



ASSEMBLY — 38TH SESSION

TECHNICAL COMMISSION

Agenda Item 38: Other issues to be considered by the Technical Commission

IMPLEMENTATION OF HIMALAYAN ROUTE

(Presented by Nepal)

EXECUTIVE SUMMARY

Despite the development and implementation of revised routes structures South of the Himalayas and across the Indian sub-continent, there is still congestion and delays of east-bound and west-bound air traffic flows across the Bay of Bengal. Nepal has proposed a direct route along the Southern Slope of Himalaya as a solution to the congestion and to enhance safety.

This paper outlines the significance and multiple benefits of the development of this route. Cooperation and support from the concerned States, ICAO and IATA is essential to materialize the proposed air route, which will constitute a leap in enhancing safety and efficiency of air transportation, as well as foster the harmonized and economically viable air route that contribute a lot in the reduction of CO₂ emissions.

<i>Strategic Objectives:</i>	This working paper relates to the Safety and Environmental Protection and Sustainable Development of Air Transport Safety Objectives.
<i>Financial implications:</i>	Not applicable.
<i>References:</i>	ICAO Asia/Pacific Region ATS Route Catalogue, Version 12, 26 June 2013 ICAO Carbon Emissions Calculator, Version 3, August 2010

1. INTRODUCTION

1.1 Nepal is strategically located between India and China on the southern slope of the Himalayas and has diverse landscapes ranging from flat plains to the highest summit of the world, the Mt. Everest having the most amazing panoramic scenes to be seen anywhere else in the world. The development of long haul air routes along the elegant Himalayan stretches will be very beneficial not only for Nepal but also regional as well as global air traffic scenario.

1.2 Asia Pacific Region being the highest in air traffic growth, there is the increased congestion and delays of air traffic flows in the region and specifically in the Bay of Bengal. Nepal is of the view that as a contributing effort in solving the congestion of the East and West-bound traffic flows across the Indian sub-continent, the implementation of Himalayan Route will be one of the major steps in solving this issue. This effort was initially proposed by IATA during EMARSSH Project in 2002 to connect Asia to the east and Europe and Middle East to the west. This will constitute a leap in enhancing safety and efficiency of air transportation within the region and beyond, as well as foster the harmonized and economically viable air route that contribute a lot in reducing the CO₂ emissions in the Bay of Bengal and Indian sub-continent.

2. ANALYSIS

2.1 Details of Himalaya route

Routing	Existing Route	Proposed Route	Distance saved, Time saving	Reduced Emission CO ₂ (per flight)	Total Reduced Emission, CO ₂ /Year	Fuel Saving (per flight)	Total Fuel Saving/year (Average)	Remarks
Kathmandu to Kunming, Hong Kong, Guanzhou	Kathmandu-R344-BRT-KH-RAJ-A201-LSO-A599-Kunming (1085NM)	1.Kathmandu-G348-BBD-W45-GGT-W53-KKU-W55-IIM-DCT-Kunming (971NM)	114NM/ 15 min	1640 kg	600 ton	520 kg	190 ton	Average 1.0 flt/day (two way) from Kathmandu to Hong Kong via Kunming. Presently Nepal Airlines is only doing this flight.
		2.Kathmandu-G348-BBD-W45-GGT-W53-KKU-W55-IIM-LSO-Kunming (1040NM)	45NM/ 6 min	650 kg	235 ton	205 kg	75 ton	

2.2 The above mentioned route is not only emission efficient and cost effective, but also, if connected to India and further west direct via Kathmandu FIR (VNSM), significantly increases ATC efficiency and helps to reduce flying time from Hong Kong to Delhi, Middle East and Europe.

Routing	Existing Route	Proposed Route	Distance saved	Reduced Emission, CO ₂ (per flight)	Total Reduced Emission, CO ₂ /Year	Fuel Saving (per flight)	Total Fuel Saving/year (Average)	Remarks
Delhi to Kunming, Hong Kong, Guanzhou and East.	Delhi-R460E-LLK-A201-SALOR-RAJ-LSO-A599-Kunming (1488NM)	1.Delhi-L626-Kathmandu-G348-BBD-W45-GGT-W53-KKU-W55-IIM-DCT-Kunming (1431NM)	57NM/ 7.5 min	820 kg	8965 ton	260 kg	2850 ton	Considering Average 30 flt/day (two way) this proposed route to Kunming, Hong Kong, Guanzhou and East.

3. BENEFITS

3.1 Reduce air traffic congestion thereby reducing the air traffic delays of the flights across Bay of Bengal to Europe and Middle East and enhancing the regional as well as global aviation safety.

3.2 Reduce flying time significantly by introducing the shorter possible route.

3.3 Reduce the consumption of fuel thus reducing the cost involved in aircraft operation.

3.4 Contribute in reducing CO₂ emissions thereby addressing the global concern of environmental protection.

3.5 Enhance harmonized and balanced use of airspace thereby reducing the ATC workload and increasing the ATC efficiency.

3.6 This route will contribute for safer, economically viable, cost-effective and environment friendly air transportation system in the world.

4. **CONCLUSION**

4.1 Considering over the enormous benefits and potentials which Himalayan Route has, Nepal urges better understanding and cooperation among concerned States, ICAO, IATA and the Industries for the materialization of the proposed Himalayan Route which will be of great benefit to civil aviation industries of the world.

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