



International Civil Aviation Organization

ICAO

The Seventh Meeting of the Bay of Bengal Traffic Flow Review Group (BOBTFRG/7)

Virtual Teleconference, 09 – 11 December 2025

**Agenda Item 3: Review of the Existing Traffic Flow Route Structures in BOB Airspace and Identifying Priorities**

**TRAFFIC SAMPLE DATA VISUALIZATION OVER THE BAY OF BENGAL AIRSPACE**

(Presented by Monitoring Agency for Asia Region)

**SUMMARY**

This paper presents the updated visualization of traffic flow over Bay of Bengal Airspace and the number of flights on routes L759, P628, L510, L645 and N571, based on Traffic Sample Data (TSD) from 2018 to 2024. The visualization and the number of flights aims to assist the BOBTFRG in reviewing the route structure and traffic flow in this airspace.

**1. INTRODUCTION**

1.1 MAAR has compiled the visualization of traffic flow based on the Traffic Sample Data (TSD) annually. Please note that the collected TSD contains records of flights operated only in December each year. MAAR primarily use this data to simulate annual traffic for safety assessment as one of MAAR's responsibilities.

1.2 To support Bay of Bengal Traffic Flow Review Group (BOBTFRG), these visualizations were first presented in the Second Meeting of Bay of Bengal Traffic Flow Review Group (BOBTFRG/2) in 2019 to illustrate the route structure and the traffic changes over the years. During BOBTFRG/5 meeting, MAAR was requested to extend the TSD analysis to specific routes. In coordination with the ICAO Asia and Pacific Regional Sub-Office, it was agreed to focus on the routes L759, P628, L510, L645 and N571. Accordingly, this paper presents the updated visualization of traffic flow over the Bay of Bengal Airspace and the number of flights on the specified routes based on TSD from 2018 to 2024.

**2. DISCUSSION**

2.1 The TSD used to generate the visualization of traffic flow and the number of flights comparisons presented in this paper have the following limitations:

- TSD from each State is generated differently. Data may be extracted from each ANSP's ATM system, prepared manually, processed from flight plans (FPLs), or submitted in raw FPL format. Consequently, the characteristic of each TSD varies; for instance, some datasets are based on actual flight trajectories, while others reflect only planned trajectories.
- Some datasets may lack significant points within the FIR, while others may be missing a substantial portion of flights.

2.2 **Attachment 1** to this paper presents the visualization of traffic flow in Bay of Bengal Airspace, where **blue lines** represent **westbound movements** and **orange lines** represent **eastbound movements**. The **thickness** of each line reflects the **volume of traffic** for each December. Additionally, **Attachment 2** to this paper presents the comparison table, comparison line graphs, and analysis on the crucial ATS routes. These tables and graphs clearly illustrate how traffic volumes have changed each year on routes L759, P628, L510, L645 and N571.

2.3 **DISCLAIMER:** This air traffic volume statistics presented in this paper were provided by MAAR and intended solely as reference material. Partial sample data from selected flight segments of each ATS route were used to indicate trends in traffic volume changes for the purpose of this meeting. Therefore, these statistics do not represent the official air traffic data for the Bay of Bengal Airspace.

### 3. ACTION BY THE MEETING

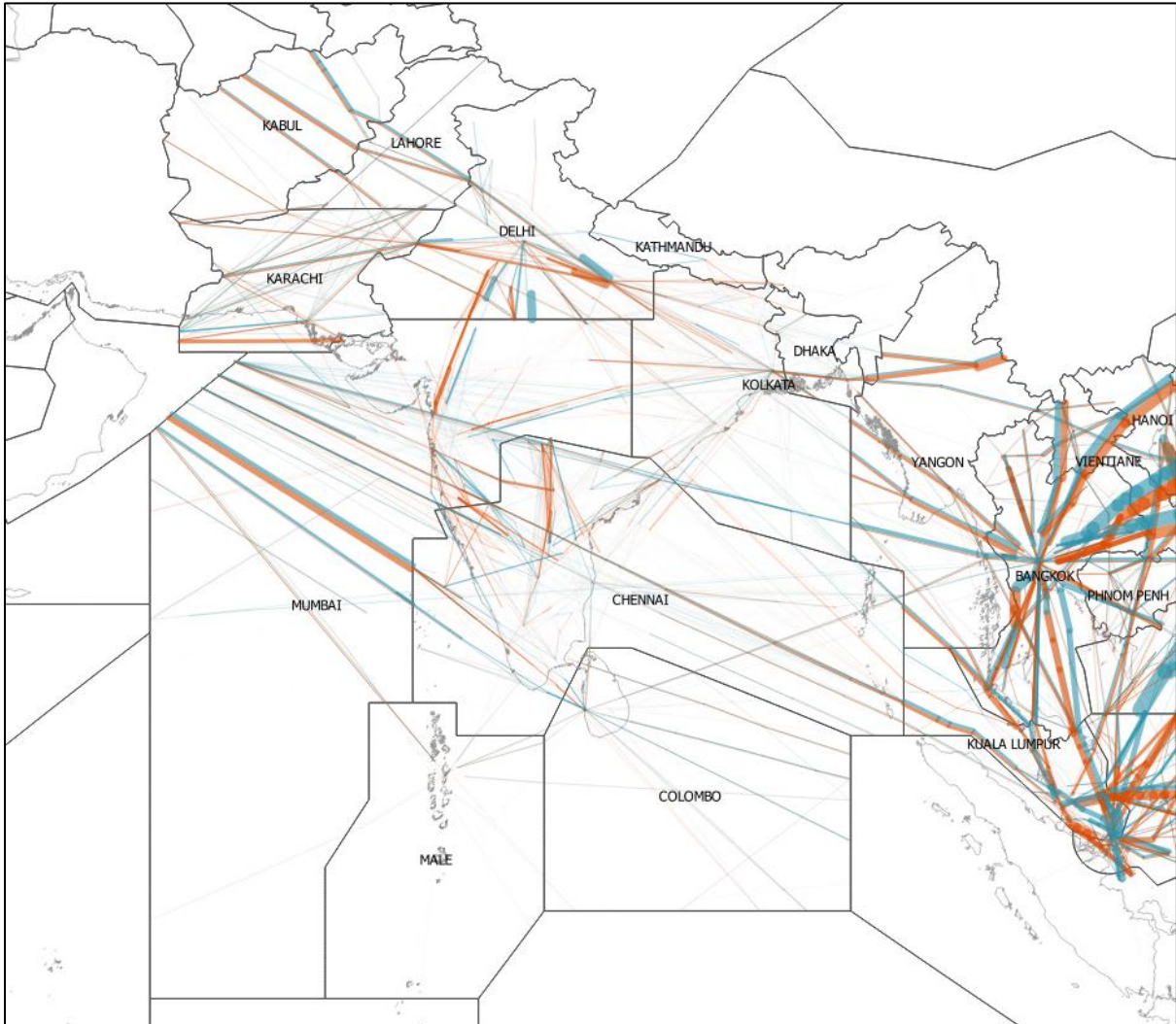
3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate.

