



International Civil Aviation Organization

MIDANPIRG/21 & RASG-MID/11 Meetings

(Abu Dhabi, UAE, 4 – 8 March 2024)

Agenda Item 4.2: Outcome of the ASRG/5 meeting

ESTABLISHING A DATA & ARTIFICIAL INTELLIGENCE GROUP WITHIN THE ICAO-MID

(Presented by UAE)

SUMMARY

With the rapid advancements in data analytics and artificial intelligence (AI), the Middle East and North Africa (MENA) region faces both opportunities and challenges in aviation. To address these, establishing a Data & Artificial Intelligence Group (DAIG) within the ICAO Middle East Regional Office (ICAO-MID) would be a transformative step. The DAIG will have the potential to bring about positive transformation by harnessing data and AI, addressing specific challenges in the MENA region's aviation sector, and contributing to the overall advancement of the industry. This working paper outlines the rationale, objectives, structure, and potential benefits of the proposed DAIG.

Action by the meeting

1. The meeting is invited to Consider the proposal submitted by the United Arab Emirates.
2. Provide guidance and assistance towards the creation and establishment of group.
3. Mediate and campaign the participation of the States from the MENA region in the group.

REFERENCE

- NIL

1. INTRODUCTION

1.1 The aviation sector in the Middle East and North Africa (MENA) region generates a vast repository of data from diverse sources, encompassing aircraft, airlines, airports, and air traffic management systems. This data, if harnessed and coupled with the transformative potential of Artificial Intelligence (AI), presents a unique opportunity to propel the region's aviation industry towards unprecedented advancements in safety, operational efficiency, and environmental sustainability.

1.2 Recognizing the challenges and immense potential of the MENA region, the establishment of a dedicated Data & Artificial Intelligence Group (DAIG) within the International Civil Aviation Organization (ICAO) Middle East Regional Office (MID) is proposed. The DAIG, will foster collaboration and innovation in the adoption and adaptation of data-driven and AI-powered solutions specifically tailored to the MENA context. This dedicated group will serve as a central hub, transforming aviation data into actionable insights through the establishment of standardized protocols for data collection and analysis. Furthermore, the DAIG will actively support the development and implementation of AI solutions specifically targeted towards enhancing safety, optimizing operational efficiency, and promoting sustainable practices within the region's aviation landscape. To bridge the knowledge gap and ensure successful integration of these cutting-edge technologies, the DAIG will offer targeted training programs and workshops, equipping aviation professionals with the necessary skills and expertise to effectively leverage data analytics and AI.

2. DISCUSSION

2.1 The establishment of a dedicated Data & Artificial Intelligence Group (DAIG) within the MENA region offers significant opportunities for improving safety, efficiency, and sustainability in its aviation sector. This group would bring together representatives from MENA states to establish data collection standards, invest in infrastructure, and develop tools to extract insights from the vast amount of aviation data.

2.2 By focusing on key areas like AI adoption, solution implementation, collaboration platforms, and skills enhancement, the DAIG can drive tangible benefits:

- Data-driven insights and AI applications can predict and mitigate safety risks in real-time.
- AI-powered solutions can optimize air traffic flow, reduce delays, and streamline operations.
- Data analytics can optimize fuel consumption and flight paths, reducing environmental impact.
- The DAIG can address the unique challenges of the MENA region by developing bespoke solutions.
- The DAIG can position the MENA region as a leader in aviation AI adoption.
- Data-driven insights and analyses can enhance policymaking and the development of effective best practices in the aviation sector.
- A dedicated platform for stakeholders to share expertise and accelerate AI adoption can be created.
- Training programs can equip aviation professionals with the skills to leverage AI effectively.
- Increased efficiency and improved services can contribute to economic growth in the MENA region.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) consider the proposal submitted by the United Arab Emirates and evaluate its financial impact;
- b) provide guidance and assistance towards the creation and establishment of group; and
- c) mediate and campaign the participation of the States from the MENA region in the group.