

भारतीय विमानपत्तन प्राधिकरण AIRPORTS AUTHORITY OF INDIA

Challenges in Delhi FIR due to Kabul FIR restrictions and associated mitigation

Presented by- INDIA

Reference is invited to:

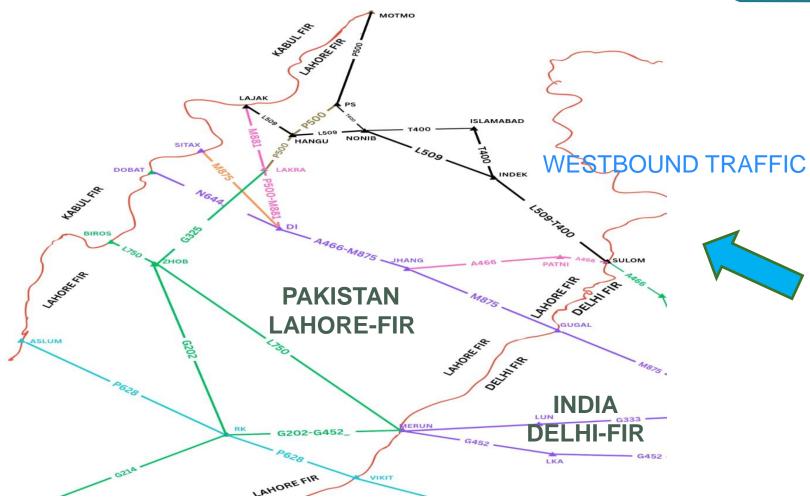
- ➤ KABUL FIR Contingency Coordination Team (CCT) Bulletin 013 : The ENROUTE air traffic service in Kabul FIR remains unavailable.
- The severe flow restriction at **DOBAT**, **BIROS**, **ASLUM** and **SERKA** (**FL360-F510** vide NOTAM G0071/25), at LAJAK (**FL310**-F510 vide NOTAM G0071/25), and **increased longitudinal separation requirement** (15 min vide G0553/24) at entry points of Kabul FIR (LAJAK, DOBAT, BIROS, ASLUM and SERKA).
- SAIOSEACG/4 Meeting (March 2025)) highlighting impacts of increased westbound transit traffic through Afghanistan airspace in the form of delays, complexities fuel consumption, carbon emissions and ATC workload.
- ➤ Kabul FIR CCT Meeting dated 23.04.2025



LOCATION OF DELHI, LAHORE & KABUL FIR



AFGHANISTAN KABUL-FIR







Kabul FIR restrictions



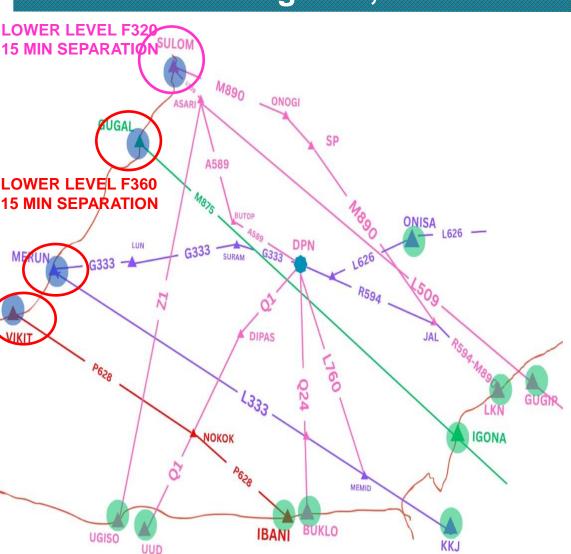
Challenges





More entry Points – Less exit points-Delhi FIR, Traffic convergence, Flow restrictions & Consequence





Delhi FIR receives westbound aircraft from **NINE ENTRY** points and releases these aircraft to Lahore FIRs through **FOUR EXIT** points These aircrafts after exiting Delhi FIR further route via L509, N644, L750 and P628 to enter Kabul FIR via entry points LAJAK, DOBAT, BIROS and ASLUM respectively

