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**Eleventh Meeting of the Air Traffic Management Sub-Group
(ATM/SG/11) of APANPIRG**

Singapore, 2 – 6 October 2023

Agenda Item 5: ATM Systems (Modernization, Seamless ATM, CNS, ATFM)

FATIGUE MANAGEMENT OF AIR TRAFFIC CONTROLLERS IN INDIA

(Presented by India)

SUMMARY

This information paper presents the regulation and implementation of Fatigue Management regulations for Air Traffic Controllers (ATCOs) in India.

1. INTRODUCTION

1.1 An Air Traffic Controller (ATCO) is one of the key elements for an effective functioning of any Air Traffic Management (ATM) system. Fatigue is a major human factor hazard since it directly affects Air Traffic Controller's ability to perform his job and has implications on aviation safety. ICAO mandates every state to establish regulations for fatigue management in Air Traffic services.

1.2 Covid-19 pandemic delayed the implementation of fatigue management regulations in India. DGCA-India was in the process of implementing Fatigue Management regulations with the state owned Air Traffic Service Provider(ATSP),Airports Authority of India at all ATS stations across India. This paper presents information about the nature of Fatigue Management regulations for Air Traffic Controllers in India and the challenges faced during implementation process.

2. DISCUSSION

Heading

2.1 ICAO mandates every state to establish regulations for fatigue management in Air Traffic services based on scientific principles, knowledge and operational experience through Amendment 50B of Annex 11 — Air Traffic Services applicable from November 5, 2020.States are given the flexibility to regulate fatigue management either through prescriptive limitation regulations or through Fatigue Risk Management system (FRMS).

2.2 India has adapted a prescriptive limitation regulations for Air Traffic Controllers. The prescriptive limitations specify the limits while managing risks using safety management system (SMS) processes. India had adapted ICAO guidelines through a national regulation in Civil Aviation requirements Section 9 Series L Part VII which elaborates the Watch duty time limitations (WDTL) and rest requirements for Air Traffic Controllers (ATCOs) engaged in provision of air traffic services. The prescriptive limitation regulations in India have been made not only from the ICAO guidelines but also from the global best practices for fatigue management.

2.3 As per the prescriptive limitation guidelines, fatigue management of ATCOs is a shared responsibility involving the ATSP, responsible personnel of the ATS-station (ATS-in-Charge/Watch supervisor) and the ATCOs.

2.4 As per the regulations, the ATSP is required to develop and maintain a fatigue management policy and also provide education on fatigue management to ATCOs. The ATSP should manage fatigue using SMS process and also ensure adequate facilities and separate designated areas for ATCOs which shall afford individual quiet space and for refreshment.

2.5 The prescriptive regulations mandates ATS-in-Charges of each ATS station to construct schedules /rosters within the limits specified in the regulations. As per the regulations, ATSP is required to publish schedules/roster at least 5 days in advance for a period of at least two weeks.

2.6 They are also required to keep records of the planned (scheduled) and the actual work period of ATCOs.

2.7 The ATCOs are not only required to comply with the prescriptive limitation guidelines but also are mandated not to perform any safety relevant tasks when he/she knows that he/she is fatigued.

2.8 The prescriptive duty time limitations provides limits on the duty period, interval between the duty period and limit on and interval following consecutive duty period. The limits on operational duty and break during operational duty is also prescribed. The length of night duties and intervals after night duties are specified in the limitation guidelines. The prescriptive duty time limitations provides also incorporates flexibility by allowing variations in exceptional circumstances such as operational disruptions. The regulations will be under continuous oversight by the state for effective implementation.

Benefits

2.9 The introduction of fatigue management regulations through prescriptive limitation guidelines will streamline the work pattern and mitigate the risk arising out of fatigued ATCOs

Challenges

2.10 The varied complexity of air traffic and additional manpower requirements at different ATS-Stations are major challenges towards implementation of fatigue management regulations.

Next step

2.11 India has more than 110 operational civil airports which have ATS stations of varying traffic complexities from dense traffic to only few flights per day. The number of new ATS units/Stations is also growing at a steady pace due to rapid growth of air-traffic. The CAA, DGCA-India is aiming to implement the Fatigue Management regulations to across all ATS-stations in India in a phased manner.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information contained in this paper.

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