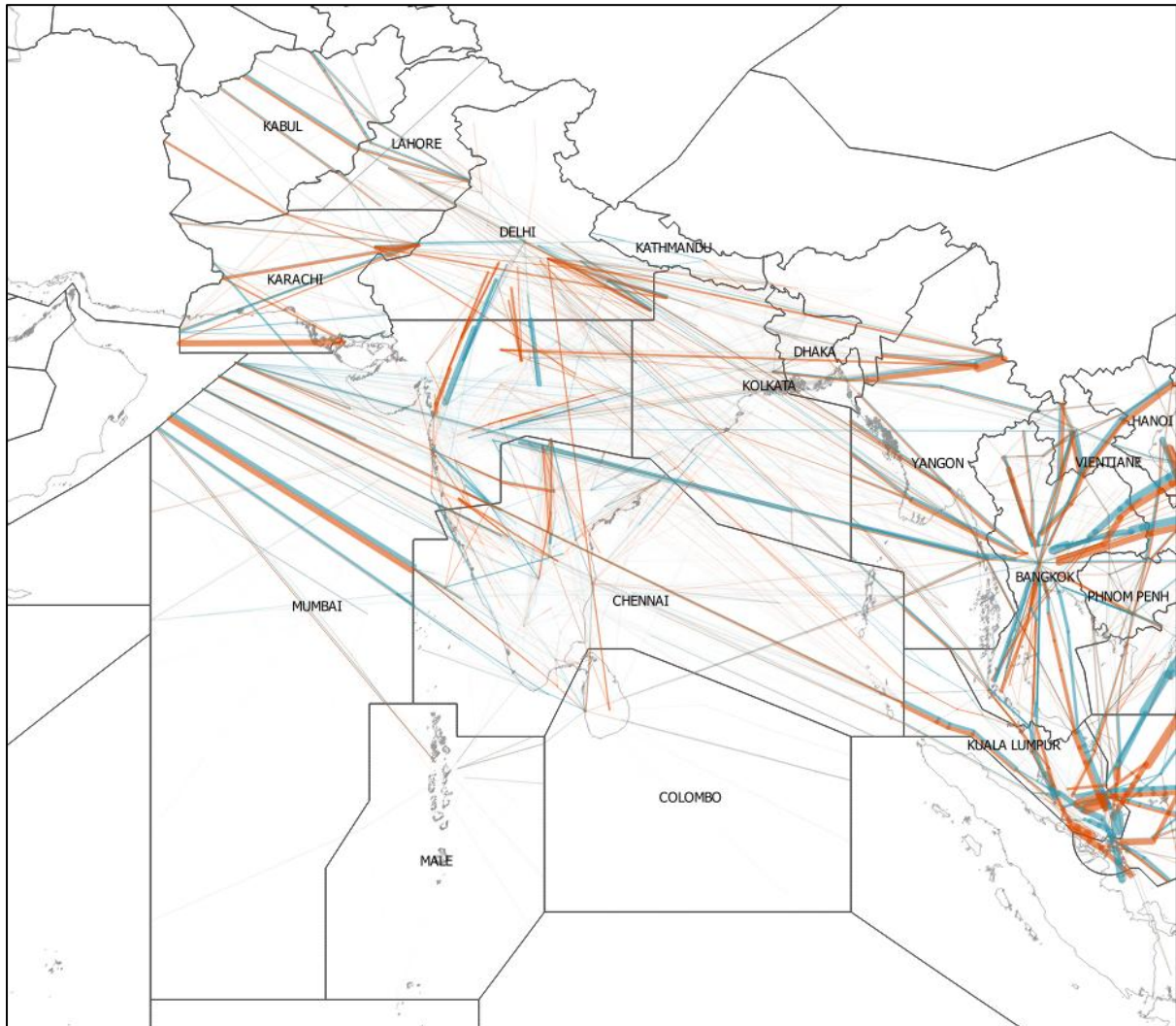
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**Attachment 1**

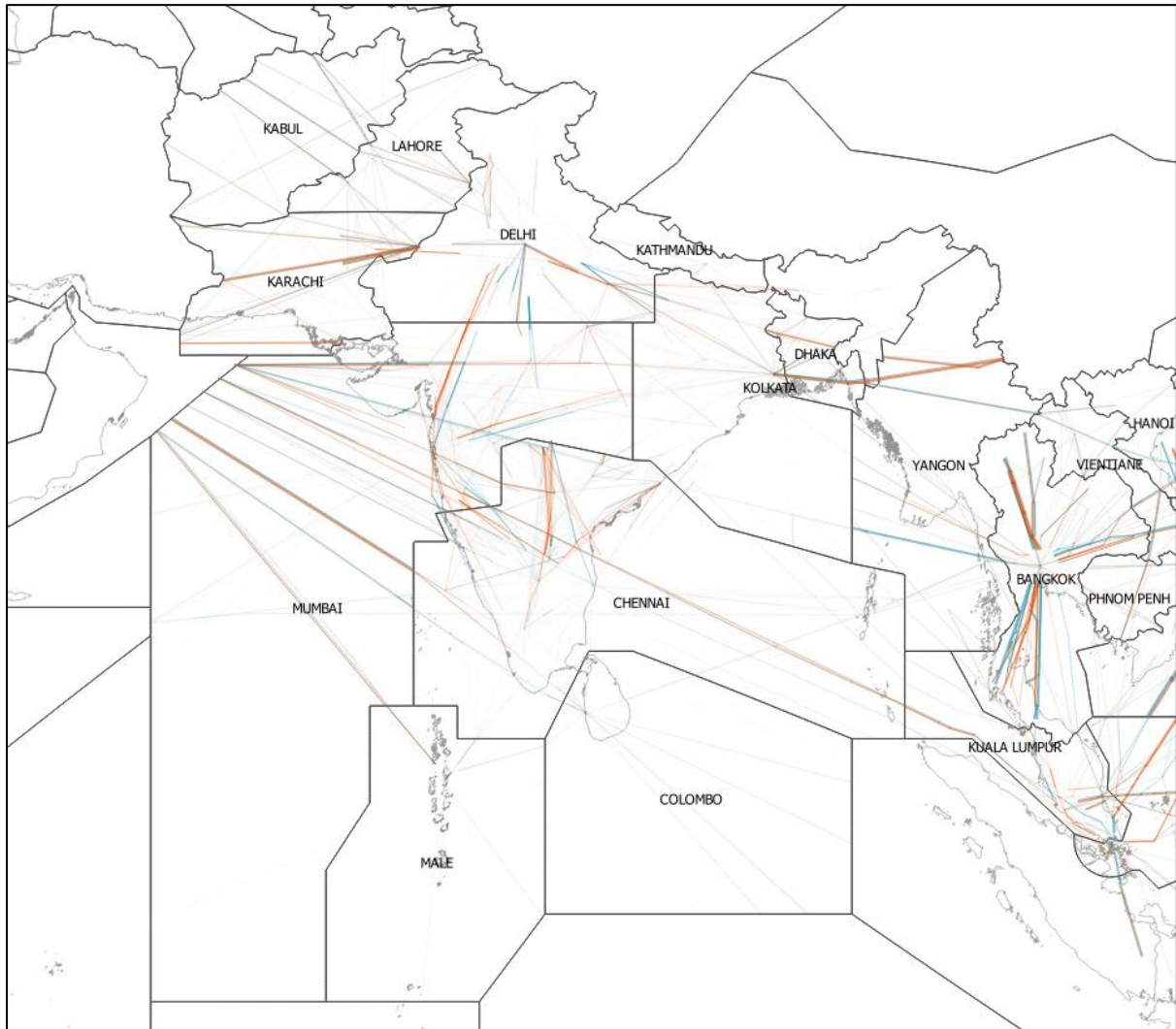
**The visualization of traffic flow over Bay of Bengal Airspace based on  
Traffic Sample Data (TSD) from 2018 to 2024.**



