



ICAO

*International Civil Aviation Organization***The Tenth Meeting of System Wide Information Management Task Force (SWIM TF/10)***Bangkok, Thailand, 20 – 23 May 2025***Agenda Item 4**

Outstanding SWIM TF/7, SWIM TF/8 and SWIM TF/9 Action Items Review

- Update on APAC SWIM Implementation Guidance materials (IGD)

**COMMENTS ON TECHNICAL MEMORANDUM OF COOPERATION (TMC)
DOCUMENT FOR ATM INFORMATION EXCHANGE THROUGH SWIM**

(Presented by Australia)

SUMMARY

This paper presents Australia's comments on the draft Technical Memorandum of Cooperation (TMC) document for ATM Information Exchange through SWIM, in response to Action 9-5 from SWIM TF/9.

1. INTRODUCTION

1.1 As captured in the ICAO APAC SWIM TF/9 Final Report under Action Item 9-5, States/Administrations were requested to share the latest revision of TMC, provided in Appendix A of the Report, with respective legal experts for comments and observations and provide feedback to ICAO by 28 February 2025.

1.2 Australia provided comments to ICAO APAC Office, who have subsequently offered Australia to submit a paper to the SWIM/TF10 meeting for discussion.

2. DISCUSSION

2.1 It is noted with appreciation Malaysia's efforts in drafting the SWIM TMC to assist States in bilateral cooperation/agreement for ATM Information Exchange through SWIM.

2.2 Australia also acknowledges input provided by New Zealand on the draft TMC via WP06 at SWIM TF/9, "[Comments on Technical Memorandum of Cooperation \(TMC\) Document for ATM Information Exchange through SWIM](#)".

2.3 It is noted that the draft SWIM TMC is a guidance document that can be used as a template for discussion between ANSPs. Noting this, Australia provides the following additional considerations:

- 2.3.1 SWIM services by their nature will include agencies other than ANSPs, either as service originators or service consumers, e.g. Meteorological or ATFM agencies (as service originators) or commercial entities such as EFB providers and flight planners, whose functions may not be provided by a State's ANSP. It is therefore unclear whether ANSPs would be expected to enter into such an arrangement on behalf of other agencies within

their State’s jurisdiction. Australia notes that it has not yet formed its position on the allocation of responsibility for SWIM TI (e.g. ANSP being the primary service provider and consumer, or another agency), and therefore whether the proposed TMC should be between States (countries) or specified agencies.

2.3.2 Australia notes that SWIM as a concept should be seeking to shift away from bilateral agreements, particularly with respect to TI. While there is an expectation that agencies will need to administer their SWIM services (including authorizing other SWIM consumers to subscribe to their service), another alternative could be establish a non-binding head agreement at the Regional level (e.g. MOU) for defining high level policies and principles of common understanding, e.g. Parties, Purpose, Dispute Resolution, Definitions or Interpretation, Information Sharing (including Confidentiality, Data Protection, Privacy etc.), Financial Arrangements, Record Keeping, Duration, Variation, Extension, Termination etc. The head agreement principles would ideally not change for the duration of the arrangement. Individual ANSPs/States/agencies could then sign up to the regional head agreement, avoiding the need to manage individual agreements between other ANSPs/States).

2.3.3 Pursuant to 2.3.2, if there was still a need for ANSPs or agencies to deal with specific, detailed procedural and administrative matters such as Technical Specifications, Technical Testing, Day-to-Day Management/Reporting/Liaison Responsibilities, Specific Legal or Regulatory Specifications or Limitations etc., signatories to the head agreement could execute a non-binding subordinate agreement subject to the terms of the head agreement such as a letter of agreement or letter of exchange (LOA or LOE) or an annex, which could be varied at any stage throughout the duration of the head agreement on an as-needs basis.

2.3.4 Australia would be supportive of the establishment of a dedicated group (e.g. SWIM OG) to administer the transition to SWIM, which could be used to progress relevant processes (such as MOU) and governance in establishing SWIM services in the APAC region.

