

**GOVERNMENT OF INDIA
MINISTRY OF CIVIL AVIATION
RAJYA SABHA
UNSTARRED QUESTION NO : 2910
(TO BE ANSWERED ON THE 27th March 2023)**

RISKS OF 5G ON AIR TRAVEL

2910. SMT VANDANA CHAVAN

Will the Minister of CIVIL AVIATION be pleased to state:-

- (a) whether Government has conducted any study to gauge the potential effects of 5G signals on safe flight operations;
- (b) if so, the details of the same including the risks involved in air travel; and
- (c) whether Government will suspend the 5G operations until risk of air travel is not eliminated?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF CIVIL AVIATION

(GEN. (DR) V. K. SINGH (RETD))

(a) & (b) Directorate General of Civil Aviation (DGCA) has not conducted any study on the potential effect of 5G signals on safe civil aircraft operations. However, DGCA has, reviewed the studies/action undertaken by various countries during the launch of 5G on the potential interference of 5G C-band signals on radio altimeters installed on the aircraft and risk involved in air travel. The review has shown that there may be a likelihood of interference in the functioning of Radio Altimeter installed on aircraft due to C-band 5G signals which may affect vital aircraft systems and can lead to unsafe aircraft operations.

(c) Based on the technical inputs received from the OEMs, while there is a guard band available in the frequency band allocated to 5G transmissions for International Mobile Telecommunications (IMT) in India, there may be a possibility of interference with aircraft radio altimeters which may affect safe aircraft operations. In order to minimise the interference, the Telecom Service Providers (TSP) have been advised to ensure the following while placing 5G towers in the vicinity of airports:

- (i) Establishing safety and buffer zones in the vicinity of airports.
- (ii) Restricting power levels of C-Band 5G transmissions around the airports.
- (iii) Tilt of 5G base stations to an extent such that the 5G emissions do not interfere with radio altimeters.
