International Civil Aviation Organization

SEVENTH MEETING OF THE ASIA/PACIFIC AIR TRAFFIC MANAGEMENT AUTOMATION SYSTEM TASK FORCE (ATMAS TF/7)

Bangkok, Thailand 2-4 June 2026

Agenda Item 7: ATS Inter-Facility Data - Link Communication (AIDC) Implementation

7.2. AIDC Implementation Experience Sharing by States

UPDATES ON THE DEVELOPMENT OF GLOBAL GUIDANCE MATERIAL FOR AIDC

(Presented by Singapore)

SUMMARY

The purpose of this paper is to share with the meeting on the development of ICAO global guidance material for ATS inter-facility data communications (AIDC) of ICAO CP-OPDLWG panel that was attended by Singapore in May 2026. The new guidance material will replace the Manual of Air Traffic Services Data Link Applications (Doc 9694). It highlights the operational value of AIDC in supporting safe, efficient and interoperable coordination between ATS units, its relevance to ASBU/FICE implementation, and the expected progressive transition towards FF-ICE in a mixed-mode environment. The paper also notes the continued role of regional interface control documents, including PAN AIDC ICD, OLDI and NAM ICD, in supporting implementation, and advises that the CP-OPDLWG is developing the new guidance with an estimated publication date of 2028.

1. INTRODUCTION

1.1 The purpose of this paper is to share with the meeting on the development of ICAO global guidance material for ATS inter-facility data communications (AIDC) of ICAO CP-OPDLWG panel that was attended by Singapore in May 2026. The new guidance material will replace the Manual of Air Traffic Services Data Link Applications (Doc 9694). It outlines the operational importance of AIDC, its relationship with relevant ICAO frameworks and regional interface control documents, and the ongoing work of the Communications Panel Operational Data Link Working Group (CP-OPDLWG).

2. DISCUSSION

Operational significance

2.1 AIDC enables ATS units to exchange flight data in support of notification, coordination and transfer procedures between adjacent units. By automating routine ground-ground coordination, AIDC reduces controller workload, improves the timeliness and consistency of information exchange, and mitigates the potential for manual coordination errors. These benefits contribute directly to enhanced safety, efficiency and interoperability.

2.2 AIDC supports the implementation objectives of the ICAO Aviation System Block Upgrade (ASBU) framework, in particular the Flight and Flow Information for a Collaborative Environment (FICE) modules. Its use facilitates improved inter-unit coordination and contributes to gains in capacity, operational efficiency, safety and cost-effectiveness. It also provides an important foundation for the progressive evolution of information exchange arrangements across future ASBU blocks.

Transition towards FF-ICE

2.3 The transition from current ATS message formats in PANS-ATM (Doc 4444), Appendix 3, towards Flight and Flow Information for a Collaborative Environment (FF-ICE) is expected to take place progressively. At present, ICAO has not established a date for the withdrawal of existing ATS messages. Accordingly, a mixed-mode environment is expected for some time, during which current ATS messages and procedures will continue to operate in parallel with FF-ICE-based exchanges and associated SWIM-enabled services.

Regional applications and supporting standards

2.4 In regional application, the term AIDC may also be used to describe the implemented ground-ground coordination interface. The principal implementations currently in use include AIDC, the North American Common Coordination Interface Control Document (NAM ICD) and the European On-Line Data Interchange (OLDI). While these arrangements differ in form, they address the same core operational needs for notification, coordination and transfer of control between ATS units. These associated interface control documents provide the technical and procedural basis for implementation and interoperability.

Development and maintenance of global guidance

2.5 The CP-OPDLWG is developing global guidance material intended to replace the Manual of Air Traffic Services Data Link Applications (Doc 9694). The new guidance draws on the principles of AIDC, existing provisions in PANS-ATM (Doc 4444), Appendix 3, and experience gained from regional implementations, including PAN AIDC ICD, OLDI and NAM ICD. The material is intended to complement ICAO Standards and Recommended Practices (SARPs), Procedures for Air Navigation Services (PANS) and other relevant ICAO provisions, and to support more consistent implementation and maintenance. The current target for publication is 2028.

CONCLUSION

2.6 AIDC remains an important enabler of safe, efficient and interoperable air traffic management. Ongoing ICAO work to develop updated global guidance material will assist States and regions in implementing and maintaining interoperable ground-ground coordination arrangements, while supporting the longer-term transition towards FF-ICE-based operations.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the information contained in this paper; and

b) provide comments, as appropriate.

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