



International Civil Aviation Organization

ICAO

Sixth Meeting of the Bay of Bengal Traffic Flow Review Group (BOBTFRG/6)

Bangkok, Thailand, 14 – 15 November 2024

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 2023. 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 TSD collected in December every year. To assist BOBTFRG, visualizations were first presented in BOBTFRG/2 meeting held in 2019 to illustrate the route structure and the traffic changes over the years. During BOBTFRG/5 meeting, MAAR was asked to extent the TSD analysis to specific routes. In coordination with the ICAO Asia and Pacific Regional Sub-Office prior to BOBTFRG/5 meeting, it was agreed to demonstrate traffic on the routes L759, P628, L510, L645 and N571. Thus, 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 2023.

2. DISCUSSION

2.1 Data limitations of TSD, used to generate the visualization of traffic flow and the number of flights presented in this paper, are:

- 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 nature 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 inside the FIR, while others may be missing a significant portion of flights.

2.2 **Attachment 1** to this paper shows 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 in December each year. Additionally, **Attachment 2** to this paper shows the number of flights on the routes, including L759, P628, L510, L645 and N571, based on TSD from 2018 to 2023.

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.

.....

Attachment 1

**The visualization of traffic flow over Bay of Bengal Airspace based on
Traffic Sample Data (TSD) from 2018 to 2023.**

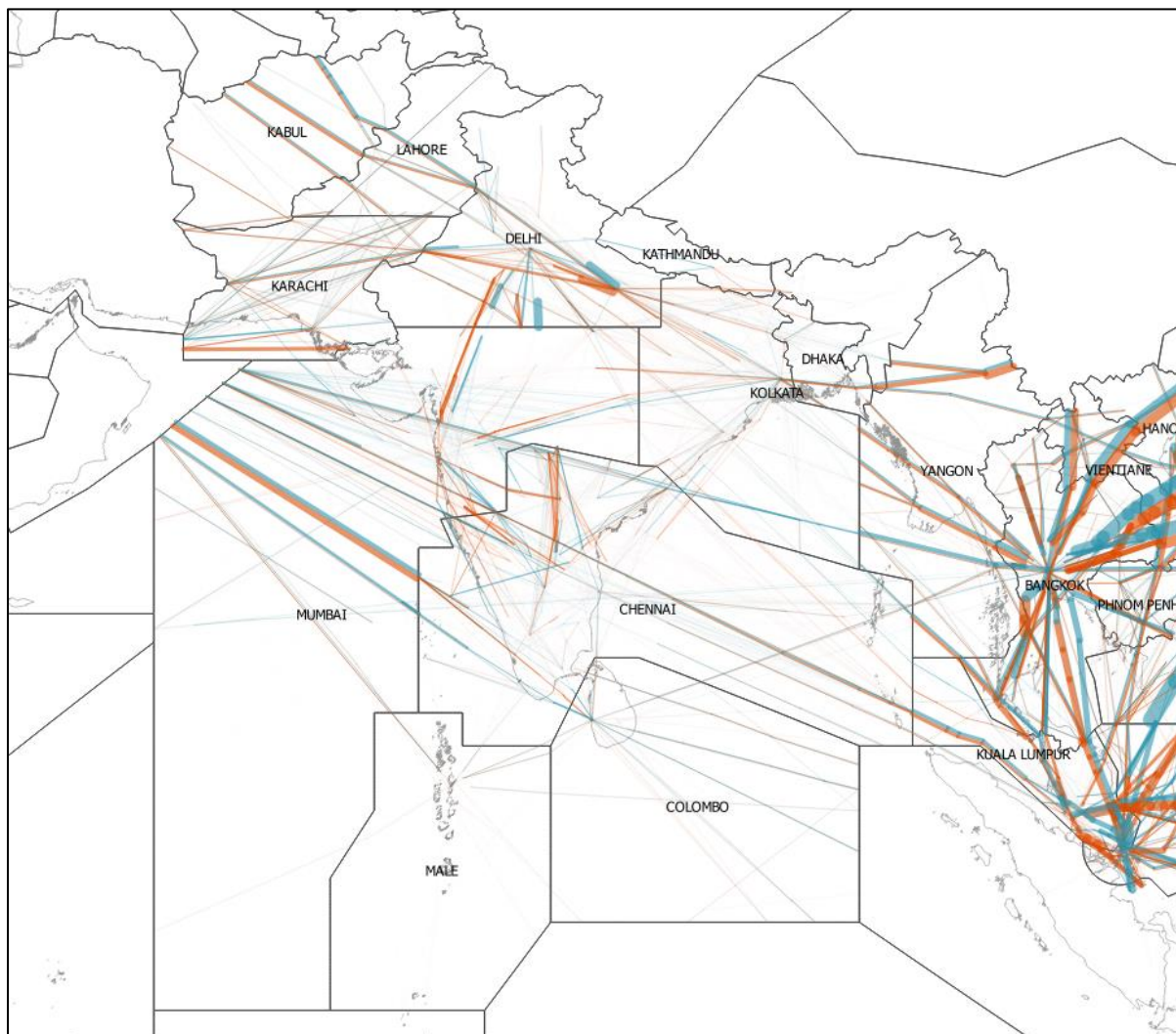


