a) The incident-wise and location-wise details of consequential train accidents along with the loss of life and property, during each of the last five years and in the current year are as under:-

Year	2017-18			
S. No.	Date of Accident	Location (Division/Railway)	No. of persons who lost their lives	Loss/Damage to property in ₹
1	15/04/2017	Moradabad/ Northern	0	2050000
2	20/04/2017	Ambala/ Northern	0	430000
3	21/04/2017	Secunderabad/South Central	0	240000
4	22/04/2017	Varanasi/North Eastern	5	0
5	01/05/2017	Mumbai/Central Railway	0	4000000
6	03/05/2017	Jhansi/North Central	2	21500
7	03/05/2017	Jhansi/North Central	4	3000
8	09/05/2017	Hyderabad/South Central	0	2556665
9	14/05/2017	Ratlam/Western	0	43500
10	15/05/2017	Chennai/Southern	0	852249
11	16/05/2017	Palghat/Southern	0	1609094
12	17/05/2017	Mysore/South Western	0	290000
13	21/05/2017	Lucknow/Northern	0	225000
14	08/07/2017	Samastipur/East Central	2	0
15	18/07/2017	Mumbai/Central Railway	0	8025000
16	24/07/2017	Chakradharpur/Sout h Eastern	0	6683076
17	02/08/2017	Deen Dayal Upadhyaya/East	0	9920000

		Central		
18	19/08/2017	Delhi/Northern	25	31645000
19	20/08/2017	Moradabad/Northern	1	50000
20	23/08/2017	Allahabad/North Central	0	117470000
21	25/08/2017	Mumbai/Western	0	661120
22	07/09/2017	Delhi/Northern	0	30000
23	07/09/2017	Mumbai/Central	0	550000
24	17/09/2017	Alipurduar /Northeast Frontier	0	2510000
25	18/09/2017	Lucknow Junction/North Eastern	0	30600
26	19/09/2017	Lucknow Junction/North Eastern	0	79880
27	27/09/2017	Khurda Road/East Coast	0	67400000
28	01/10/2017	Mumbai/Central	0	2000
29	08/10/2017	Firozepur/Northern	1	5010000
30	13/10/2017	Jodhpur/North Western	0	454000
31	17/10/2017	Jodhpur/North Western	0	229110
32	22/10/2017	Kharagpur/South Eastern	0	90379
33	25/10/2017	Moradabad Division/Northern	1	41000
34	29/10/2017	Jodhpur/North Western	1	0
35	23/11/2017	Lucknow/Northern	4	50000
36	24/11/2017	Jhansi/North Central	4	0
37	24/11/2017	Khurda Road/East Coast	0	22000000
38	28/11/2017	Delhi/Northern	0	80000
39	03/12/2017	Ratlam/Western	0	35000
40	04/12/2017	Bikaner/North Western	0	880422
41	23/12/2017	Hyderabad/South Central	0	5564707
42	31/12/2017	Vadodara/Western	5	0

43	03/01/2018	Dhanbad/East Central	0	50000
44	08/01/2018	Lucknow/Northern	0	19000
45	12/01/2018	Lumding/Northeast Frontier	1	300000
46	20/01/2018	Nagpur/South East Central	0	153200
47	20/01/2018	Agra/North Central	0	355000
48	30/01/2018	Sonepur/East Central	1	0
49	30/01/2018	Khurda Road/East Coast	0	9961000
50	04/02/2018	Waltair/East Coast	0	16576577
51	11/02/2018	Moradabad/Northern	0	3350
52	14/02/2018	Ranchi/South Eastern	0	10320000
53	19/02/2018	Asansol/Eastern	0	4676650
54	03/03/2018	Moradabad/ Northern	1	65000
55	17/03/2018	Sonepur/East Central	0	1500
56	26/03/2018	Pune/Central	0	1300000
	Total		58	335593579

Year	2018-19			
S. No.	Date of Accident	Location (Division/Railway)	No. of persons who lost their lives	Loss/Damage to property in ₹
1	06/04/2018	Varanasi/North Eastern	0	169486
2	11/04/2018	Ranchi/South Eastern	0	1360000
3	14/04/2018	Danapur/East Central	1	10000
4	14/04/2018	Jabalpur/West Central	0	5844000
5	25/04/2018	Jhansi/North Central	1	0
6	25/04/2018	Thiruchirapalli/South ern	0	196009
7	26/04/2018	Varanasi/North	13	0

