

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE**

LOK SABHA

UNSTARRED QUESTION NO. 53

TO BE ANSWERED ON WEDNESDAY, DECEMBER 07, 2022

INDIAN REGIONAL NAVIGATION SATELLITE SYSTEM

53. SHRI LAVU SRI KRISHNA DEVARAYALU:

Will the PRIME MINISTER be pleased to state:

- (a) whether the usage of Indian Regional Navigation Satellite System (NaviC system) has increased in India;**
- (b) if so, the steps taken to ensure that manufacturers of mobile phones add compatibility of the NaviC system in the devices so they can process the signals;**
- (c) whether the NaviC has been able to compete with Google Maps or other non-Indian Global Positioning Systems and if so, the details thereof;**
- (d) whether the current version of NaviC is only compatible with the L5 and S bands, if so, the details thereof;**

- (e) whether the current version has been able to penetrate the civilian sector, if not, the reasons therefor;**
- (f) the steps taken to add the L1 band into NavIC for civilian navigational use; and**
- (g) the other steps taken by the Government to launch more satellites in space to expand the reach of NavIC to the global level?**

ANSWER

**MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC
GRIEVANCES & PENSIONS AND IN THE PRIME MINISTER'S OFFICE**

(DR. JITENDRA SINGH):

- (a) Yes, Sir. The usage of NavIC system has increased in India. NavIC finds utilisation in national projects like public vehicle safety, power grid synchronisation, real-time train information system, fishermen safety, etc. Other upcoming initiatives viz. common alert protocol based emergency warning, time dissemination, geodetic network, unmanned aerial vehicles, etc. are in the process of adopting NavIC system.**
- (b) Many mobile phone models in the country are already having NavIC compatibility. Department of Space is constantly engaged with the manufacturers of mobile phones and chipsets to support them technically for adding NavIC compatibility in their devices.**

- (c) NavIC system provides signals for positioning. Applications like Google Maps can utilise the position obtained through NavIC or other similar system and display it on a map or other user interface for easy visualisation. Signals provided by NavIC system are agnostic to the end-user application. Hence, a mobile phone which has NavIC compatibility automatically uses NavIC signals when showing position on maps. Performance of NavIC system is at par with the other positioning systems.**
- (d) Yes, Sir. The current version of NavIC is compatible with L5 and S bands. This is as per the international frequency coordination and compatibility.**
- (e) Yes, Sir. The current version has been able to penetrate the civilian sector. The addition of signal in L1 band will help in faster penetration in the civilian sector.**
- (f) The next satellites starting from NVS-01 onwards will have an L1 band for civilian navigational use.**
- (g) Government is working to launch replacement satellites NVS-01 onwards for the current seven satellite constellation. Simultaneously, studies are underway to work out suitable configuration to expand the reach of NavIC beyond its current coverage.**
