- Delegation of Powers to the field officers for tenders and estimates: The zonal railways have now been delegated full powers with respect to works contracts. Full power has been given to General Managers of Zonal Railways with respect to sanctioning of estimates. This has also resulted in cutting down time for estimate sanctions and tenders.
- (iv) Institutional financing by tying up loan with M/s Life Insurance Corpration of India Limited for ₹ 1.5 lac crore for assured funding of viable projects has increased Railways' capacity for committed fund provision for essential projects.
- (v) Further, to strengthen capacity augmentation over Indian Railways, 166 New Line Projects covering a length of 18,592 kms, 39 Gauge Conversion Projects of 8,470 km and 253 Doubling Projects covering a length of 21,337 km have been sanctioned as on 1.4.2016. Besides, two Dedicated Freight Corridors (DFC), i.e. Western DFC (Jawaharlal Nehru Port to Dadre-1504 km.) and Eastern DFC (Ludhiana to Dankuni-1856 km) have been taken up for implementation.

## Derailment as cause of train accidents and casualties

3473. SHRI RAM KUMAR KASHYAP: Will the Minister of RAILWAYS be pleased to state:

- whether derailment is the second highest reason for consequential train accidents and casualties, the details thereof;
- (b) the total number of train accidents occurred between 2003-04 to 2016-17 and how many of those accidents were due to derailment;
  - (c) whether reasons for derailment is defect in the track/rolling stock;
  - (d) the steps taken to maintain tracks in safe and fit condition;
  - the laid down safety standards of rail tracks;
- the total track length and how many kilometers of tracks should be renewed (f) annually; and
  - the total track length renewed during the last five years, year-wise?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI RAJEN GOHAIN): (a) and (b) Yes, Sir. There were 2377 consequential train accidents (including accidents occurred at unmanned level crossings (UMLC) caused due to the negligence of road vehicle users) over Indian Railways during the period from 2003-04 to 2016-17 (upto February, 2017). Out of these, 1273 consequential train accidents (about 53%) are on account of derailments.

Number of Consequential train accidents and derailments during the period from 2003-04 to 2015-16 and the current year from 1st April, 2016 to 28th February, 2017 alongwith the casualties are given below:

| Year              | Total No. of consequential train accidents | of conse<br>quential | of derailments | Casualties in the consequential train derailments |         |
|-------------------|--|----------------------|----------------|---|---------|
|                   | (including accidents at UMLCs)             | train derailme       | nts (%)        | Killed  | Injured |
| 2003-04           | 325  | 202                  | 62.2           | 90  | 190     |
| 2004-05           | 234  | 138                  | 58.9           | 15  | 117     |
| 2005-06           | 234  | 131                  | 55.9           | 148   | 191     |
| 2006-07           | 195  | 96                   | 49.2           | 8   | 130     |
| 2007-08           | 194  | 100                  | 51.5           | 13  | 145     |
| 2008-09           | 177  | 85                   | 48.0           | 10  | 142     |
| 2009-10           | 165  | 80                   | 48.5           | 14  | 91      |
| 2010-11           | 141  | 80                   | 56.7           | 4   | 55      |
| 2011-12           | 131  | 55                   | 41.9           | 73  | 367     |
| 2012-13           | 122  | 49                   | 40.2           | 5   | 159     |
| 2013-14           | 118  | 53                   | 44.9           | 6   | 93      |
| 2014-15           | 135  | 63                   | 46.7           | 104   | 265     |
| 2015-16           | 107  | 65                   | 60.7           | 36  | 100     |
| 2016-17 (01.04.20 | 016  |                      |                |   |         |
| to 28.02.2017)    | 99   | 76                   | 76.7           | 196   | 327     |
| Total             | 2377                                       | 1273 Ave             | rage-53%       |   |         |

- (c) There have been various reasons for train derailments. Defect in tracks and rolling stocks is also one of the factors.
- (d) Steps have been taken/being taken to maintain railway tracks in safe condition as under:
  - In order to improve safety, modern track structure consisting of Prestressed Concrete Sleeper (PSC), 60kg, 90 or higher Ultimate Tensile Strength (UTS) rails, fanshaped layout turnout on PSC sleepers, Steel Channel Sleepers on girder bridges is used while carrying out primary track renewals.
  - Long rail panels of 260 M/130M length are being manufactured at the steel plant or in Flash Butt Weld plants to minimize number of Alumino Thermit joints in the track.
  - Provision of Thick Web Switches (TWS) is planned for all important routes
    of IR. To expedite provision of TWS, procurement of Thick Web Switches
    has been decentralized to zonal railways.
  - Cold weather patrolling of the railway tracks is done during the coldest part
    of the night in cold months of the year to look out for weld/rail fractures
    for ensuring safety.
- (e) Track renewal is a continuous activity, which is undertaken as and when a stretch of track becomes due for renewal on the basis of criteria laid down in Indian Railway Permanent Way Manual which are as under:
  - (i) Incidence of rail fractures/failures
  - (ii) Wear on rail
  - (iii) Maintainability of track to prescribed standards
  - (iv) Expected Service Life in terms of Gross Million Tonnes carried
  - (v) Plan based renewals
- (f) and (g) Railway tracks are replaced through track renewal works, which are sanctioned every year in the budget and execution of track renewal works is an ongoing process. Track Renewal works are planned in advance every year and their execution is prioritized according to the condition of track and overall availability of funds ensuring all the time that track is in a proper condition for safe running of trains. In case, any stretch of track is not renewed in time due to various reasons including

scarcity of funds, material etc., suitable speed restrictions are imposed to ensure safe running of trains. As on 31.03.2016, total track length on Indian Railways is 1,19,630 kilometres and details, of track renewed during the last five years and the current year are as under:

| Year                  | Track Renewed (in Kms) |
|-----------------------|------------------------|
| 2011-12               | 3300                   |
| 2012-13               | 3296                   |
| 2013-14               | 2885                   |
| 2014-15               | 2424                   |
| 2015-16               | 2794                   |
| 2016-17               | 2260                   |
| (Upto February, 2017) |                        |

## Illegal occupation of railway land/assets

3474. SHRI D. KUPENDRA REDDY: Will the Minister of RAILWAYS be pleased to state:

- (a) the total Railway land/assets under illegal occupation in the country;
- (b) the effective steps taken by the Government to prevent such illegal occupation of railway land and to get back the encroached land; and
- (c) whether Government is preparing any road-map to check such incidents in future and if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI RAJEN GOHAIN): (a) to (c) At present, out of 4.73 lakh hectare land assets available with Indian Railways, approximately 879.51 hectare (0.18%) land is under encroachment.

Most of the encroachments are in the approaches of the Stations in Metros and big cities. For these encroachments, Railways carry out regular surveys and take action for their removal. If the encroachments are of temporary nature (soft encroachment) in the shape of jhuggies, jhopries and squatters, the same are got removed in consultation with and the assistance of Railway Protection Force and local civil authorities. For old encroachments, where party is not amenable to persuasion, action is taken under Public Premises (Eviction of Unauthorized Occupants) Act, 1971 (PPE Act, 1971), as amended from time to time. Actual eviction of unauthorized occupants is carried out with the