

(f) and (g) The deployment of Anti-Collision Device (ACD) after initial trials, was done on Northeast Frontier Railway (NFR) covering 1736 Route KMs. This was a single/double line non-electrified Broad Gauge section. Based on experience of NFR, to improve reliability and dependability of ACDs and to test its functioning on multiple lines as well as electrified routes, the specification and design configuration were revised and the system as evolved was tried on the electrified multiple lines of automatic signalling section of Southern Railway in 2010-2011. Operation and technical problems noticed during Southern Railway trials as well as the problems not yet resolved on Northeast Frontier Railway are being looked into and further proliferation of ACD shall be possible only after these problems are resolved comprehensively by Konkan Railway Corporation Limited.

Train Protection and Warning System (TPWS) has been provided on 50 Route Kms. suburban section on Southern Railway and is in service trials on 200 Route Kms. on North Central Railway. Works for TPWS have been sanctioned on 3397 Route Kms. spread over eight Zonal Railways.

Projects under NF Railway

4800. SHRI KUMAR DEEPAK DAS: Will the Minister of RAILWAYS be pleased to state:

(a) the details of construction of double line between New Jalpaiguri and New Bongaigaon under Northeast Frontier (NF) Railway and the date of completion;

(b) the details of construction of double track railway line between New Bongaigaon and Guwahati *via* Rangia and the date of completion; and

(c) the details of proposal for construction of double track between Guwahati and Dibrugarh under NF Railway?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI BHARATSINH SOLANKI): (a) to (c) Double line already exists between New Jalpaiguri and New Bongaigaon. There exist two broad gauge lines between New Bongaigaon and Guwahati on different alignments. Further, gauge conversion of Rangiya-Murkongselek along with completion of Bogibeel Bridge will provide an alternative route to Dibrugarh/Tinsukia *via* the North Bank line. Survey for doubling of Guwahati-Lumding-Tinsukia-Dibrugarh line has been completed. Proposal will be further considered after scrutiny of survey report.

Use of solar energy in train coaches

4801. SHRI T. M. SELVAGANAPATHI: Will the Minister of RAILWAYS be pleased to state:

- (a) whether it is a fact that Railways have decided to use solar energy for train coaches;
- (b) if so, the details thereof;
- (c) whether it is also a fact that Railways have conducted experimental trials in this regard; and
- (d) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI BHARATSINH SOLANKI): (a) and (b) Yes, Sir. Three coaches with solar lighting system are under trial. On evaluation of trial further study of economic viability will be undertaken.

(c) and (d) Solar lighting based train lighting system has been provided in two narrow gauge coaches plying on Pathankot-Jogindernagar Route in Kangra Valley section and one narrow gauge coach plying on Kalka-Shimla section on trial basis.

Decline in passenger revenue

4802. SHRI Y. S. CHOWDARY: Will the Minister of RAILWAYS be pleased to state:

- (a) whether it is a fact that passenger revenue ratio has declined during last three years;
- (b) if so, the details thereof and the reasons therefor; and
- (c) the remedial steps/measures taken by Government in this regard?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI BHARATSINH SOLANKI): (a) No, Sir. Passenger revenue ratio has not declined during last three years. The position in this regard is as under:-

	(Rs. in crores)		
	2009-10	2010-11	2011-12 (Approx.)
Total earnings	87105	94525	103157
Passenger earnings	23488	25793	28268
%age of passenger earning with Total earnings	26.97	27.29	27.40

(b) and (c) The average growth in passenger earnings and number of passengers carried has been around 9.32% and 5.64% respectively during the last three years. Indian Railways, however, continuously strive to attract more passengers with a view to have increased earnings by introducing new trains, by enhancing load of more popular trains, extending/increasing frequency of existing