Figure 1: 2018 Traffic Flow from TSD over Bay of Bengal Airspace

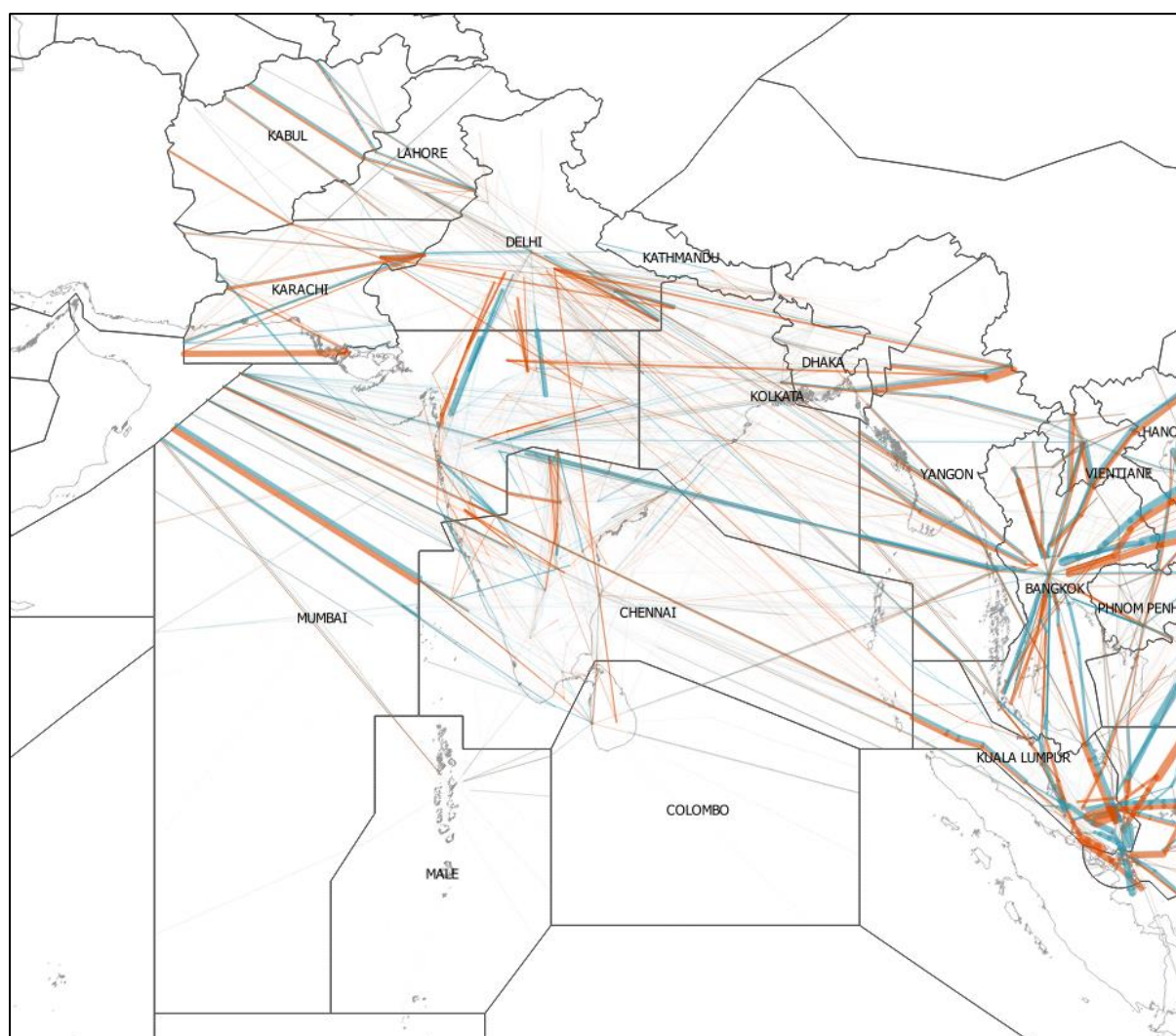


Figure 2: 2019 Traffic Flow from TSD over Bay of Bengal Airspace

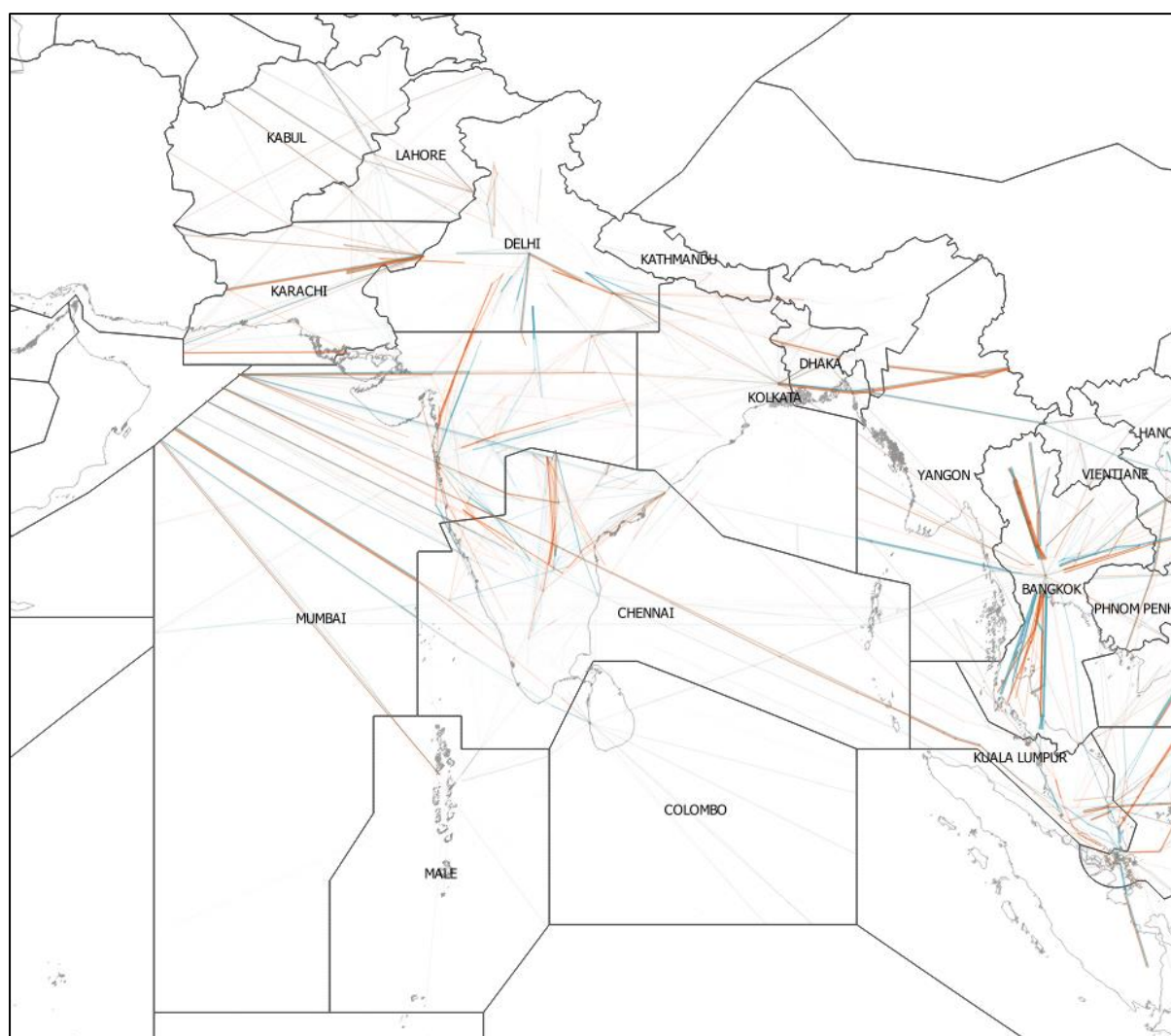


Figure 3: 2020 Traffic Flow from TSD over Bay of Bengal Airspace

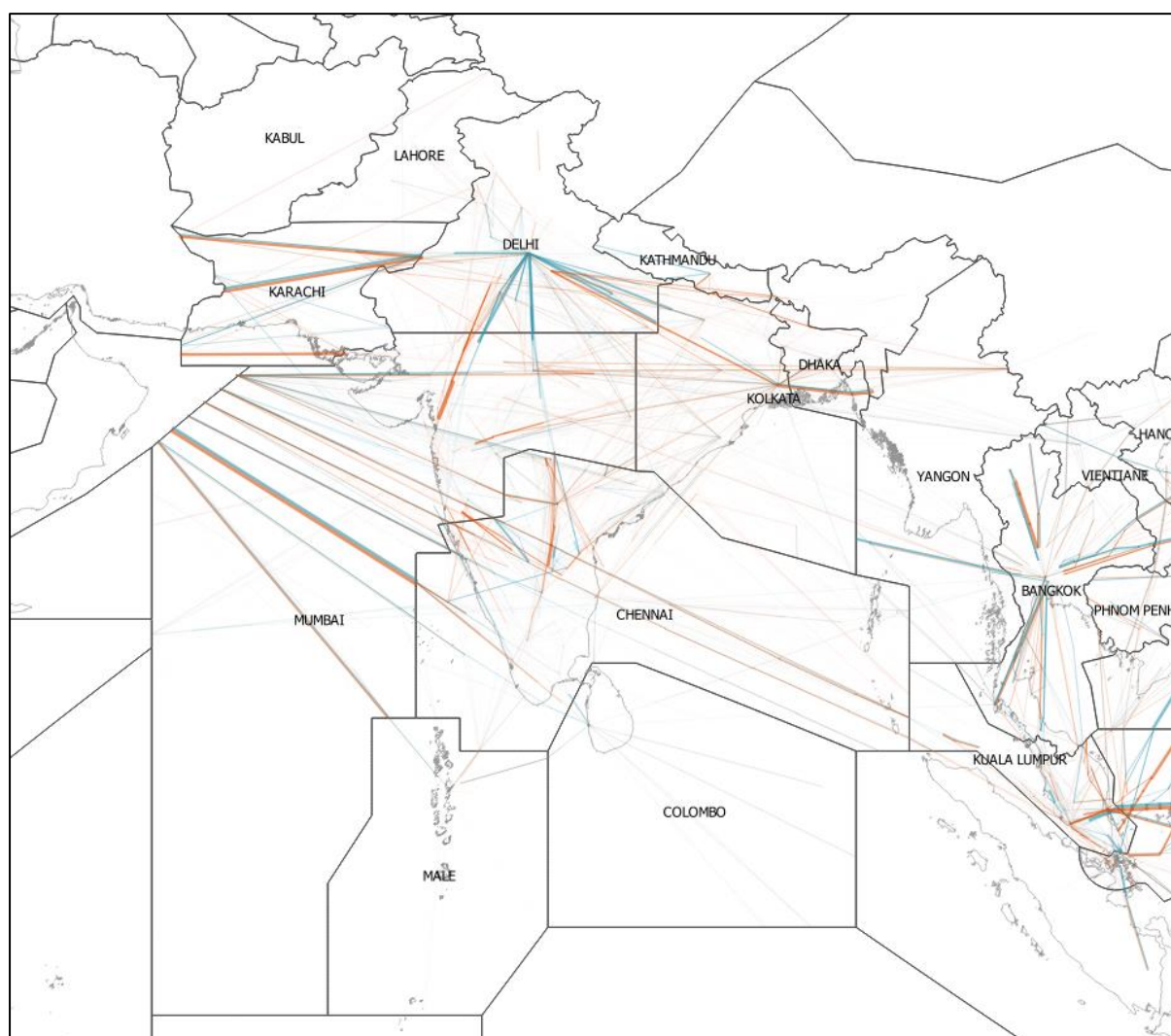


Figure 4: 2021 Traffic Flow from TSD over Bay of Bengal Airspace

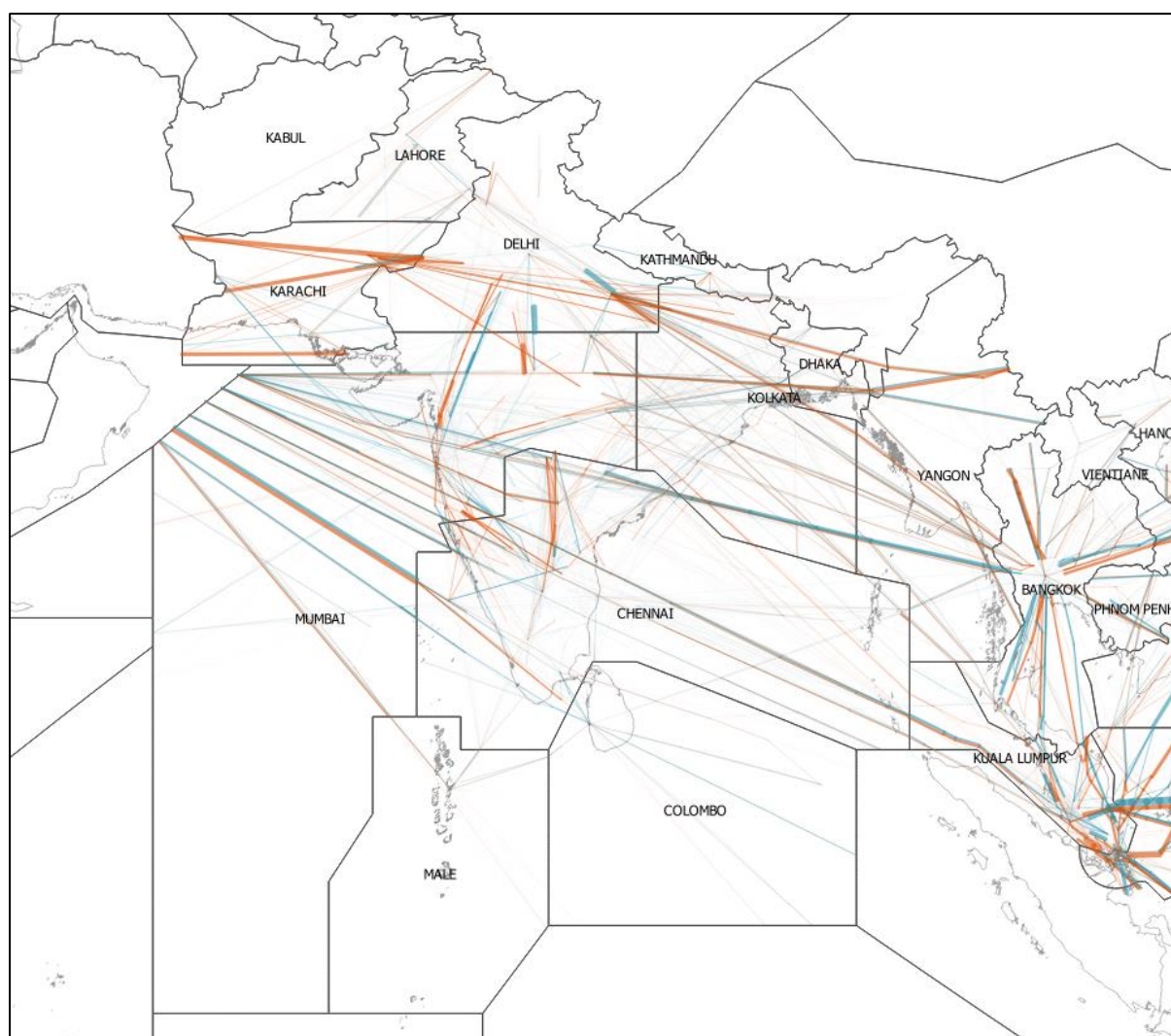


