

**GOVERNMENT OF INDIA  
RAILWAYS  
LOK SABHA**

UNSTARRED QUESTION NO:4177  
ANSWERED ON:21.04.2005  
PRE-STRESSED CONCRETE SLEEPERS  
Singh Shri Sugrib

**Will the Minister of RAILWAYS be pleased to state:**

- (a) whether any private firm has come up with a new design for the Pre-stressed Concrete Sleepers;
- (b) if so, whether Research, Design and Standards Organization has undertaken scrutiny of adequacy of the design;
- (c) if so, the findings thereof; and
- (d) the decision taken by the railways in the matter?

**Answer**

MINISTER OF STATE IN THE MINISTRY OF RAILWAYS ( SHRI R. VELU )

(a) & (b) : Yes, Sir.

(c) Research, Design and Standards Organization (RDSO) gave its technical clearance for undertaking field trial of the said new design and left its commercial assessment to Railway Board.

(d) Railway Board decided to undertake trial of the said design in a stretch of 3 KMs each on East Coast Railway, Northern Railway and West Central Railway in the year 2002 without any financial commitment to the firm. However, in the year 2005, in view of reduced factor of safety (approx 11% lower than the existing design), reduced load factor (approx. 17.5% lower than the existing design), reduced rail seat bottom failure moment (approx 18.2% lower than the existing design), lower moment of resistance etc. (i.e. lower strength as compared to the existing design in almost all parameters of strength when compared taking same basic assumption for both) and wide variation in field in terms of loading, ballast cushion etc., Railway Board has decided to review the said decision of trial of new design.