



International Civil Aviation Organization

ICAO

The Second Meeting of the South Asia, Indian Ocean and Southeast Asia ATM Coordination Group (SAIOSEACG/2)

Bangkok, Thailand, 20 – 24 March 2023

Agenda Item 7: ANSP Coordination and Civil/Military Cooperation

BENEFITS OF FLEXIBLE USE OF AIRSPACE IN INDIA

(Presented by INDIA/AIRPORTS AUTHORITY OF INDIA)

SUMMARY

This paper presents the Flexible Use of Airspace in India and its benefits.

1. INTRODUCTION

1.1 Flexible Use of Airspace (FUA) is the “Concept of airspace management based on the principle that airspace should not be designated as exclusively military or civilian, but as a continuous space that meets the requirements of all users to the extent possible.

1.2 The airspace of a nation is a finite asset and that should be used in the best interest of the state. FUA shall be facilitated through both strategic coordination and dynamic interaction, thus allowing the implementation of optimal flight paths, reducing operating costs of all airspace users while protecting the environment.

2. DISCUSSION

FUA in India

2.1 Based on the principle of Flexible Use of Airspace, India embarked upon implementation of FUA. In 2012 Committee of Secretaries proposed the adoption of the FUA concept by India. In 2013 Cabinet Committee on Security approved the implementation of FUA. National High Level Airspace Policy Body (NHLAPB), with the primary responsibility of implementing FUA in India, came into existence on 24 October 2013. The National Airspace Management Advisory Committee (NAMAC) was also established to assist NHLAPB in realizing its objectives. India published its Manual of FUA version 1.0 on August 2014.

2.2 Based on the Government of India directives the following have been accomplished

- 1) In 2020 the upper airspace of Restricted Areas at and above 33,000 feet in the Northern Sector and above 25,000 feet in the Southern Sector were converted as Temporary Reserved Areas (TRA) or Temporary Segregated Areas (TSA).

- 2) Till 1st January 2023, 92 Temporary Reserved Areas (TRAs) and 17 Temporary Segregated Areas have been established following ICAO norms. Out of these 109 TSA/TRAs 102 are managed by AMC.
- 3) National Airspace Management Cells (NAMC) at Delhi and Regional Airspace Management Cells (RAMC) at Delhi (IGIA) & Chennai have been established. These units have officers from AAI and Military (IAF & Navy) who coordinate and issue Airspace Use Plan (AUP) on a daily basis. The AUP, issued at 1500 hours, notifies the activation / availability of TRAs and CDRs (Conditional Routes) for the next day. For any change, an Updated AUP (UUP) is published at 1800 hours daily. There are plan to establish RAMCs in Eastern and Western regions.
- 4) 40 Danger Areas and 1 Restricted Area of Army have been de-notified and upper limit of 2 Danger Areas has been brought down to 10000 ft from 37000 ft.
- 5) A total of 128 Conditional Routes (CDRs) have been implemented which consists of 5 CDR-1, 104 CDR-2 and 19 CDR-3 routes. These CDRs have helped shortening the distances for airline operators giving rise to fuel saving and reduced carbon emission.

Benefits of FUA

2.3 The following benefits have been derived from FUA in India.

- 1) FUA has enabled fuel savings of around **Rs.407.96 crores** (\$ **4,97,56,097**) as reported by some major airlines.
- 2) FUA has enabled reported reduction of carbon footprint of the order of **91165 tons** of CO₂.

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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