

PRESS RELEASE

MINISTRY OF CIVIL AVIATION

Upper Airspace Harmonization in Kolkata FIR (Flight Information Region) taken up

New Delhi, June 18, 2014 - As part of the safety, Air Navigation Services improvement project – Upper Airspace Harmonization in Kolkata FIR has been taken up for implementation. While stating this after a review, Secretary (Civil Aviation) Shri Ashok Lavasa stated that the main components of the project include state-of-the-art integrated ATS Automation System, Integration of multiple Radar and ADS-B Sensors, Airspace Restructuring with multiple sectors and Remote operation of VHF from Kolkata using IP based VCCS. This is part of AAI's initiative towards establishing a single continuum of upper airspace (26000 ft and above), which will facilitate uniform application of separation standards and procedures with significant benefits including enhanced safety and operational efficiency.

- (a) Integrated ATS Automation System** – The Integrated Automation System provides adequate safety nets in the form of conflict alerts, minimum safe altitude warning to the Controller, advanced decision support tools and improved HMI enabling faster decision-making and conflict resolution by the Controller. ATS Automation System has been successfully installed and operationalised at 38 Medium and small Airports as well, in addition to Metro Airports.

- (b) Integration of Multiple Radars and ADS-B Sensors** – Integration of 9 Radars of different manufacturers and 8 ADS – B located across the region into the Automation system has been completed and the surveillance picture of all the aircraft in the Eastern region is seen at Kolkata ATC Centre. The integration of Radars/ADS-B sensor information into Automation enables authorization of direct routing to flights by the controllerstherby reducing flying distance/time, saving fuel for the airlines and facilitating on-time performance. The minimum distance between two aircraft will be reduced through application of Radar Based Separation minima.

ADS B (Automatic dependent Surveillance – Broadcast)

ADS-B is a new generation surveillance technology that enables aircraft to transmit critical information on the location, speed and altitude to ground stations connected to air traffic control centres. The system use GNSS to determine the position of the aircraft and broadcast the data in real time enabling the Ground Automation Systems and air traffic controllers to benefit from highly accurate position of the aircraft. This leads to safer operations and improved operational efficiency.

The installation of ADS-B has already been completed by AAI at 21 sites to complement the existing network of Radars for ensuring seamless surveillance across the entire continental & oceanic airspace.

(c) VCCS (Voice Control and Communication System)

VCCS is a System that permits Controllers to perform air to air, air to ground and ATS Unit to ATS Unit communication exchange using a single switch operation. The system Permits enhanced operational efficiency of the ATS Units and enhanced safety of the aircraft operations.

VCCS of IP based Technology to cater for 100 Controller positions at Kolkata and 150 positions at Delhi is being installed providing for efficient, fail-proof and comprehensive communication network among ATS Units & between the Controller and the Aircraft.

The Upper Harmonisation of Kolkata FIR Initiative would ultimately result in marked improvement in ATM operational efficiency, safety of aircraft operations, fuel efficiency for Airlines, savings in operating cost for Airlines, environmental benefits due to reduced fuel burn and reduction in pilot/controller workload. Earlier as part of upper airspace harmonization project, AAI had completed similar project i.e. restructuring of Chennai FIR and operationlisedthe same with substantial benefits. The project won the International Janes ATC Award 2012.



State-of-the-art equipment at Kolkata as Enabler for the Implementation of Upper Airspace Harmonization in the Kolkata FIR (Flight Information Region)



Shri Ashok Lavasa, Secretary (Civil Aviation)