

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
STARRED QUESTION No. *49**

TO BE ANSWERED ON WEDNESDAY, DECEMBER 02, 2015

DOPPLER RADAR SYSTEM

***49. SHRI BAIJAYANT JAY PANDA:**

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) the details of the Doppler Radar Systems (DRSs) installed in various parts of the country at present as well as the timelines drawn for commissioning latest DRSs;**
- (b) whether various DRSs including the one in Delhi is not functioning for a long time;**
- (c) if so, the details thereof and the reasons therefor; and**
- (d) the funds incurred on their installation and recent repair as well as arrangements made for annual maintenance contracts for their smooth functioning?**

**ANSWER
MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(DR. HARSH VARDHAN)**

(a) to (d): A Statement is laid on the Table of the House.

**STATEMENT LAID ON THE TABLE OF THE LOK SABHA IN REPLY (a) to (d) TO
STARRED QUESTION NO. *49 REGARDING “DOPPLER RADAR SYSTEM” TO BE
ANSWERED ON WEDNESDAY, DECEMBER 02, 2015**

- (a) As on today, 3 Nos. of polarimetric Doppler Weather Radar (DWR) systems at Delhi- Lodi Road , Jaipur and Srinagar respectively, are functional along with 17 Nos. non-polarimetric DWR systems, respectively at Chennai, Sriharikota, Machilipatnam, Visakhapatnam, Kolkata, Mumbai, Hyderabad, Nagpur, Patiala, Delhi Palam, Lucknow, Patna, Mohanbari, Agartala, Bhopal , Paradip and Karaikal in other parts of the country. DWRs of non-polarimetric nature at Goa, Bhuj , Gopalpur and Kochi are under installation. Additional DWRs will be placed in a phased manner based on resolution of issues related to land and associated infrastructure in various parts of the country.
- (b) Yes Madam.
- (c) DWRs installed at New Delhi (Palam), Hyderabad & Nagpur are non functional for some time. However, DWR located at Lodhi Road is functional during the period for severe weather monitoring over Delhi region.

At times radars remain non-functional due to failure of support systems/critical spares/parts. As and when non-functionality scenario develops, the said 24X7 severe weather surveillance is carried out through half-hourly updates of geostationary satellites (like INSAT-3D) and other polar orbital satellites covering India and its neighborhood. Although, endeavors are always made to ensure the uninterrupted functionality of various observing systems including DWRs over land and ocean, systems become dysfunctional at times. Prioritized action will always be launched so as to make the system functional with minimum break-downs to the extent possible.

- (d) The funds incurred on procurement of each radar of various brands is given below:

S.No	Brands	Numbers of Radar Procured	Cost of Procurement of each radar (in Rs)
1.	Metstar Beijing DWR	12	9.2 Crores
2.	Gematronik DWR	4	18 Crores
3.	Vaisala C band DWR	2	8.5 Crores
4.	S Band DWR BEL India	5	12.5 Crores
5.	X Band DWR ECIL, India	1	2.44Crores

These DWRs have been maintained by the Earth System Science Organisation-India Meteorological Department (ESSO-IMD) staff only and no cost has been incurred on repairs. Efforts are on for exploring the option of outsourcing the Annual Maintenance Contract of DWRs.
