

**GOVERNMENT OF INDIA
CIVIL AVIATION
LOK SABHA**

UNSTARRED QUESTION NO:461
ANSWERED ON:14.07.2014
AIR TRAFFIC SERVICES
Kateel Shri Nalin Kumar

Will the Minister of CIVIL AVIATION be pleased to state:

- (a) whether all the Air Traffic Services (ATS) routes are covered by the surveillance radars and if so, the details thereof;
- (b) if not, the details of ATS routes which are not covered by the surveillance radars along with the measures being taken/implemented by the Airports Authority of India (AAI) in this regard;
- (c) the details of Indian air traffic control capacity per hour for each airport and air space;
- (d) whether the AAI is contemplating to make some changes in the air traffic control system with a view to enhancing operational capacity of airports; and
- (e) if so, the details thereof along with the time by which these changes are likely to be made?

Answer

Minister of State in the Ministry of CIVIL AVIATION (Shri G. M. Siddeshwara)

(a) & (b): Yes Madam. All the ATS routes in Indian continental airspace are covered by surveillance radar. The details of surveillance radar are as under:

(i) Primary Surveillance Radar (PSR) with a range of 220NM and co-located Monopulse Secondary Surveillance Radar (MSSR) with a range of 250NM are operational at Delhi and Mumbai airports.

(ii) Primary Surveillance Radar (PSR) with range of 60 NM and co-located with (MSSR) with a range of 250 NM are operational at the Ahmedabad, Bengaluru, Chennai, Delhi, Guwahati, Hyderabad, Kolkata, Mumbai, Thiruvananthapuram and Cochin airports.;

(iii) MSSR with a range of 250NM is operational at Beharampur, Chennai(Porur), Kolkata (Badu), Mangalore, Nagpur, Varanasi, Jharsuguda, Bhopal, Udaipur, Porbandar, Vizag, Bellary and Katihar airports/locations.

(c): Air Traffic Control capacity at an airport/airspace depends upon airport infrastructure such as number of Runways/ Taxiways/ parking space and fleet mix operating at an airport.

(i) In Delhi, by using all the three runways, the optimum capacity achieved is 75 movements per hour.

(ii) In Mumbai, with a single runway configuration, the optimum capacity achieved is 46-48 movements per hour.

(iii) At the airports, which are served by single runway, and where with required airport infrastructure, the capacity is 30 movements per hour. These airports are Ahmedabad, Bengaluru, Chennai, Guwahati, Hyderabad, Kolkata, Thiruvananthapuram and Cochin.

(iv) At other airports, the capacity is 16 movements per hour.

With respect to airspace capacity, with ANS infrastructure improvements catering for complete surveillance and with implementation of Reduced Vertical Separation Minima catering for stacking of aircraft at levels separated by 1000 feet, airspace capacity has been significantly enhanced to handle the present and forecast air traffic.

(d) & (e): Upgradation and modernisation of ATC depends upon technological advancement in the field of Air Navigation which is a continuous process and Airports Authority of India adopts new technologies like Air Traffic Flow Management to enhance operational capacity of airports.