GOVERNMENT OF INDIA

DEPARTMENT OF SPACE

LOK SABHA

UNSTARRED QUESTION NO. 1793

TO BE ANSWERED ON WEDNESDAY, JULY 29, 2026

OPERATIONAL STAUTS OF NAVIC CONSTELLATION

1793. SHRI SHYAMKUMAR DAULAT BARVE:

Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that the failure of the atomic clock onboard the Indian Regional Navigation Satellite System (IRNSS-1F) satellite has reduced the operational capacity of the NavIC constellation to only three fully functioning satellites and if so, the details thereof;

(b) whether this reduction drastically compromises the system's positional accuracy, timing, and structural telemetry, leaving the Armed Forces with an inadequate standalone navigation grid and if so, the details thereof; and

(c) whether this systemic vulnerability places India's operational planning and real-time mapping at risk and if so, the details thereof including the immediate contingency satellite deployments and alternative tracking grids mobilised to insulate frontline tactical networks?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND IN THE PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH):

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(a) & (b)

After completion of mission life (10 years) of IRNSS-1F, presently the NavIC constellation has three satellites for providing PNT services viz., IRNSS-1B, IRNSS-1I and NVS-01. To provide basic positioning service, minimum four operational satellites are required in orbit. Hence, the NavIC constellation cannot provide standalone positioning service, however timing service is functional. Armed Forces are using multi constellation GNSS including NavIC at present to promote operational services.

(c) Since NavIC is being used in multi constellation environment for most of the use-cases, there is no vulnerability for the users. Next NavIC satellite viz., NVS-03 is ready for launch and two more satellites viz., NVS-04 & NVS-05 are in advanced stage of realization.

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