

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**LOK SABHA
UNSTARRED QUESTION NO.607
TO BE ANSWERED ON 27.04.2016**

MoU BETWEEN RAILWAYS AND ISRO

**607. SHRI BIDYUT BARAN MAHATO:
SHRI KUNWAR HARIBANSH SINGH:
SHRI PRAHLAD SINGH PATEL:
SHRI GAJANAN KIRTIKAR:
SHRI ASHOK SHANKARRAO CHAVAN:
SHRIMATI KOTHAPALLI GEETHA:
DR. SUNIL BALIRAM GAIKWAD:
SHRI SUDHEER GUPTA:
SHRI S. R. VIJAYAKUMAR:**

Will the Minister of RAILWAYS be pleased to state:

- (a) whether the Railways has signed any Memorandum of Understanding (MoU) with the Indian Space Research Organisation(ISRO) for developing applications in the field of remote sensing and graphic information system;**
- (b) if so, the details thereof and the aims and objectives of the said MoU;**
- (c) the terms and conditions of the MoU and the time by which the MoU is likely to be made effective;**
- (d) the expenditure to be paid by the Railways to ISRO for this purpose; and**
- (e) the other steps taken/being taken by the Railways to provide accurate information about all trains to the passengers?**

ANSWER

**MINISTER OF STATE IN THE MINISTRY OF RAILWAYS
(SHRI MANOJ SINHA)**

(a): Yes, Madam. Railways have recently signed Memorandum of Understanding (MoU) with Indian Space Research Organisation (ISRO) for developing applications in the field of Remote Sensing and Geographic Information System.

(b) & (c): The aims and objectives of the MoU is to develop applications and services in tune with the requirements of Indian Railways such as:-

i) Develop an advance warning system at Unmanned Railway Crossings for road users.

ii) Mapping of Indian Railway assets through Geospatial technology.

iii) Develop paperless unreserved ticketing solution based on geo-fencing of station area.

iv) Developing Real Time Train Information System by using Communication Satellite Services.

v) Setting up of “BHUVAN” node in Indian Railways to internalize the use of BHUVAN geospatial solutions by Railways.

vi) Meet Indian Railways satellite based communication requirements.

vii) The MoU has been signed on March 17th, 2016 and has come into force.

(d): For services being currently provided by BHUVAN or envisaged in future for Government of India, no charges shall be levied. For communication services, satellite assisted Navigation etc. charges would be applicable as per mutual agreement and based on pricing policies of the Government.

(e): A project called Real-time Train Information System (RTIS) to track trains on real time basis alongwith dissemination of train running information to rail users has been sanctioned.