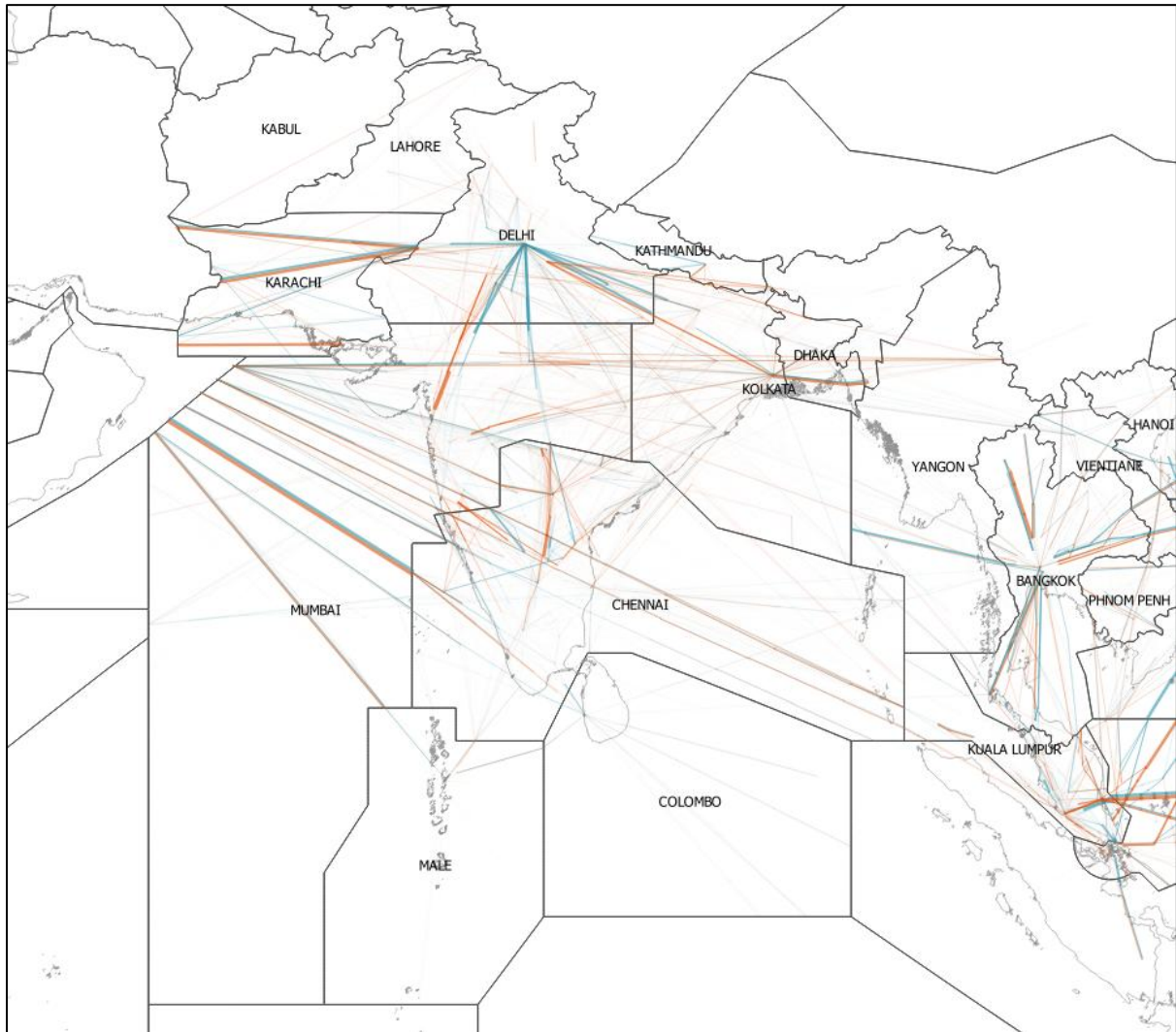
**Figure 1: 2018 Traffic Flow from TSD over Bay of Bengal Airspace**



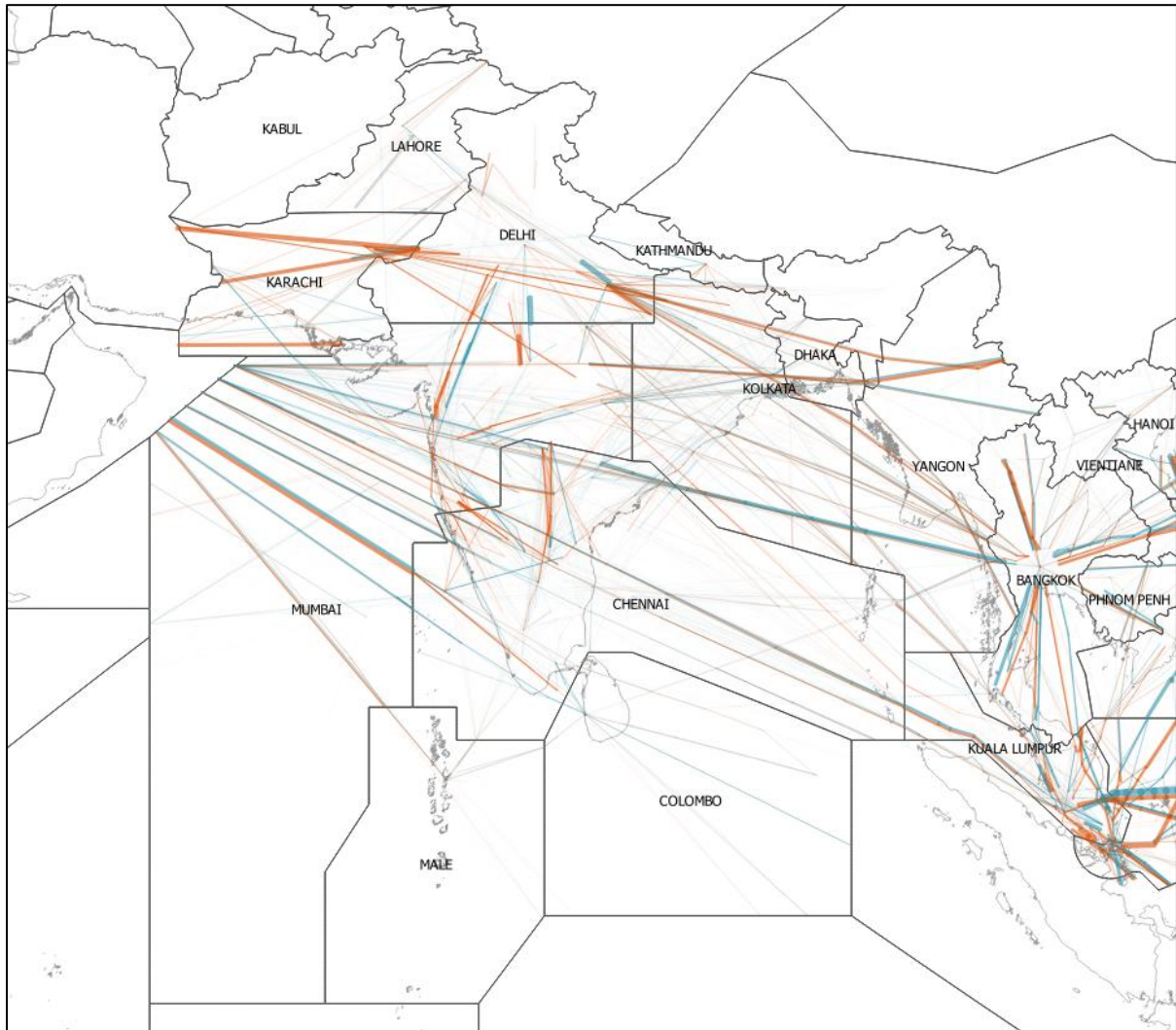
**Figure 2:** 2019 Traffic Flow from TSD over Bay of Bengal Airspace