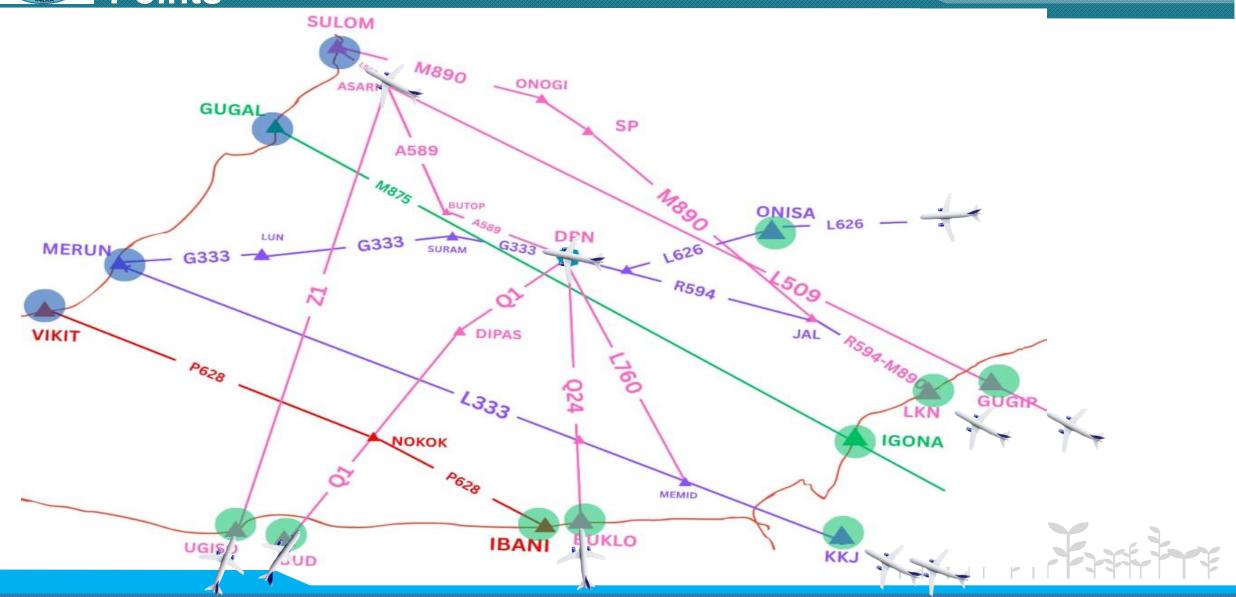
Delhi FIR receives westbound overflying aircrafts at all levels with separations such as 20 NMs, 50 NMs etc. converging at four exit points. Delhi ACC has challenge of translating such inbound traffic pattern through mentioned exit points and release to Lahore ACC as per prescribed flow restriction at DOBAT, BIROS, ASLUM and SERKA (FL360-F510 vide NOTAM G0071/25), at LAJAK (FL310-F510 vide NOTAM G0071/25) and increased longitudinal separation requirement (15 min vide G0553/24)

Larger separation requirements and limited flight level availability causes capacity mismatch at entry and exit points of Delhi FIR, leading to ground and air delays ,congestion, fuel consumption, traffic complexity and ATC workload. During peak hours of west bound traffic, above restrictions are further increasing operational difficulties, congestion, delays and tactical coordination.



Traffic complexity: Flights Converging at Exit Points

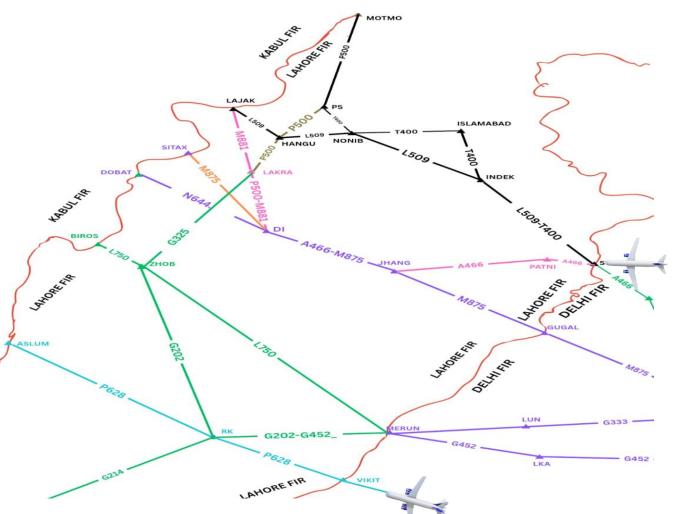






Traffic complexity: Flights Conflicting after exiting Delhi FIR





After exiting Delhi FIR, absence of clear alignment between Delhi FIR exit point and Kabul FIR entry leads to increase in conflicts and traffic complexity, further reducing overall airspace capacity

