Sl. No.	Name of project (length)	Latest anticipated cost
	New Lines	
1.	Karad-Chiplun (112km)	1200
2.	Pune-Nashik (265 km)	2425
3.	Vaibhavwadi-Kolhapur (107 km)	2750
4.	Indore-Manmad via Malegaon (368 km)	9968
	Doubling	
1.	Itarsi-Nagpur 3rd line (267 km)	2326
2.	Kazipet-Balharshah 3rd line (202 km)	2020
3.	Pune-Miraj-Londa (467 km)	4670
4.	Rajnandgaon-Nagpur 3rd line (228 km)	1273
5.	Hotgi-Kudgi-Gadag (284 km)	1618
6.	Teegaon-Chichonda Ghat Section 3rd line (17 km)	) 141
7.	Wardha-Ballarshah 3rd line (132 km)	630
8.	Jalgaon-Bhusawal 4th line (24 km)	199
9.	Daund-Manmad (236 km)	1876
10.	Manmad-Jalgaon 3rd line (160 km)	854
11.	Wardha-Nagpur 4th line (76 km)	912

[17 March, 2017]

- (c) Railway projects have traditionally suffered on account of law and order, difficult geological conditions in some projects, delay in land acquisition, forestry and wild life clearances etc. However, sufficient fund allotment has been made for projects in the last three budgets commensurate with the physical progress.
- (d) Completion of projects depends on many factors such as land acquisition, forestry and wild life clearances, shifting of services, construction of road over and road under bridges, law and order etc. As many of these factors are not within the control of Railways, it is not feasible to fix timelines for all the projects.

## Implementation of TCAS and TPWS to prevent train accidents

1865. PROF. M. V. RAJEEV GOWDA: Will the Minister of RAILWAYS be pleased to state:

(a) the details of train accidents in last three years;

- (b) whether Government plans to implement the recommendations of Anil Kakodkar Committee on railway safety, if so, the details thereof;
- (c) the details of measures taken by Railways to improve the railway safety and whether the continuous decline in railway depreciation fund has impacted the efforts to improve the railway safety scenario; and
- (d) whether the pilot implementation of Train Collision Avoidance System (TCAS) and Train Protection Warning System (TPWS) was successful in terms of preventing accidents and train collisions, particularly in recent railway derailments?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI RAJEN GOHAIN): (a) Number of consequential train accidents (including accidents at unmanned level crossings (UMLC) caused due to negligence of road vehicle users) occurred during the last three years is 118 in 2013-14,135 in 2014-15,107 in 2015-16 and 99 in the current year up to February, 2017.

(b) Of the 106 recommendations of the High Level Safety Review Committee (Kakodkar Committee), 68 recommendations have been found fully acceptable, 19 partially acceptable and 19 not acceptable to the Ministry of Railways.

Of the accepted recommendations, 31 recommendations have been fully implemented and remaining recommendations are at various stages of implementation.

(c) Improvement in train safety is a continuous process. Constant upgradation of technology is being incorporated in all spheres of Railway operations and infrastructure to prevent accidents and to enhance safety. Safety is accorded the highest priority by Indian Railways and all possible steps are undertaken on a continual basis to prevent accidents and to enhance safety. These include replacement of over-aged assets, adoption of suitable technologies for upgradation and maintenance of track, rolling stock, signalling and interlocking systems, safety drives, greater emphasis on training of officials and inspections at regular intervals to monitor and educate staff for observance of safe practices. Safety devices/systems being used to prevent accidents include complete track circuiting, provision of Block Proving Axle Counters (BPAC), Auxiliary Warning System (AWS), Colour Light LED Signals, Vigilance Control Device (VCD), usage of 60kg rails and Pre-stressed Concrete Sleepers, long rail panels, better welding technology, progressive use of Linke Hofmann Busch (LHB) Coaches, Centre Buffer Couplers with Integral Coach Factory (ICF) Coaches, etc.

Expenditure on safety related activities forms part of both Revenue and Capital

segments of the Budget. The Railways' capacity to generate sufficient internal resources, including DRF, for financing of Plan activities has come under strain for some time. It has, however, not come in the way of deploying sufficient funds for safety related activities. Expenditure on safety has gradually increased from ₹ 30661 crore in 2009-10 to ₹ 63063 crore in 2016-17 (Revised Estimates).

(d) Train Protection Warning System (TPWS) has been provided and is operational on 342 route kilometers over Indian Railways and there has been no accident or collision of trains fitted with the system.

Train Collision Avoidance System (TCAS) developed indigenously is undergoing extended field trials and safety certification in 230 route kilometers over South Central Railway. Here again there are no accident or collision of trains fitted with the system.

## Rail track sabotage cases

1866. DR. PRABHAKAR KORE: Will the Minister of RAILWAYS be pleased to state:

- (a) whether it is a fact that rail track sabotage is on the rise in the country;
- (b) the number of rail track sabotage cases and the number of deaths due to such sabotages in the last three years, year-wise; and
- (c) the immediate action in place and the steps taken by Government to protect rail tracks in the country, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI RAJEN GOHAIN): (a) and (b) No, Sir. During the years 2014, 2015 and 2016, 45, 53 and 51 incidents of suspected rail track sabotage have been reported respectively over Indian Railways. However, no death due to rail track sabotage has been substantiated during the years 2014, 2015 and 2016.

(c) Policing on Railways being a State subject, prevention of crime, registration of cases, their investigation and maintenance of law and order in Railway premises as well as on running trains and security of railway tracks, tunnels and bridges are the statutory responsibility of the State Governments, which they discharge through Government Railway Police (GRP)/Civil Police. However, Railway Protection Force (RPF) supplements the efforts of GRP by providing better protection and security of passengers and passenger area and for matters connected therewith. Proper coordination at all levels is being maintained by the Railways with Ministry of Home Affairs (MHA), State Governments, Central/State Intelligence Agencies and State Police/GRP authorities for