GOVERNMENT OF INDIA MINISTRY OF CIVIL AVIATION

Rajya Sabha

STARRED QUESTION NO.: 244

TO BE ANSWERED ON THE 24th March 2025

DIGITAL ADVANCEMENTS IN AVIATION SECTOR

244. DR. SIKANDER KUMAR

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

- (a) whether Government has launched any digital license to modernize and enhance the safety, security and efficiency of civil aviation sector;
- (b) if so, the details thereof;
- (c) the details of other digital advancements made in aviation sector for airline operations; and
- (d) the steps taken for the development of digital twin systems for airports and also to strengthen India's position as a global leader in aviation sector?

ANSWER

Minister of CIVIL AVIATION (Shri Kinjarapu Rammohan Naidu)

(a) to (d): A statement is laid on the table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (A) TO (D) IN RESPECT OF RAJYA SABHA STARRED QUESTION NO. 244 FOR REPLY ON 24.03.2025 REGARDING "DIGITAL ADVANCEMENTS IN AVIATION SECTOR" BY DR. SIKANDER KUMAR.

(a) & (b): Yes. The First phase of Electronic Personnel Licensing (EPL) implementation for flight crew commenced on February 20th, 2025 in accordance with the 178th Amendment to ICAO Annex I, which contains the Standards for an EPL.

In this phase, Commercial pilot license (CPL) and Flight Radio Telephone Operators License (FRTOL) are being issued electronically (EPL) and are accessible in mobile hand held devices via eGCA mobile application.

The main objective of EPL by ICAO is to "enhance the safety, security & efficiency of the civil aviation licensing system. An EPL system should be globally interoperable and trustworthy, as it will interconnect different Issuing Authorities."

(c): Various digital initiatives like e-SAHAJ, e-GCA, e-BCAS, Airsewa, Digital Sky and Digiyatra have been launched for bringing in transparency, accountability, ease of doing business along with ease of living.

Measures taken by the stakeholders to enhance the use of technology inter-alia include digital form of on board aircraft documents through Electronic Flight Bag (EFB), auto capture of flying experience in e-logbook using Application Processing Interface (API), Inline Baggage Facility, Self-Baggage Drop Facility,

GPS Aided GEO Augmented Navigation (GAGAN), Airport Operation Control Centre (AOCC), Augmentation of Air Traffic Control (ATC) Automation System, Advanced Surface Movement and Guidance Control System, ADS-B based approach surveillance services, State of art Air Traffic Flow Management Central Command Centre, Airport Collaborative Decision Making System, Computed Tomography Explosive Detection System (CT-EDS), Real Time Wait Display System, Radioactive Detection Equipment (RDE), Perimeter Intrusion Detection System, Airport Predictive Operations Center etc.

(d): GHIAL Airport at Hyderabad is India's first to implement a Digital Twin, a real-time virtual replica of the airport ecosystem. It enhances Airport Operations Centre (APOC) by optimizing slot allocation, resource management, passenger flow, and security monitoring. In addition, Major airports are also equipped with Airport Operation Control Centre (AOCC) providing digital platform for performance monitoring, resource & security management.