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- -A359/H-SDE1E2E3GHIJ1J2J3J5M1P2RWXYZ/LB1D1
- -WSSS1530
- -M085F360 VMR B469 VPK M751 VKB/N0499F360 M626 BGO/M085F360 L507
 CEA/N0502F360 R460 LKN M890 SP/N0500F380 M890 SULOM A466 DI N644
 DOBAT/N0499F380 N644 LEMOD/K0912F380 A909 NINOP B475 DOLOS B449 MAMED P130
 ARBAT/K0911F400 P130 BODKA/N0488F400 M747 SULEL N449
 TELLI/K0903F400 N449 INDUR/N0490F400 UN161 ERZ UL746 ODERO DCT
 LUGEB DCT MOPUG DCT DIMLO DCT VAMET DCT DETSA/N0492F390 DCT BAKOR DCT
 NAXAV/N0457F330 DCT RENTA DCT ATPED DCT LUSIL DCT EVRIP EVRIP3E

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-LIMC1229 LSZH

- -A359/H-SDE1E2E3GHIJ1J2J3J5M1P2RWXYZ/LB1D1
- -WSSS1605
- -N0506F340 AROSO Y513 KALIL Y501 RINBA Y503 VPL/M085F340 P628 MINAT/M085F380 P628 VIKIT/N0499F380 P628 RK G202 ZB L750

BIROS/N0499F380 L750 GODSI/N0495F400 L750 RANAH/K0914F400 A846 RUBAD B475 DOLOS B449 MAMED P130 BODKA/N0488F400 M747 SULEL N449 TELLI/K0903F400 N449 INDUR/N0490F400 UN161 ERZ UL746 ODERO DCT LUGEB DCT MOPUG/N0493F430 DCT SUNIS DCT VATET DCT REDBU Q112 NAPSA NAPSA1B -EDDM1200 EDDS

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- -B772/H-SDE1E2FGHIRWY/B1L
- -VCRI0740
- -N0496F340 MTL DCT ATETA T4 TTR W42 BIA W56 BBB/N0493F350 G208 ISRIS W10N APANO/N0495F340 G451 AAE Z8 NOPIM/N0495F360 Z8 VIKIT P628 RK

G202 ZB/N0493F350 G325 LAKRA/N0494F360 M881 LAJAK L509 TAPIS M875
TIGTA/K0887F360 M875 MILSO M161 URL M166 ARISA L736 GEKPA L736 OLOPI
-UUDD0824 UUEE UUBW



