

**GOVERNMENT OF INDIA  
MINISTRY OF COMMUNICATIONS  
DEPARTMENT OF TELECOMMUNICATIONS**

**LOK SABHA  
UNSTARRED QUESTION NO.4395  
TO BE ANSWERED ON 29<sup>TH</sup> MARCH, 2017**

**WIRELESS NETWORK IN URBAN AREAS**

4395. SHRI Y.V. SUBBA REDDY:

Will the Minister of COMMUNICATIONS be pleased to state:

- (a) whether it is not easy to design wireless networks in urban areas in view of various complexities, etc.;
- (b) if so, whether the Government proposes to use drones to create an accurate 3D model to design wireless network, particularly for 5G wireless mobile services in a cost effective manner and if so, the details thereof; and
- (c) the present status of introducing 5G services in the country?

**ANSWER**

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

(a) to (c) The design of wireless network is a complex process that depends on various parameters like terrain, propagation model, antenna site, location, height, direction, down tilt, radiated power, frequency plan, coverage and capacity required etc. The Telecom Service Providers (TSPs) deploy their wireless network and designing of such networks is done by them adopting most advanced technology and processes. The TSPs are free to use drones to design wireless networks subject to compliance of prevailing regulations/ restrictions.

The 5G (Fifth Generation) technology also known as International Mobile Telecommunication-2020 (IMT-2020) is still in the development stage and only limited trials have been conducted across the world and therefore no timeframe has been prescribed for introduction of 5G technology in the country.

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