International Civil Aviation Organization

The Twelfth Meeting of the Common aeRonautical Virtual Private Network Operations Group (CRV OG/12)

Denarau Island, Fiji, 23-26 January 2024

Agenda Item 2: Review outcomes of relevant meetings

ICAO IPS ROADMAP

(Presented by USA/FAA)

SUMMARY

This paper presents the update of the ICAO documents to be published. These documents might be related to AFS implementation in the region.

1. INTRODUCTION

1.1 Various ICAO panels are developing many documents, technical manuals, and guidance material to enhance IPS. The current plan is for a seamless IPS operation of air -to-ground and ground-to-ground.

1.2 The CP WG-I held in Bangkok December 2023 presented the following documents that are under development with a planned publication in 2024 as shown in Attachment A:

1. Doc. 9896, Ed. 3: IPS Technical Manuals and Guidance Material
2. Doc. 10090, Ed. 1: Security Services for Aeronautical Communications
3. Doc. 10094, Ed. 1: Secure Dialog Service Tech Manual / ConOps / Guidance (planned for 2025 or later publication)
4. Doc. 10095, Ed. 1: PKI Security Policy
5. Doc. 10145, Ed. 1: Security Risk Assessment

2. DISCUSSION

2.1 Communication Panel (CP) WG-I is planning to finalize the following issues in 2024 and to be documented in ICAO Doc. 9896 Ed. 3:

1. IPv6 address assignment: ICAO assignment versus ANSPs to obtain
2. IPv6 address access: public address versus private address or both

2.2 The Trust Framework Panel also develops many security documents. These documents will not be available until the end of 2024. It's recommended the ICAO regional office to obtain these documents when available for members to analyze and comment as needed.

2.3 The CRV OG is recommended to review these documents to determine impacts, if any.

3. ACTION BY THE MEETING

1.1 The meeting is invited to:

a) note the information contained in this paper; and

b) discuss any relevant matter as appropriate.

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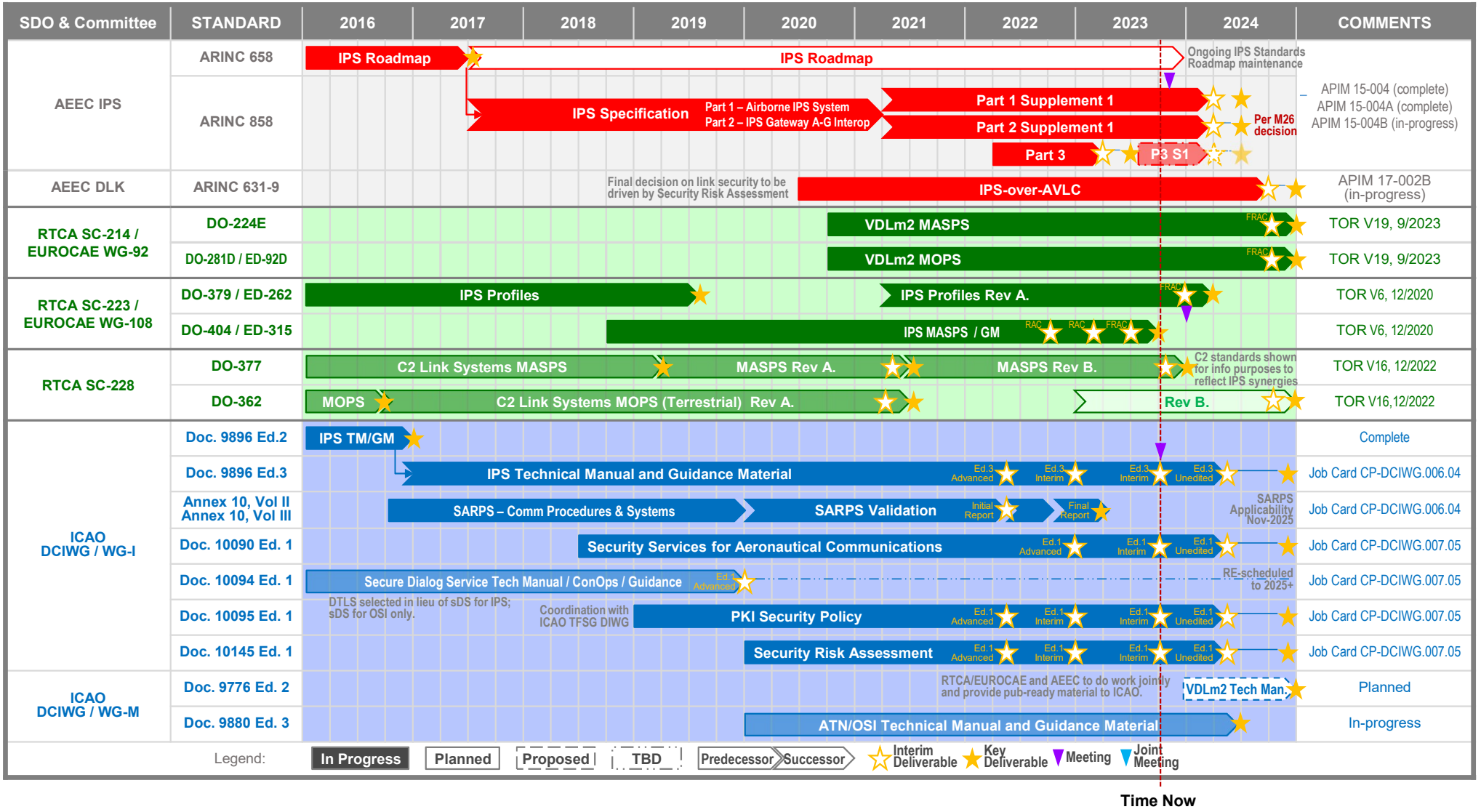
ATN/IPS A/G Standardization Roadmap (rev. 2023-10-17)