		Eastern		
8	06/05/2018	Nagpur/Central	1	6686000
9	12/05/2018	Lucknow/Northern	0	22500
10	18/05/2018	Waltair/East Coast	0	713560
11	21/05/2018	Jhansi/North Central	0	1205000
12	23/05/2018	Firozepur/Northern	0	8000000
13	09/06/2018	Delhi/Northern	0	15000
14	10/06/2018	Mumbai/Central	0	197000
15	10/06/2018	Chennai/Southern	0	1644240
16	14/06/2018	Lucknow/Northern	0	43000
17	20/06/2018	Dhanbad/East	0	9470000
		Central		
18	26/06/2018	Lucknow/Northern	0	37500
19	29/06/2018	Adra/South Eastern	0	3250000
20	03/07/2018	Bikaner/North	0	266700
		Western		
21	04/07/2018	Jaipur/North	0	185000
		Western		
22	06/07/2018	Mumbai/Central	0	1205000
23	07/07/2018	Bhavnagar/Western	0	176000
24	15/07/2018	Tinsukia/Northeast	2	110300
		Frontier		
25	20/07/2018	Bangalore/South	0	27000
		Western		
26	23/07/2018	Lucknow/Northern	0	1000000
27	24/07/2018	Ajmer/North Western	0	25000
28	03/08/2018	Salem/Southern	2	15000
29	15/08/2018	Sonepur/East	1	0
		Central		
30	25/08/2018	Lumding/ Northeast	0	44991138
		Frontier		
31	17/09/2018	Bhusawal/Central	0	61600
32	24/09/2018	Lumding/ Northeast	0	22449295
		Frontier		
33	01/10/2018	Lumding/ Northeast	0	164128
		Frontier		
34	04/10/2018	Khurda Road/East	0	1015000
		Coast		
35	10/10/2018	Lucknow/Northern	7	73150048
36	18/10/2018	Ratlam/Western	1	2230956
37	25/10/2018	Trivandrum/Southern	0	135000

38	04/11/2018	Danapur/East	0	78000
		Central		
39	13/11/2018	Kharagpur/South	0	2102500
		Eastern		
40	02/12/2018	Pune/Central	0	630000
41	11/12/2018	Lucknow	0	110000
		Junction/North		
		Eastern		
42	27/12/2018	METRO Kolkata	0	422816
43	03/02/2019	Sonepur/East	6	19205271
		Central		
44	19/02/2019	Dhanbad/East	0	13700000
		Central		
45	23/02/2019	Samastipur/East	0	16238
		Central		
46	26/02/2019	Palghat/Southern	0	453948
47	03/03/2019	Hyderabad/South	0	41931
		Central		
48	05/03/2019	Vijayawada/ South	0	1970195
		Central		
49	11/03/2019	Bhusawal/Central	0	650000
50	20/03/2019	Delhi/Northern	0	75000
51	22/03/2019	Katihar/Northeast	2	60062500
		Frontier		
	Total		37	285588859

Year	2019-20				
S. No.	Date of Accident	Location (Division/Railway)	No. of persons who lost their lives	Loss/Damage to property in ₹	
1	06/04/2019	Howrah/Eastern	0	2208000	
2	10/04/2019	Secunderabad/South Central	0	5364486	
3	26/04/2019	Jhansi/North Central	0	1892000	
4	28/04/2019	Karwar/Konkan	0	310000	
5	07/05/2019	Jabalpur/West Central	0	255000	
6	09/05/2019	Allahabad/North Central	0	2000000	
7	16/05/2019	Delhi/Northern	0	90000	

8	08/06/2019	Sealdah/Eastern	1	0
9	12/06/2019	Nagpur/Central	0	16106000
10	25/06/2019	Waltair/East Coast	3	50949778
11	28/06/2019	Mumbai/Central	0	125000
12	01/07/2019	Mumbai/Central	0	15604000
13	02/07/2019	Danapur/East	0	3000
		Central		
14	16/07/2019	Bhavnagar/Western	0	130279
15	18/07/2019	Mumbai/Central	0	115000
16	24/08/2019	Asansol/Eastern	0	22695713
17	28/08/2019	Allahabad/North Central	0	313000
18	29/08/2019	Delhi/Northern	0	18500000
19	06/09/2019	Delhi/Northern	0	995064
20	20/09/2019	Asansol/Eastern	0	9657744
21	21/09/2019	Malda Town/Eastern	0	6925866
22	01/10/2019	Jhansi/North Central	0	12000
23	02/10/2019	Mumbai/Western	0	135000
24	06/10/2019	Moradabad/Northern	0	10000
25	15/10/2019	Bhopal/West Central	0	100000
26	17/10/2019	Ahmedabad/Western	0	50000
27	01/11/2019	Delhi/Northern	0	21000
28	10/11/2019	Bangalore/South Western	0	44000
29	11/11/2019	Hyderabad/ South Central	1	74697000
30	16/11/2019	Guntakal/ South Central	0	2001791
31	03/12/2019	Guntakal/ South Central	0	29634
32	08/12/2019	Tinsukia/ Northeast Frontier	0	16215943
33	15/12/2019	Allahabad/ North Central	0	518000
34	18/12/2019	Firozepur/Northern	0	1649142
35	25/12/2019	Ajmer/North Western	0	1000
36	03/01/2020	Dhanbad/East Central	0	5000
37	05/01/2020	Deen Dayal Upadhyaya /East Central	0	51000