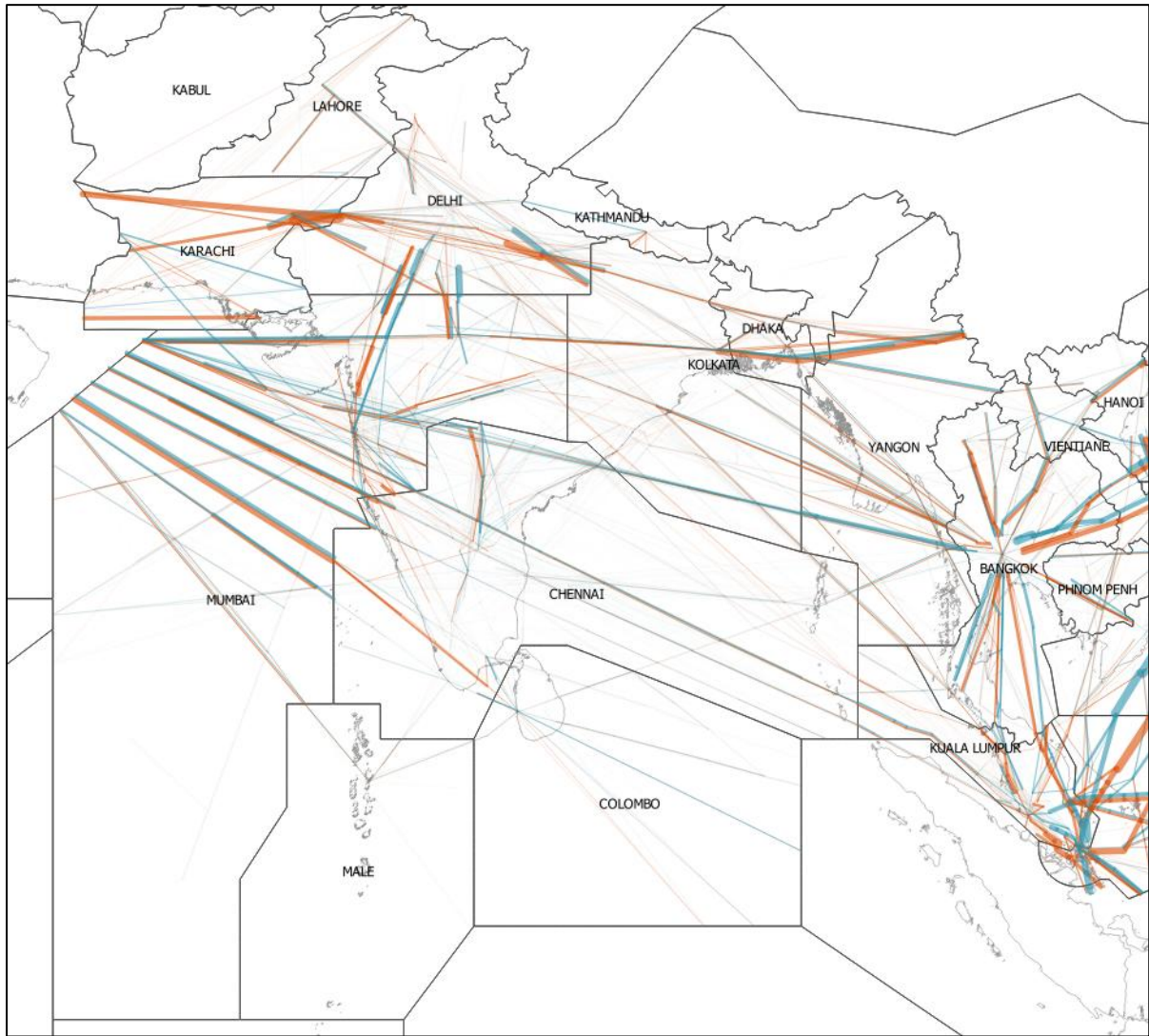
**Figure 3:** 2020 Traffic Flow from TSD over Bay of Bengal Airspace



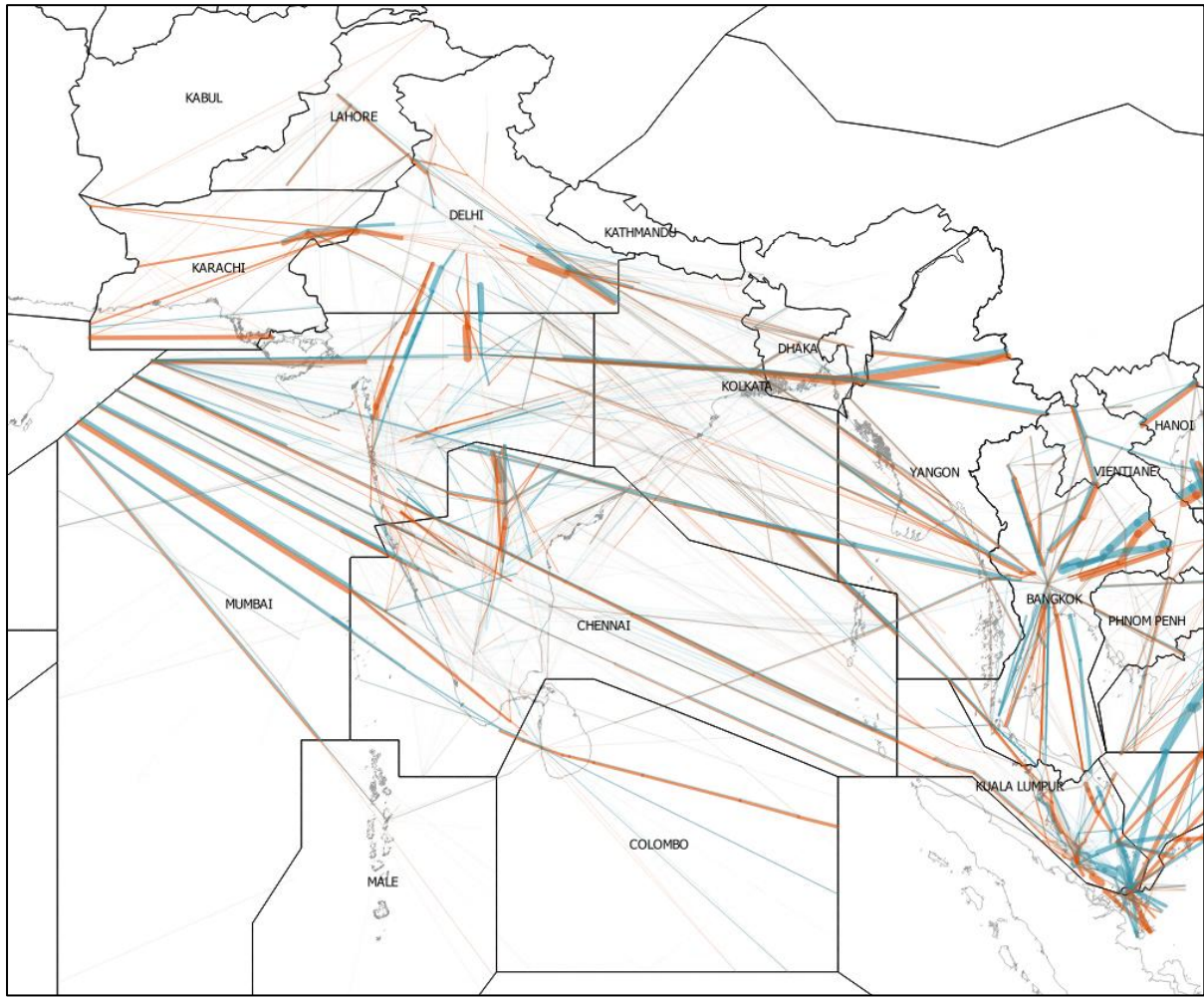
**Figure 4:** 2021 Traffic Flow from TSD over Bay of Bengal Airspace



