

GOVERNMENT OF INDIA
MINISTRY OF CIVIL AVIATION
RAJYA SABHA
UNSTARRED QUESTION NO : 2424
(TO BE ANSWERED ON THE 8th August 2022)

**IMPROVING AIR NAVIGATION INFRASTRUCTURE IN THE
COUNTRY**

2424. SHRI AYODHYA RAMI REDDY ALLA

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

- (a) the details of air navigation infrastructure developed in the country during the year 2021- 22;
- (b) the details of advanced air navigation technology adopted and used in the country; and
- (c) whether Government has taken any steps to improve the air navigation infrastructure and develop indigenous technologies with respect to the same, if so, the details thereof and if not, the reasons therefor?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF CIVIL AVIATION

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

(a): Airports Authority of India (AAI) has installed/commissioned Air Navigational Infrastructure at various airports as per requirement during the year 2021-22 e.g. Instrument Landing System (ILS) at Jharsuguda, Hubballi and Belgavi airports, Doppler Very High Frequency Omni Range (DVOR) at Pakyong, Lengpui, Kadapa and Tuticorin airports, RADAR at Bengaluru and Jaipur airports, Automation System and Airport Surface Movement & Guidance Control System (ASMGCS) at Kochi Airport, Automatic Dependent Surveillance Broadcast (ADS-B) at Kolkata, Ranchi, Bengaluru, Gulbarga and Raipur airports.

(b) & (c): Upgradation/ Modernisation of infrastructure at airports and the navigation technologies is a continuous process and is undertaken by AAI and other Airport Operators from time to time depending on the availability of land, commercial viability, socio-economic considerations, traffic demand / willingness of airlines to operate to/ from such airports. AAI has installed state-of the art Air Traffic Control Automation system at 44 airports across India for safe and efficient traffic management. Air Traffic Flow Management System is used to manage flow of nationwide air traffic for balancing the demand and capacity of major airports and managing the airspace across the country.

GAGAN (GPS Aided Geo Augmented Navigation) is an Indian satellite based navigation system, developed jointly by Airports Authority of India (AAI) and Indian Space Research Organisation. It is capable of providing Navigation Services for departure, en- route and landing operations to suitably equipped aircraft. The system provides very accurate satellite signals with high level of integrity for precision air navigation over the entire Indian airspace. Airports Authority of India (AAI) has entered into an MoU with Bharat Electronics Limited (BEL) on 24th March 2022 for the collaborative development of indigenous ASMGCS.
