GOVERNMENT OF INDIA MINISTRY OF COMMUNICATIONS DEPARTMENT OF TELECOMMUNICATIONS

LOK SABHA UNSTARRED QUESTION NO. 2104 TO BE ANSWERED ON 12TH MARCH, 2025

INTRODUCTION OF 6G SPECTRUM TECHNOLOGY

2104. SHRI DILESHWAR KAMAIT:

Will the Minister of COMMUNICATION be pleased to state:

- (a) whether the Government has plans to introduce 6G spectrum technology to enhance high speed communication systems in the country and if so, the details thereof and if not, the reasons therefor:
- (b) whether the Government has any proposal for exclusive exploitation and use of 6G spectrum in the communication systems under its various departments and if so, the details thereof; and
- (c) the outcome expected from the exploitation of 6G spectrum in the country?

ANSWER

MINISTER OF STATE FOR COMMUNICATIONS AND RURAL DEVELOPMENT (DR. PEMMASANI CHANDRA SEKHAR)

- (a) Currently, the 6G technology is under development phase at international level and is expected to be available by 2030. Hon'ble Prime Minister has released India's 6G vision "Bharat 6G Vision" document on March 23, 2023 which envisaged India to be a frontline contributor in design, development and deployment of 6G technology by 2030. Bharat 6G Vision is based on principles of affordability, sustainability and ubiquity. Also, Department of Telecom has facilitated setting up of 'Bharat 6G Alliance' which is an alliance of domestic industry, academia, national research institutions and standards organisations to develop action plan according to the Bharat 6G Vision.
- (b) & (c) The frequency bands 4400-4800 MHz, 7125-8400 MHz (or parts thereof), and 14.8-15.35 GHz are being studied in International Telecommunication Union (ITU) for the use of International Mobile Telecommunications (IMT). Based on the outcome of these studies, a decision on identification of these bands for IMT use will be taken at World Radio communication Conference in year 2027. These frequency bands are to be considered for 'IMT2030', also known as '6G'.

Presently the 600 MHz, 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300 MHz & 26 GHz are identified for IMT based services in this country. The TSPs who have acquired spectrum in these bands after paying the auction determined price can deploy any technology including 2G/3G/4G/5G/6G, based on the availability of device ecosystem.