IPS Standards: Summary of Key Dates (rev. 2023-10-17)

At this point, the technical content is complete

SDO	Standard	Short Title	Review Start	Review Complete	Handoff to SDO	SDO Approval	Publication
ICAO	Annex 10 Vol. II Annex 10 Vol. III	IPS SARPS	Jul 2023 (State Review)	Jan 2024	Jan 2024	Jun 2024 (TBC) ANC	Applicability EOY 2025
	Doc. 9896 Ed. 3 (I, II, III)	IPS Tech Manual	Ongoing	Oct 2023 (WG-I / M38)	Dec 2023	May 2024 CP DCIWG/7	Nov 2024
	Doc, 9896 Ed. 3 (IV)	IPS Guidance Material	Ongoing	Dec 2023 (WG-I / M38)	Mar 2024		
	Doc. 10090	IPS Security Services	Ongoing	Oct 2023 TBC [1] (WG-I / M38)	Dec 2023 TBC [1]		
	Doc. 10095	IPS PKI Security Policy	Ongoing	Oct 2023 (WG-I / M38)	Dec 2023		
	Doc. 10145	IPS Risk Assessment	Ongoing	Oct 2023 (WG-I / M38)	Dec 2023		
RTCA/ EUROCAE	DO-404 / ED-315	IPS MASPS	Apr 2023 (FRAC start)	Aug 2023 (FRAC complete)	Aug 2023	Sep 2023 PMC	Sep 2023
	DO-379A / ED-262A	IPS Profiles	Dec 2023 TBC [2] (FRAC start)	Mar 2024 TBC [2] (FRAC complete)	Mar 2024TBC [2]	TBD PMC	TBD
AEEC	A858 Part 1 Supp1	Airborne IPS System	Ongoing	Nov 2023 TBC [3] (IPS M27)	Dec 2023 TBC [3] (with slack time thru Mar 2024 if necessary)	May 2024 AEEC General Session	Jul 2024
	A858 Part 2 Supp1	IPS Gateway	Ongoing				
	A858 Part 3 Supp1	Common IPS Radio I/F	Ongoing				

NOTES:

1. The dates shown are the planned dates. Since tight coordination with ICAO TFP (content being developed in the TFP Manual on Information Security) and Cybersecurity Panel are necessary, the planned dates may need to be adjusted.
2. Completion of the IPS Profiles is dependent on resource availability (Aloke or alternate). Timing to be revisited/revised in September.
3. Completion of A858 Supp1 is dependent on resource availability (Mike O. or alternate). Timing to be revisited/revised in September.