2.4 Australia provides the following comments and observations based on feedback from legal experts:

2.4.1 It is unclear how the proposed arrangement would fit in with other international and domestic aviation-related information sharing arrangements and initiatives e.g. working groups and joint agreements.

2.4.2 If the agreement/signatories were intended to be “State to State” (or country to country), Country-to-Country agreements attract additional effort to ensure that they be very clearly drafted and administered so as not to be construed as having treaty status that are legally binding and subject to international law. Country-to-country arrangements are also more complex and timelier to negotiate due to different bureaucratic processes and formalities within each jurisdiction.

2.5 Australia also notes the following on specific wording contained within the draft TMC:

2.5.1 Reference to Introduction, paragraph 2, ‘SWIM TI’ is ambiguous and should ideally reference a version-controlled APAC publication whether that be a modified EUROCONTROL Yellow Profile or other endorsed publication.

2.5.2 Reference to Introduction, paragraph 3, the conditions of what quantifies ‘successful completion’ in recommended for inclusion, preferably specified in the ‘SWIM TI’ document as per 2.5.2 above. ‘Partial success’, or wording to that effect, is also recommended for inclusion to cater for ANSP/agencies that have completed one or more

SWIM Information Services (e.g. FF-ICE Filing Service) and are working towards implementing other SWIM Information Services (e.g. Digital NOTAM Distribution Service).

- 2.5.3 Reference to Paragraph 3, the definition of a connection point or boundary is expected to vary between countries and within countries. This may depend on a contractual agreement (e.g. PCCW may provide and monitor an on-premise router and associated international circuits to other ANSPs). This also applies, in some cases, to ISPs that provide a router as part of the contract and service level agreements, though there are ISPs that allow bring-your-own (BYO) devices.
- 2.5.4 Reference to Paragraph 4, section 4.1, it is noted that the EUROCONTROL Yellow Profile TI is outdated (published 5 July 2020) and should be modified where needed to capture SIPG APAC agreed specifics and be governed as such. Such a document would be a consolidated view on what constitutes an APAC Yellow Profile that reflects APAC nuances, for example distributed ANSP/agency/country specific rules and regulations versus the centralised EUROCONTROL model. Other aspects of the Yellow Profile include the updating/removal specific details (e.g. ‘SOAP’ with AMQP and Publish/Subscribe patterns and service registries expanded upon). There are likely to be other specificities that will be identified by subject matter experts in assessing the suitability of the Eurocontrol Yellow Profile TI for applicability in APAC.
- 2.5.5 Reference to Paragraph 5, contingency arrangements should ideally be linked back to the actual type of information exchange and required quality of service and associated supporting service level agreements. More time-sensitive data exchanges (e.g. sharing of surveillance tracks versus sharing Aeronautical data such as airspace or route definitions) are expected to have differing contingency requirements that have differing costs.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) discuss the points raised for the draft SWIM TMC;
 - b) note the information contained in this paper; and
 - c) discuss any relevant matter as appropriate

THE EIGHTH MEETING OF THE ASIA-PACIFIC SWIM TASK FORCE
(SWIM TF/8)
Appendix A to the Report

TECHNICAL MEMORANDUM OF COOPERATION

BETWEEN

<ANSP #1>

AND

<ANSP #2>

**FOR AIR TRAFFIC MANAGEMENT (ATM) INFORMATION
SHARING THROUGH SYSTEM WIDE INFORMATION
MANAGEMENT (SWIM)**

[To be filled in (Date of SWIM TMC)]

SWIM TF/10
Appendix A to IP/04

THE EIGHTH MEETING OF THE ASIA-PACIFIC SWIM TASK FORCE
(SWIM TF/8)

Appendix A to the Report

Revision History

[illegible]

THE EIGHTH MEETING OF THE ASIA-PACIFIC SWIM TASK FORCE
(SWIM TF/8)
Appendix A to the Report

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TECHNICAL MEMORANDUM OF COOPERATION

BETWEEN

<ANSP #1>

AND

<ANSP #2>

**FOR AIR TRAFFIC MANAGEMENT (ATM) INFORMATION SHARING
THROUGH SYSTEM WIDE INFORMATION MANAGEMENT (SWIM)**

This Technical Memorandum of Cooperation is made between **<ANSP #1>** and **<ANSP #2>** hereinafter collectively referred to as the “Participants” and singularly as the “Participant”.