Kabul FIR restrictions



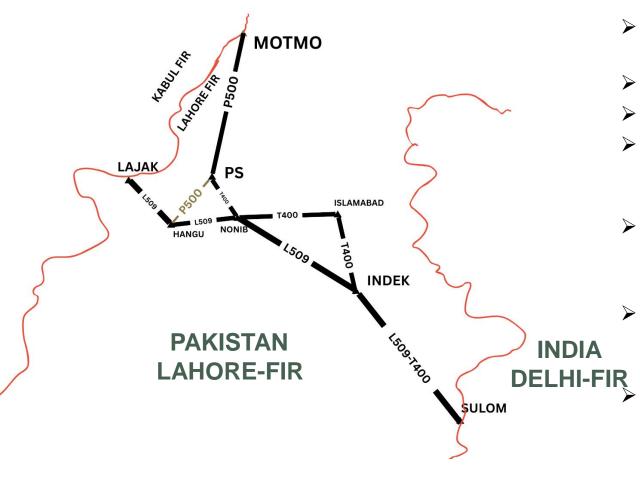
Suggestions





Airspace capacity at SULOM



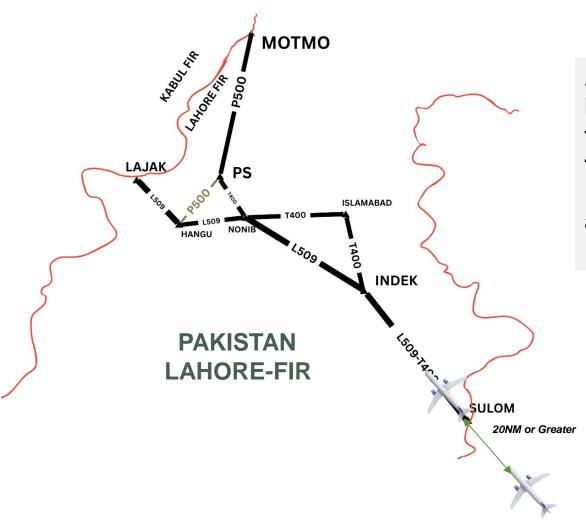


- ➤ Westbound aircraft exiting Delhi FIR via SULOM may flight plan via LAJAK (L509) or MOTMO (P500).
- > L509 westbound levels available are FL320-F510,
- > P500 westbound levels available are FL300-F510.
- ➤ The greater number of availability of levels can provides enhance airspace capacity via these route as compared to other entry points for Kabul FIR.
- ▶ It is suggested to make FL280 also available on P500. This will increase the airspace capacity.
- ➤ Kabul FIR CCT Meeting dated 23.04.2025, Controlling ANSP at MOTMO has stated/agreed to accept westbound flights on P500 with 7 minutes separation.
 - Issuing a NOTAM stating 50 NM/7-minute longitudinal separation on route P500 can provide increased capacity, benefiting participating ANSP/Airlines and reduced tactical coordination.



Reduced separation in diverging routes after SULOM





A surveillance based longitudinal separation of 20NM between aircrafts exiting Delhi FIR via SULOM and thereafter diverging in Lahore FIR (i.e. between aircrafts following L509-LAJAK and L509 NONIB T400 PS P500 MOTMO P500 FIRUZ). This will help in accommodating a greater number of westbound aircrafts at SULOM.

INDIA DELHI-FIR





Suggested Route Alignment: Exit point of Delhi FIR – Entry Point Kabul FIR



Route to be followed

L509 NONIB T400 PS P500

MOTMO P500 FIRUZ

L509-LAJAK

M875-N644

P628

L333/G333-L750

Exit Point at Delhi/

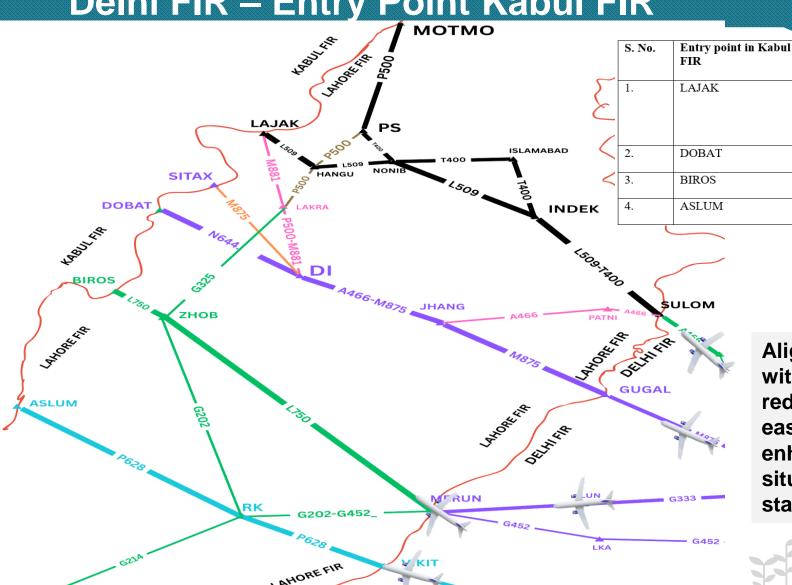
Lahore FIR

SULOM

GUGAL

MERUN

VIKIT



Alignment of Delhi FIR exit point with Kabul FIR entry point will conflicts, complexity, reduce coordination out and ease enhance predictability and situational awareness among stakeholders



Other Suggestions



- Reactivation of BOBCAT services.
- ➤ Encouragement to increase participation in BOBCAT services and slot adherence will help in efficient flow of air traffic through the region.
- ➤ In BOBCAT-westbound traffic, additional metering points at exit points of Delhi FIR specifying time and level restrictions at such points. This will help in assessing the performance of Delhi ACC in ensuring BOBCAT service and delineating the responsibilities between the ANSPs.
- ➤ Availability of F280 on M875 at Delhi FIR exit point, GUGAL (Such Flights will be taking Higher level in Lahore FIR, Delhi ACC will be ensuring availability of such level).
- Possibility of reducing time separation from 15 minutes to 10 minutes.