**Figure 5:** 2022 Traffic Flow from TSD over Bay of Bengal Airspace



**Figure 6:** 2023 Traffic Flow from TSD over Bay of Bengal Airspace

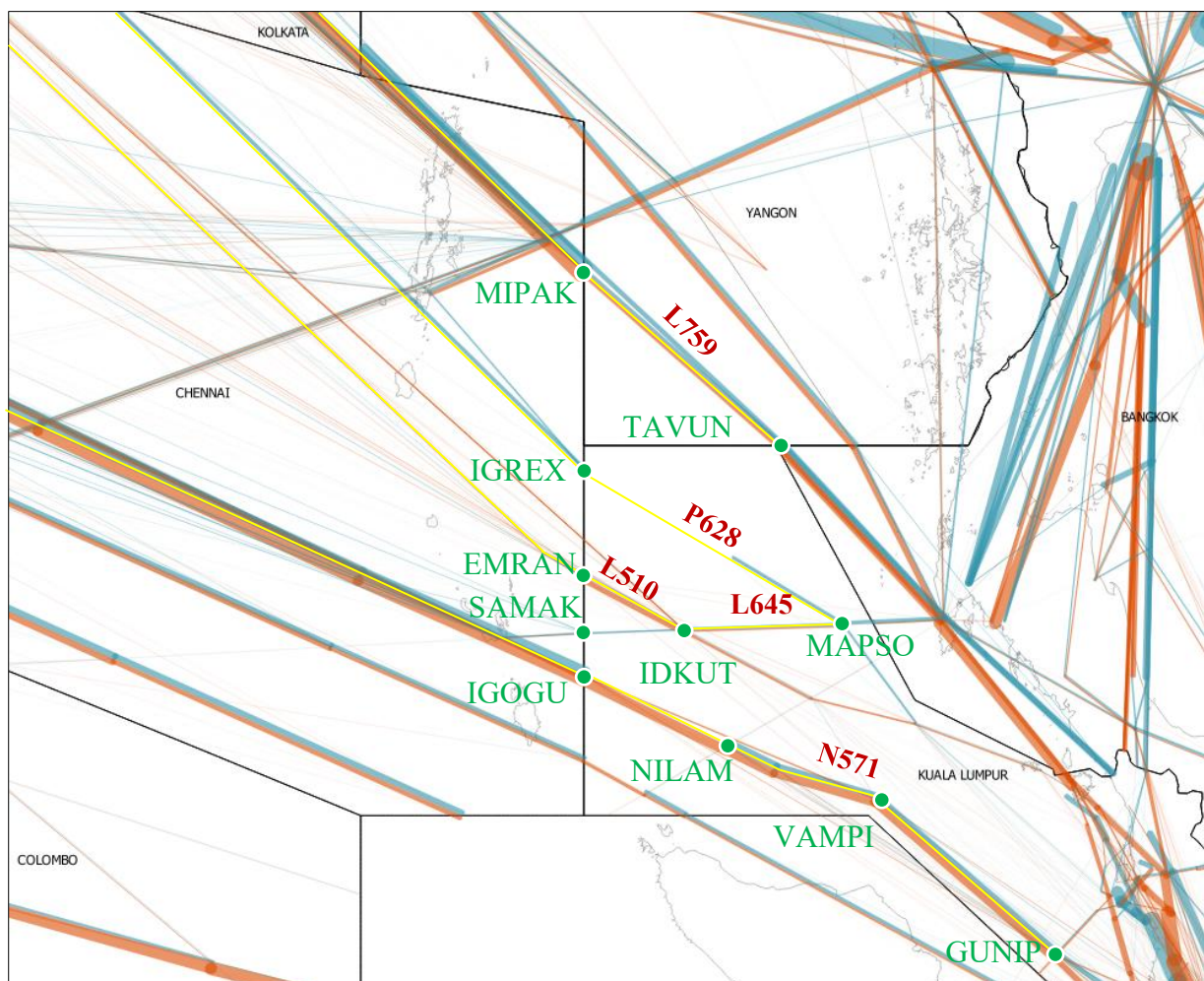


**Figure 7: 2024 Traffic Flow from TSD over Bay of Bengal Airspace**

Attachment 2

The number of flights in the Bay of Bengal airspace based on Traffic Sample Data (TSD)  
from 2018 to 2024.