WHEREAS the Participants wish to jointly establish an SWIM Technical Infrastructure (“SWIM TI”) connection between **<Country ANSP #1>** and **<Country ANSP #2>** to support the Air Traffic Management (ATM) Information Exchange through the use of International Civil Aviation Organization (“ICAO”) System Wide Information Management (“SWIM”).

AND WHEREAS the Participants have successfully completed the SWIM Technical Infrastructure (SWIM TI) Trial in preparation for a smooth ATM Information Exchange through SWIM implementation.

THE PARTICIPANTS HAVE REACHED THE FOLLOWING UNDERSTANDINGS:

PARAGRAPH 1 – CITATION

This S W I M Technical Memorandum of Cooperation will hereinafter be referred to as the “SWIM TMC”.

PARAGRAPH 2 – PURPOSE

The Participants, agree to establish and implement ATM Information Exchange through SWIM between **<Country ANSP #1>** and **<Country ANSP #2>**, subject to the terms and conditions of this SWIM TMC and the laws, rules, regulations and national policies from time to time in force in their respective States.

PARAGRAPH 3 – FINANCIAL TERMS

Each participant shall be responsible respectively for all costs and expenses arising from the connection from its SWIM Technical Infrastructure (SWIM TI) to the international connection points provided by its telecom carriers and all equipment, software and associated costs required for the ATM Information Exchange operation through SWIM.

PARAGRAPH 4 – SWIM TECHNICAL INFRASTRUCTURE DEFINITION

4.1 The SWIM TI will be based on the EUROCONTROL Specification for SWIM Technical Infrastructure (TI) Yellow Profile (EUROCONTROL-SPEC 170 Edition 1.1).

4.2 The network connectivity between Participants SWIM TI will be based on mutually agreed telecommunication provider.

PARAGRAPH 5 – CONTINGENCY ARRANGEMENTS

5.1 The Participants will ensure that fallback procedures in the event of circuit or other failure affecting the flow of network traffic between them are established and supported by their respective alternative setup.

5.2 The Participants will, through regular meetings and other appropriate means, review and exchange information on their respective procedures and the support arrangements and assist each other to strengthen these contingency arrangements.

PARAGRAPH 6 – SWIM TI TEST

6.1 To enable the establishment of the ATM Information Exchange through SWIM under this SWIM TMC, the SWIM TI trial has been conducted to evaluate the basic connectivity, interoperability, functionality, and integrity of the SWIM TI between the Participants.

6.2 The tests conducted under the SWIM TI trial are as follows:

Tests	Test Dates
Network Connectivity Bilateral Tests	[TBD]
SWIM EMS Interoperability Tests	[TBD]
SWIM Information Service Tests	[TBD]
SWIM Application Tests	[TBD]

6.4 The details of the tests and the test procedures for the test cases are set out in **Annex 1**.

6.5 The test results for each of the test cases conducted according to the test procedures in **Annex 1** are recorded and compiled in the test report provided in **Annex 2**.

6.6 The achievements, problems, and lessons learnt from the tests-related activities are also set out in **Annex 2**.

PARAGRAPH 7 – UNDERSTANDING

7.1 The Participants will use all reasonable endeavours to carry out their respective responsibilities and will cooperate to ensure the effectiveness and reliability of the SWIM TI between <Country #1> and <Country #2>.

7.2 In furtherance of this understanding, the Participants will conduct additional tests using additional test cases, if so, agreed by the Participants and subject to paragraph 8 of this SWIM TMC.

7.3 If a Participant assesses that any additional test in sub-paragraph 7.2 or any change in SWIM requirement or service detail is not affordable or not cost effective to implement, that Participant may decline to undertake that additional test or carry out that requirement or service detail but will nevertheless continue to cooperate with the other Participant to reach a mutually acceptable outcome.

