

**GOVERNMENT OF INDIA  
RAILWAYS  
LOK SABHA**

UNSTARRED QUESTION NO:1928  
ANSWERED ON:05.08.2010  
RDSO  
Majhi Shri Pradeep Kumar

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

- (a) whether the Railways have set up modern and versatile engineering software and computer workstations at the Research Designs and Standards Organization Directorate;
- (b) if so, the details thereof;
- (c) whether the training to handle the new technology for the officials of RDSO has been undertaken;
- (d) if so, the extent to which officials will be able to handle the new technology smoothly; and
- (e) the details of the expenditure incurred in setting up of new technology at RDSO?

**Answer**

MINISTER OF STATE IN THE MINISTRY OF RAILWAYS(SHRI K. H. MUNIYAPPA)

- (a) to (e): A Statement is attached.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF UNSTARRED QUESTION NO.1928 BY SHRI PRADEEP MAJHI TO BE ANSWERED IN LOK SABHA ON 05.08.2010 REGARDING RDSO

- (a) Yes, Madam.

- (b) Details of hardware & software are given below:

(I) Details of Software

S.No. Name of Software Purpose

1. SAS Statistical Analysis of Failure  
Pattern of different components.
2. LS-DYNA Simulation of behaviour of coaches under crash
3. NUCARS Simulation of riding behaviour of vehicle under design
4. AutoCAD Drafting tool for drawings in 2D and 3D by computers
5. Fire Simulation For optimizing layout of coaches  
Software to minimize risk of life.
6. TLAXIS Formation design and Tunnel design.
7. Nastran Finite Element Analysis Tool

8. MS Project    Project Management Tool  
Professional 2007
9. SPSS 16    Statistical Analysis for Development of Psychological Tests
10. Systat-12    Statistical Analysis for development of Psychological Tests.
11. X-caliber    Item Response Theory
12. UGNX    Finite Element Analysis Tool
13. Hypermesh Software FEM Simulation
14. CFD Software    Computational Fluid Dynamics Software
15. Fatigue Analysis    To assess the fatigue life of the component  
Software
16. ADAMS RAIL Software Simulation of riding behaviour of vehicle under design
17. LIBSYS    Library Management Software
18. STAAD PRO Software Analysis of Structures
19. GEOSLOPE    Slope Stability Analysis for Track Formation.

**(II) Details of Hardware**

# High Performance Computing Cluster – 1 No.

# Servers – 14 Nos.

# Workstations – 20 Nos.

# Computer – 1130 Nos

# LAN connectivity has been given for effective use of above software & hardware.

(c) & (d) Yes, Madam. Number of staff trained on these specialised softwares is 250. Some of the staff are trained by the software & hardware providers and others are trained In-house. The trained officials are handling new technology smoothly.

(e) Approximate expenditure incurred for developing these technologies is Rs.15 Crore.