Route L759, P628, L510, L645 and N571

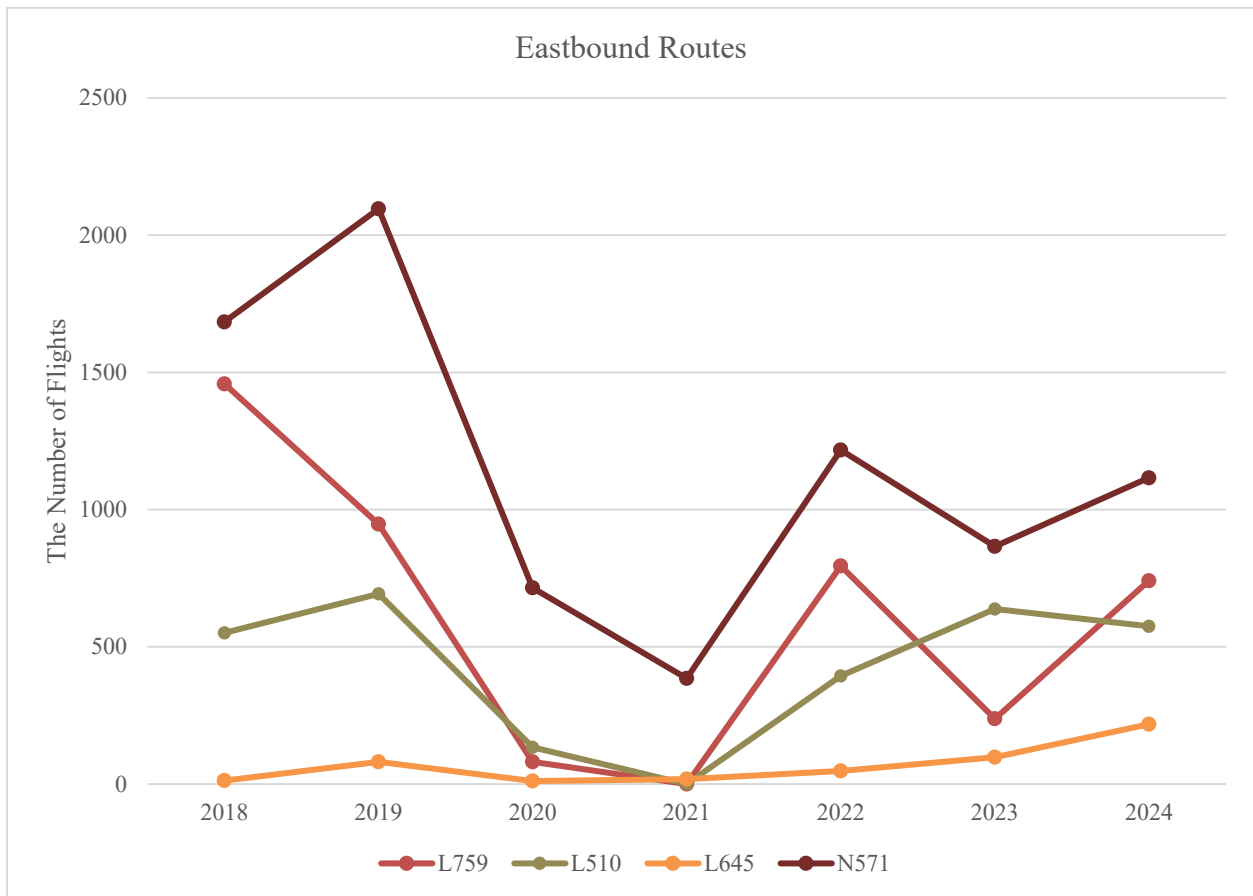


| Route | Portion        | Direction | The number of flights |      |      |      |      |      |      |
|-------|----------------|-----------|-----------------------|------|------|------|------|------|------|
|       |                |           | 2018                  | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| L759  | MIPAK to TAVUN | Eastbound | 1458                  | 947  | 81   | N/A  | 795  | 238  | 741  |
| L759  | TAVUN to MIPAK | Westbound | 1250                  | 961  | 48   | N/A  | 457  | 510  | 659  |
| P628  | MAPSO to IGREX | Westbound | 432                   | 405  | 159  | 184  | 252  | 249  | 394  |
| L510  | EMRAN to IDKUT | Eastbound | 551                   | 693  | 134  | N/A  | 394  | 638  | 575  |
| L510  | IDKUT to EMRAN | Westbound | N/A                   | N/A  | N/A  | N/A  | N/A  | 107  | 170  |
| L645  | SAMAK to IDKUT | Eastbound | 6                     | 9    | 10   | 18   | 17   | 138  | 83   |
| L645  | IDKUT to MAPSO | Eastbound | 13                    | 81   | 11   | 18   | 48   | 98   | 218  |
| L645  | MAPSO to IDKUT | Westbound | 12                    | 211  | 10   | 17   | 107  | 196  | 277  |
| L645  | IDKUT to SAMAK | Westbound | 108                   | 213  | 10   | 16   | 113  | 204  | 226  |

| Route | Portion        | Direction | The number of flights |      |      |      |      |      |      |
|-------|----------------|-----------|-----------------------|------|------|------|------|------|------|
|       |                |           | 2018                  | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| N571  | IGOGU to NILAM | Eastbound | 1684                  | 2096 | 715  | 385  | 1217 | 866  | 1116 |
| N571  | VAMPI to GUNIP | Eastbound | 1116                  | 1319 | 495  | N/A  | 937  | 666  | 866  |
| N571  | GUNIP to VAMPI | Westbound | 1466                  | 1394 | 387  | N/A  | 693  | 679  | 599  |
| N571  | NILAM to IGOGU | Westbound | 1706                  | 1599 | 428  | 689  | 1290 | 971  | 985  |

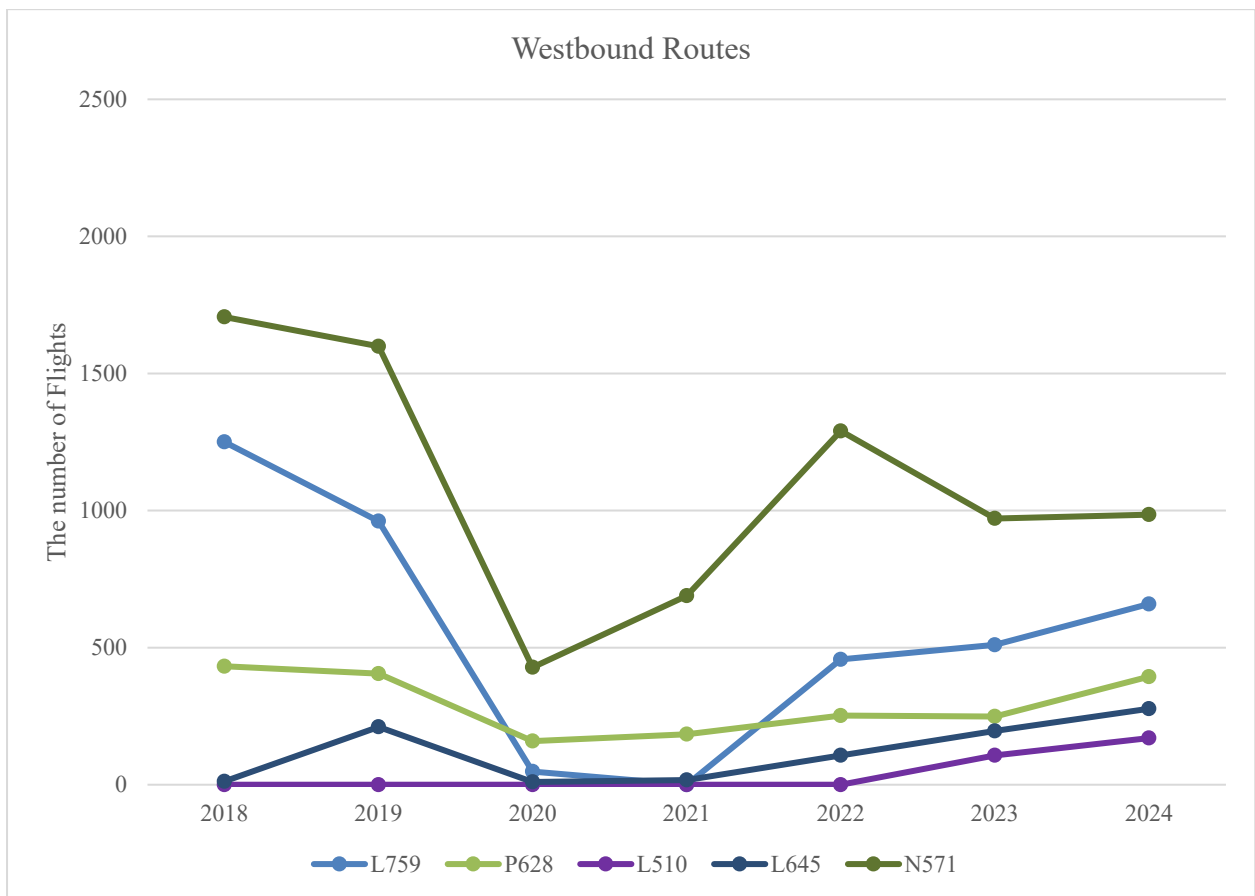
Note: N/A" indicates that no data from the TSD for that particular year