PARAGRAPH 8 – REVISION, MODIFICATION AND AMENDMENTS

8.1 No revision, modification, or amendment to this SWIM TMC will be effective unless made in writing and signed by both Participants.

8.2 Such revision, modification or amendment shall come into effect on such date as may be agreed by the Participants and specified in the document made in accordance with sub-paragraph 8.1, taking into consideration all domestic procedures that have to be complied with.

8.3 Any revision, modification or amendment shall not affect the rights and obligations arising from or based on this SWIM TMC prior to the effective date of such amendment.

PARAGRAPH 9 – SWIM TI COMMENCEMENT DATE

The SWIM TI between <Country #1> and <Country #2> under this SWIM TMC will commence one (1) month from the date this SWIM TMC comes into force under paragraph 14.1.

PARAGRAPH 10 - SETTLEMENT OF DISPUTE

Any difference or dispute between the Participants concerning the interpretation and/or implementation and/or application of any of the provisions of this SWIM TMC shall be settled amicably through mutual consultation and/or negotiations between the Participants without reference to any court, international tribunal or other third party for settlement.

PARAGRAPH 11 – CONFIDENTIALITY

11.1 Each Participant undertakes to observe the confidentiality and secrecy of documents, information and other data received or supplied to the other Participant during the period of the implementation of this SWIM TMC or any other arrangements made pursuant to this SWIM TMC. Neither Participant shall disseminate such information to a third party or use this information for any purposes including administrative, editorial, prosecutorial or judicial purposes without the prior written consent of the other Participant.

11.2 Both Participants agree that sub-paragraph 11.1 shall survive the expiry or termination of this SWIM TMC.

PARAGRAPH 12 – SUSPENSION

Each Participant reserves the right for reasons of national security, national interest, public order or public health to suspend temporarily, either in whole or in part, the implementation of this SWIM TMC which suspension shall take effect immediately after written notification has been given to the other Participant.

PARAGRAPH 13 - EFFECT OF THIS COOPERATION

13.1 This SWIM TMC serves only as a record of the Participants' intentions and does not constitute or create, or is not intended to constitute or create, legally binding rights or obligations under domestic or international law and will not give rise to any legal process and will not be deemed to constitute or create any legally binding or enforceable obligations, express or implied.

13.2 Notwithstanding anything in sub-paragraph 13.1, paragraph 3 (Financial Terms), paragraph 8 (Revision, Modification and Amendment), paragraph 10 (Settlement of Disputes), paragraph 11 (Confidentiality) and paragraph 12 (Suspension) shall be binding on the Participants.

PARAGRAPH 14 - EFFECTIVE DATE, DURATION AND TERMINATION

14.1 This SWIM TMC will come into effect on the date of last signature by both Participants and will continue to have effect for a period of five (5) years.

14.2 Thereafter, this SWIM TMC may be extended by mutual agreement of the Participants made in writing in accordance with paragraph 8.

14.3 Notwithstanding anything in this paragraph, either Participant may terminate this SWIM TMC by giving no less than sixty (60) days' prior written notice to the other Participant.

14.4 Any termination of this SWIM TMC will not affect the implementation of on-going projects and/or programmes, which have been agreed upon by the Parties prior to the effective date of the termination of this SWIM TMC.

PARAGRAPH 15 - SIGNATURE IN COUNTERPARTS

To facilitate execution, this SWIM TMC and each of its annexes and addenda, if any, may be executed in counterparts, each of which will be an original, but all of which together will constitute one and the same agreement.

PARAGRAPH 16 - AUTHORITY

The Participants agree to the provisions of this SWIM TMC as indicated by the signatures of their duly authorised representatives below.

The foregoing record represents the understandings reached between the <ANSP #1> and the <ANSP #2> upon the matters referred to therein.

Signed by the Participants' duly authorised representatives on the dates set out below in two (2) original texts in the English language.

**<ANSP #1> Authorised
Representative**

**<ANSP #2> Authorised
Representative**

Name
Designation

Name
Designation

Date:

Date:

ANNEX 1: DETAILS OF THE TESTS AND THE TEST PROCEDURES

ANNEX 2: THE TESTS RESULT