International Civil Aviation Organization

MIDANPIRG Communication, Navigation and Surveillance Sub-Group

Thirteenth Meeting (CNS SG/13)
(Jeddah, Saudi Arabia, 20 – 23 October 2024)

Agenda Item 5: CNS Planning and Implementation Framework in the MID Region

READINESS FOR FF-ICE IMPLEMENTATION

(Presented by United Arab Emirates)

SUMMARY

This paper highlights the critical role of the Flight and Flow — Information for a Collaborative Environment (FF-ICE) initiative in modernizing air traffic management (ATM). FF-ICE offers an advanced mechanism for managing flight planning and air traffic flow by enabling real-time data exchange between aviation stakeholders, including air traffic controllers, airline operators, and airport authorities. By adopting FF-ICE, the Middle East region can enhance airspace safety, efficiency, and interoperability with global systems.

The paper recommends the establishment of regional focus groups to facilitate the smooth implementation of FF-ICE in the region, ensuring that all Middle Eastern states align their efforts with the broader global roadmap. This paper also provides a proposed implementation roadmap, emphasizing the need for technological upgrades, training programs, and collaboration among states to address regional challenges.

Action by the meeting is at paragraph 3.

REFERENCES

- GANP
- Air Navigation Strategy MID Doc 002

1. INTRODUCTION

1.1 The Flight and Flow — Information for a Collaborative Environment (FF-ICE) is a transformative initiative designed to overcome the limitations of the current ICAO 2012 flight plan system (FPL 2012). FF-ICE is a key enabler of ICAO's Global Air Traffic Management Operational Concept (GATMOC), which aims to achieve an integrated, harmonized, and globally interoperable air traffic management system.

1.2 The current flight planning mechanisms limit the efficiency of airspace management, particularly in regions with rapidly growing air traffic, such as the Middle East. The transition to FF-ICE will provide substantial benefits by offering stakeholders access to more accurate, real-time data, which will enhance decision-making and improve the efficiency of operations. The Middle East's strategic geographic location makes it imperative for the region to align with global trends in air traffic management modernization

2. DISCUSSION

2.1 **Benefits:**

a) Enhanced Decision-Making: FF-ICE enables the real-time exchange of data among air traffic management stakeholders, improving situational awareness and allowing for more informed decision-making. This will reduce delays, improve airspace safety, and enhance operational efficiency.

b) Global Harmonization: The adoption of FF-ICE will allow Middle Eastern states to align their ATM systems with global standards, ensuring interoperability with international traffic flows. This will enhance the region’s role as a critical hub for global air traffic.

c) Increased Efficiency and Capacity: By providing better trajectory management and optimizing flight paths, FF-ICE will help improve airspace capacity, especially important in a region that is a global air traffic crossroads.

2.2 **Challenges:**

2.2.1 Technological Upgrades: Implementing FF-ICE requires significant upgrades to ATM systems. States must invest in data processing capabilities, real-time communication infrastructure, and cybersecurity measures to protect sensitive information.

2.2.2 Training Requirements: Comprehensive training programs will be needed to ensure that all stakeholders, including air traffic controllers, airline operators, and pilots, are proficient in using the new FF-ICE protocols and technologies.

2.2.3 Harmonization of Practices: The Middle East region includes states with diverse regulatory environments and technological capabilities. Achieving consensus on standardized protocols and operational practices will be critical to the success of FF-ICE implementation.

2.2.4 To address these challenges, the establishment of regional focus groups is proposed. These groups will serve as centers of expertise, coordinating the activities required for successful implementation, including the development of training programs and overseeing technological upgrades.

2.3 **Conclusion:**

2.3.1 Under the Abu Dhabi declaration (UAE initiative to support the ANS within the MID Region) UAE supports the early planning for the FF-ICE implementation and cessation of the current Flight Planning (FPL2012) system early 2030s.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) consider early planning of FF-ICE implementation at Regional level;

b) consider the inclusion of FF-ICE implementation as a priority for implementation at regional level; and

c) encourage member states to consider the inclusion of FF-ICE on their national air navigation plans (NANPs) and ensure their readiness for the transition.

- END -