**Statistical Analysis**



| Route | Portion        | Direction | The number of flights |      |      |      |      |      |      |
|-------|----------------|-----------|-----------------------|------|------|------|------|------|------|
|       |                |           | 2018                  | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| L759  | MIPAK to TAVUN | Eastbound | 1458                  | 947  | 81   | 0    | 795  | 238  | 741  |
| L510  | EMRAN to IDKUT | Eastbound | 551                   | 693  | 134  | 0    | 394  | 638  | 575  |
| L645  | IDKUT to MAPSO | Eastbound | 13                    | 81   | 11   | 18   | 48   | 98   | 218  |
| N571  | IGOGU to NILAM | Eastbound | 1684                  | 2096 | 715  | 385  | 1217 | 866  | 1116 |

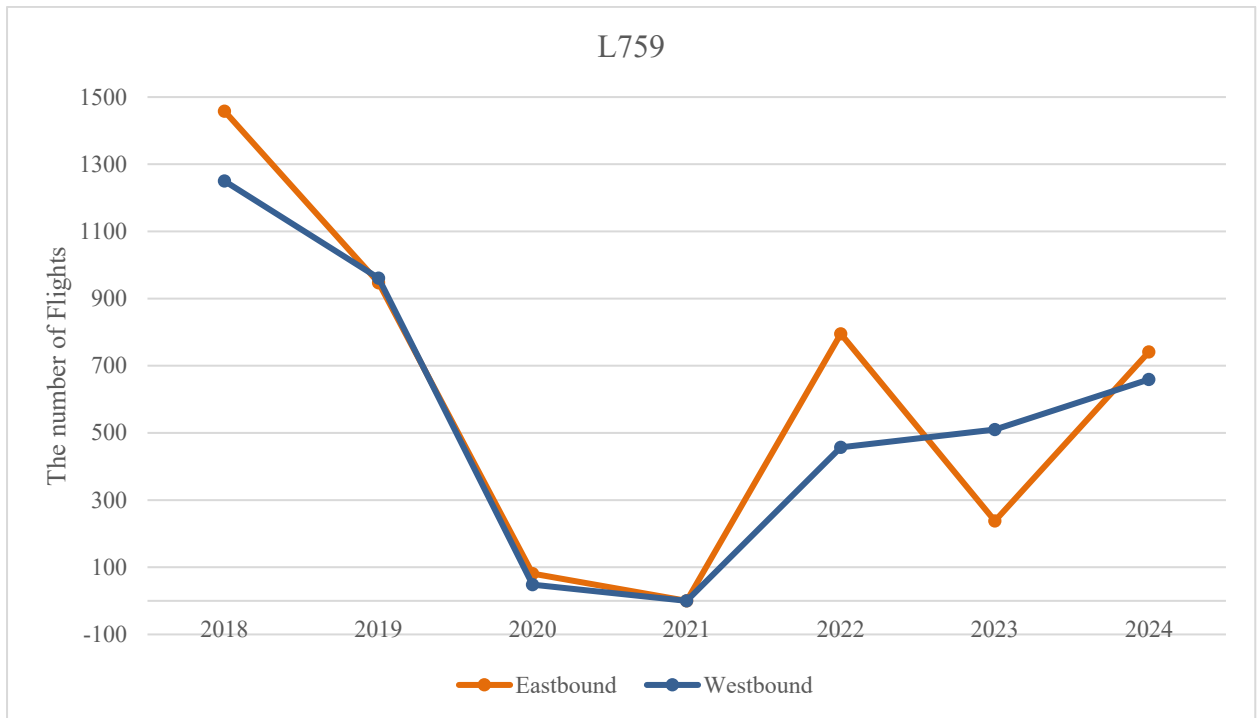
Among the specified eastbound routes, N571 consistently carries the highest number of flights each year. Compared to 2018, traffic on L759 has recovered to 51%, L510 to 104%, L645 to 1,677% (noting that the number of flights between IDKUT and MAPSO in 2018 was very small), and N571 to 66%.



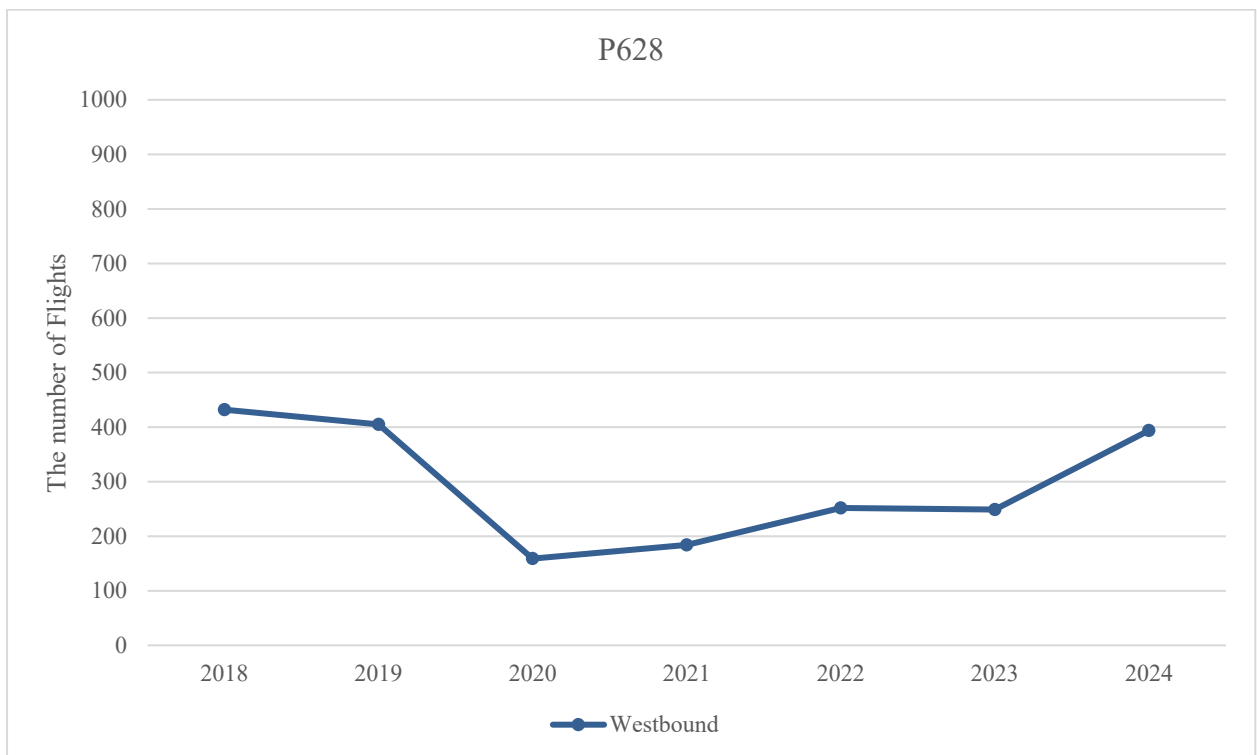
| Route | Portion        | Direction | The number of flights |      |      |      |      |      |      |
|-------|----------------|-----------|-----------------------|------|------|------|------|------|------|
|       |                |           | 2018                  | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| L759  | TAVUN to MIPAK | Westbound | 1250                  | 961  | 48   | 0    | 457  | 510  | 659  |
| P628  | MAPSO to IGREX | Westbound | 432                   | 405  | 159  | 184  | 252  | 249  | 394  |
| L510  | IDKUT to EMRAN | Westbound | 0                     | 0    | 0    | 0    | 0    | 107  | 170  |
| L645  | MAPSO to IDKUT | Westbound | 12                    | 211  | 10   | 17   | 107  | 196  | 277  |
| N571  | NILAM to IGOGU | Westbound | 1706                  | 1599 | 428  | 689  | 1290 | 971  | 985  |

Among the specified westbound routes, N571 also consistently carries the highest number of flights each year, similar to the eastbound route. Compared to 2018, traffic on L759 has recovered to 53%, L628 to 91%, L645 to 2,308% (noting that the number of flights between MAPSO and IDKUT in 2018 was very small), and N571 to 58%. The recovery of L510 cannot be assessed because MAAR does not have data for this route from 2018 to 2022.