Figure 5: 2022 Traffic Flow from TSD over Bay of Bengal Airspace

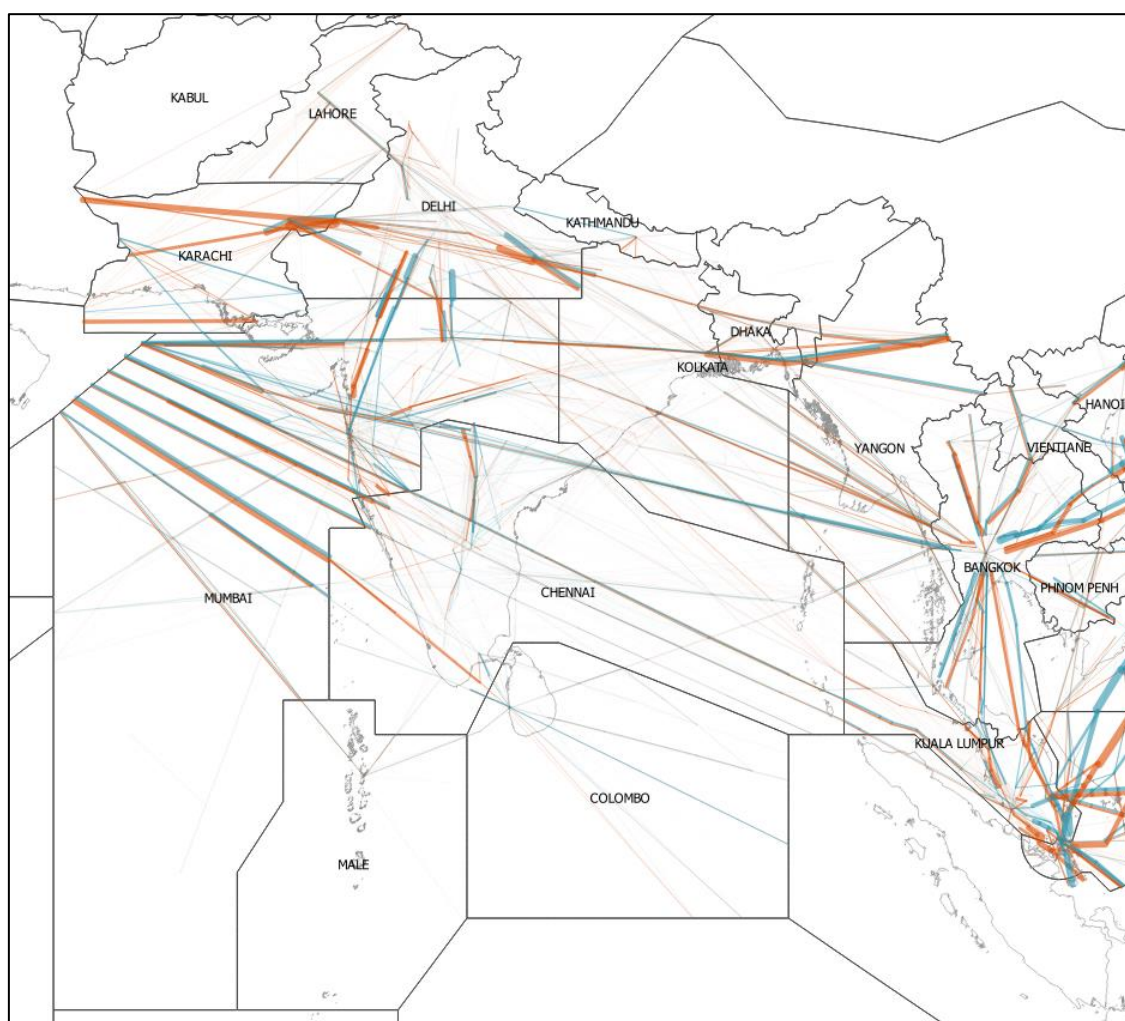
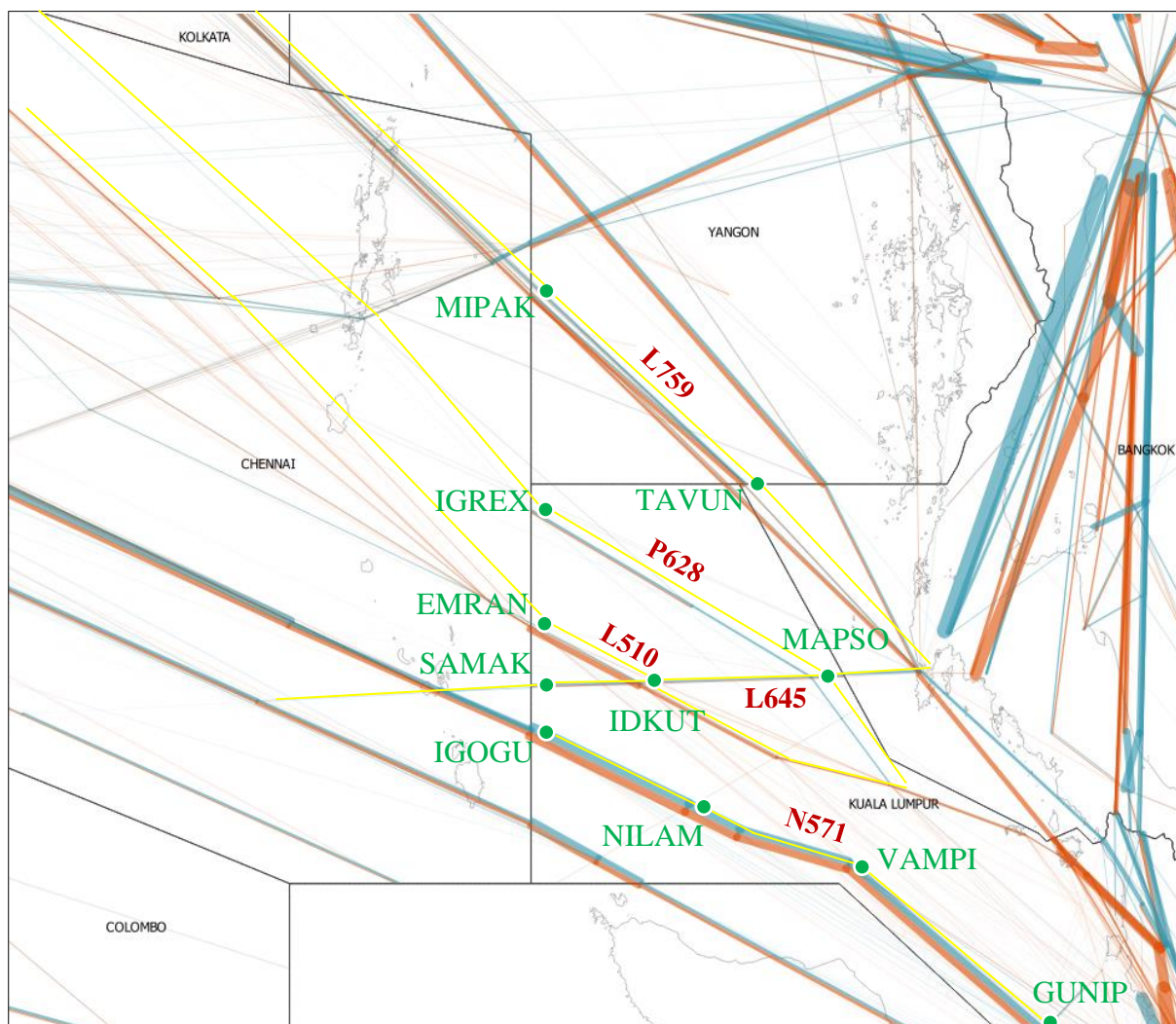


Figure 6: 2023 Traffic Flow from TSD over Bay of Bengal Airspace

Attachment 2

**The number of flights in the Bay of Bengal airspace based on Traffic Sample Data (TSD)
from 2018 to 2023.**

Route L759, P628, L510, L645 and N571



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

Route	Portion	Direction	The number of flights					
			2018	2019	2020	2021	2022	2023
L645	IDKUT to SAMAK	Westbound	108	213	10	16	113	204
N571	IGOGU to NILAM	Eastbound	1684	2096	715	385	1217	866
N571	VAMPI to GUNIP	Eastbound	1116	1319	495	N/A	937	666
N571	GUNIP to VAMPI	Westbound	1466	1394	387	N/A	693	679
N571	NILAM to IGOGU	Westbound	1706	1599	428	689	1290	971

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