38	16/01/2020	Khudra Road/East	0	1364730
		Coast		
39	19/03/2020	Secunderabad/South	0	713000
		Central		
40	19/03/2020	Lucknow/Northern	0	12000
	Total		5	269870170

Year	2020-21			
S.	Date of	Location	No. of	Loss/Damage to
No.	Accident	(Division/Railway)	persons who lost their lives	property in ₹
1	10/05/2020	Ratnagiri/ Konkan	0	18317744
2	19/05/2020	Palghat/ Chennai	0	329815
3	20/06/2020	Jabalpur/West Central	1	200000
4	25/06/2020	Vijayawada/South Central	0	8641204
5	30/07/2020	Ahmedabad/ Western	2	0
6	30/08/2020	Agra/North Central	0	10800000
7	20/10/2020	Sonepur/East Central	0	14200
8	22/11/2020	Bhavnagar /Western	1	0
9	18/12/2020	Lumding/ Northeast Frontier	0	834943
10	22/12/2020	Chakradharpur/Sout h Eastern	0	187335518
11	23/12/2020	Solapur/ Central	0	5351000
12	29/12/2020	Waltair/East Coast	0	2280924
13	31/12/2020	Mysore/South Western	0	239876
14	18/01/2021	Lucknow/ Northern	0	1131731
15	19/02/2021	Jaipur/North Western	0	39937000
16	09/03/2021	Bhusawal/ Central	0	2100000
17	13/03/2021	Moradabad/ Northern	0	7000000
18	20/03/2021	Delhi/Northern	0	70000
	Total		4	284583955

Year	2021-22			
S. No.	Date of Accident	Location (Division/Railway)	No. of persons who lost their lives	Loss/Damage to property in ₹
1	22/04/2021	Moradabad/Northern	5	462000
2	26/06/2021	Ratnagiri/Konkan	0	524099
3	09/07/2021	Bilaspur/South East Central	0	43639930
4	14/07/2021	Jodhpur/North Western	0	470776
5	23/07/2021	Hubli/South Western	0	443261
6	15/08/2021	Bhusawal/Central	0	26100000
7	24/08/2021	Danapur/East Central	0	44050000
8	25/08/2021	Rangiya/Northeast Frontier	0	2356386
9	14/09/2021	Khurda Road/East Coast	0	43311672
10	27/09/2021	Mumbai/Central	0	100000
11	10/10/2021	Lumding/Northeast Frontier	0	6054
12	15/10/2021	Allahabad/North Central	0	4300000
13	11/11/2021	Lucknow/Northern	0	10380000
14	12/11/2021	Bangalore/South Western	0	6165448
15	26/11/2021	Jhansi/North Central	0	8500000
16	26/11/2021	Waltair/East Coast	0	59386360
17	03/12/2021	Khurda Road/East	0	1856250
18	17/12/2021	Waltair/East Coast	0	54629355
19	25/12/2021	Ranchi/South Eastern	0	272122137
20	26/12/2021	Izzatnagar/North Eastern	0	3500000
21	11/01/2022	Dhanbad/East Central	3	0
22	13/01/2022	Alipurduar/Northeast Frontier	9	71550000
23	21/01/2022	Agra/North Central	0	11750000

24	25/01/2022	Jodhpur/North	0	18033921
		Western		
25	29/01/2022	Mumbai/Western	0	1212820
26	03/02/2022	Lucknow/Northern	0	19000
27	17/02/2022	Firozepur/Northern	0	3000
28	18/02/2022	Rangiya/Northeast Frontier	0	1131731
29	05/03/2022	Delhi/Northern	0	1500000
30	28/03/2022	Bilaspur/South East Central	0	108320000
	Total		17	795824200

Year	2022-23 (Upto June, 2022)					
S. No.	Date of Accident	Location (Division/Railway)	No. of persons who lost their lives	Loss/Damage to property in ₹		
1	03.04.2022	Bhusawal/Central	1	238900000		
2	15.04.2022	Mumbai/Central	0	1689124		
3	18.04.2022	Ambala/Northern	0	12869372		
	Total		1	253458496		

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