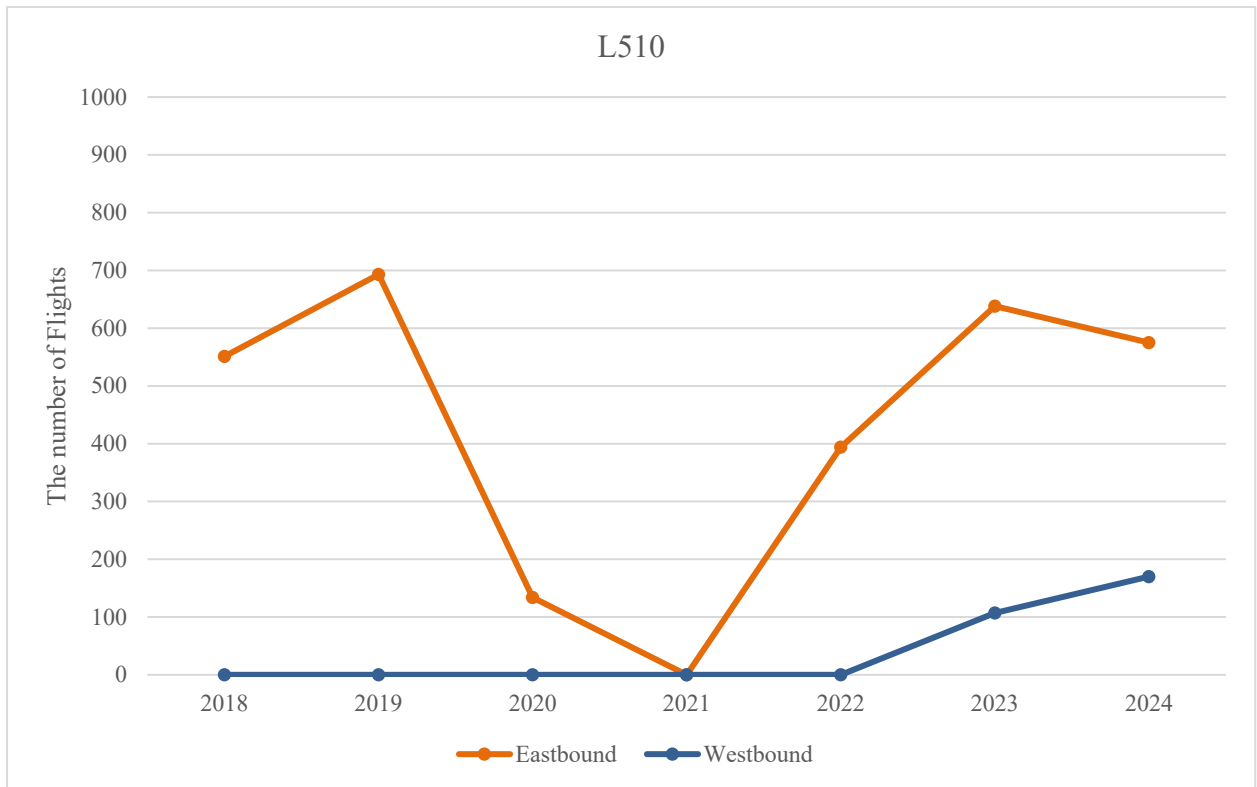
Route L759



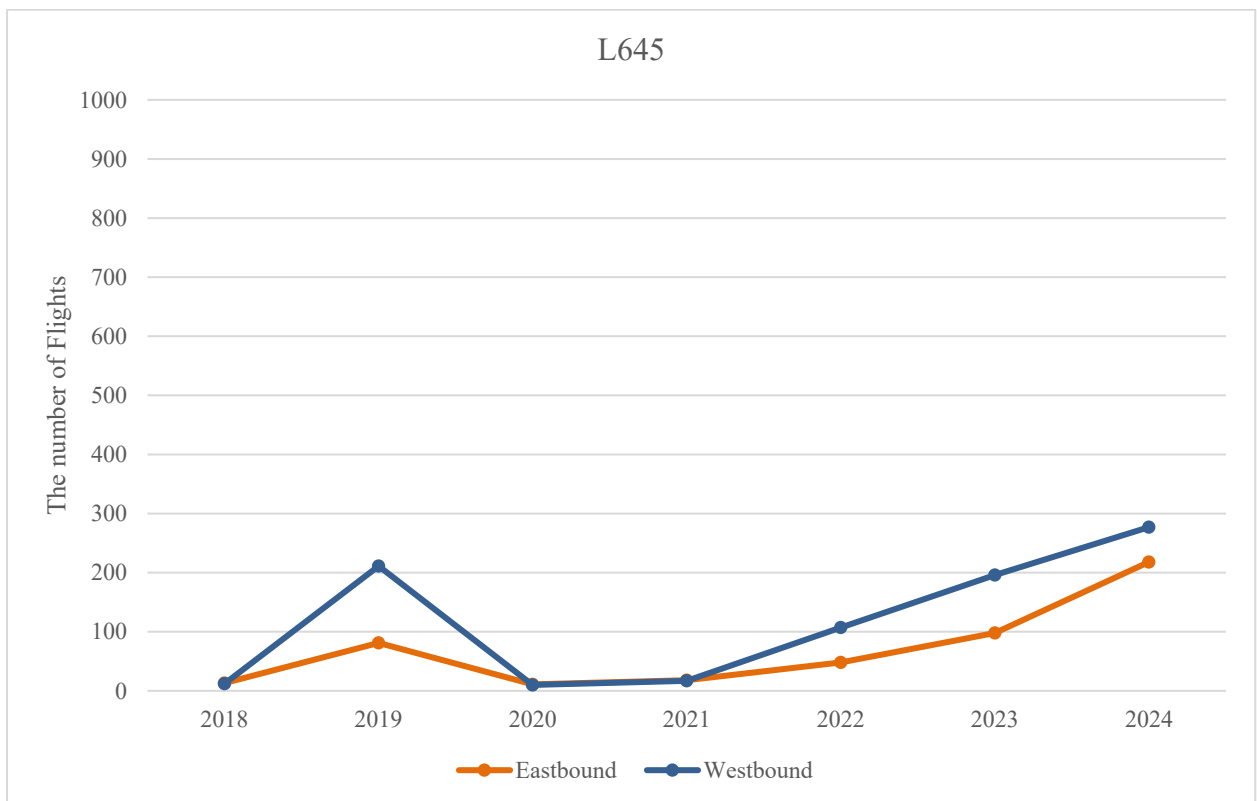
Route P682



Route L510



Route L645



Route N571

