



ICAO

*International Civil Aviation Organization*

**THE THIRD MEETING OF MODE S DOWNLINKED  
AIRCRAFT PARAMETERS WORKING GROUP  
(MODE S DAPs WG/3)**

Web-conference, 12 – 15 May 2020

---

**Agenda Item 8:** Next meetings and any other business

**REVIEW OF TERMS OF REFERENCE**

(Presented by China, Singapore and Secretariat)

**SUMMARY**

This paper presents the Terms of Reference of the Mode S DAPS WG for review by the meeting.

**1. INTRODUCTION**

1.1 The Terms of Reference for the Mode S DAPs Working Group was last reviewed and updated by SURICG/4 through the following Decision:

**Decision SURICG 4/4 – Revised Term of Reference of DAPS WG**

*That, the revised Terms of Reference proposed by Mode S DAPs Working Group provided in Appendix F to the Report be adopted.*

**2. DISCUSSION**

Terms of Reference (TOR) for the Working Group

2.1 The present TOR of the Working Group is provided in **Attachment A** to this paper.

Work done thus far

2.2 The work done thus far, with respect to the TOR is provided in **Attachment B** to this paper.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the information in this paper;
- b) discuss any matters as appropriate.

-----

**Revised Terms of Reference of Mode S DAPs Working Group****Working Arrangement of the Mode S DAPS WG**

**Membership:** The Mode S DAPS WG shall be composed of experts involved in technical and operation of surveillance services as well as operational experts. Member States of SURICG are encouraged to volunteer to form this Working Group. The working group shall normally invite representatives of International Organizations recognized by the ICAO Council and Industry Partners as required by the group which represent important civil aviation interests to participate in its work in a consultative capacity.

**Meetings:** The Mode S DAPS WG shall convene annually with at least one face-to-face meeting per year, and supplemented with WebEx meetings as required. The outcome of the meetings shall be reported to the SURICG.

**Schedule and delivery:** Subject to the extent of prioritized applications considered by the Mode S DAPS WG, the schedule for delivery of the working group shall be 3 years after initiation of the Mode S DAPS WG (28 March 2018). The delivery point(s) will be nominated by SURICG through discussion. The Mode S DAPS WG shall report to the APANPIRG via the SURICG.

**Terms of Reference.** See next section.

**Term of Reference****The Objectives of Mode S DAPs Working Group are to:**

- 1) Ensure harmonized implementation of Mode S DAPs in the Asia and Pacific Regions according to Surveillance Strategy adopted by APANPIRG;
- 2) Facilitate the implementation of Mode S DAPs application in the Asia and Pacific Regions using the project management principles where appropriate to maximize its benefit to region; and
- 3) Review, identify and address major issues in technical, operational and regulatory aspects to facilitate the Mode S DAPs implementation in the Asia and Pacific Regions.

**Deliverables to meet the Objectives:**

- 1) Progress report to be submitted to SURICG addressing the Mode S DAPs Working Group deliverables (listed in 2 to 7 below);
- 2) To study and identify applicable Mode S DAPs applications in the Asia and Pacific Regions considering:
  - Concept of use/operation;
  - Cost of system;
  - Requirement of surveillance systems (focusing on radar);
  - Matching functionality in ATC automation system;
  - Other currently available or emerging technologies;
  - ICAO Global Air Navigation Plan (GANP) and Aviation System Block Upgrades (ASBU); and
  - Evaluation method for Mode S DAPs performance.

- 3) To identify and develop the regional requirements of Mode S DAPs capability in the area of aircraft equipage, surveillance systems (focusing on radar) and ATC automation system, taking into account the relevant performance expectations of the Asia/Pacific Seamless ATM Plan;
- 4) To develop roadmap for Mode S DAPs application in the Asia and Pacific Regions taking into account of:
  - Available equipment standards;
  - Readiness of airspace users and ATS providers; and
  - Development of standardized and systematic approach to Mode S DAPs application.
- 5) To develop guidance materials to assist States and airspace users on the use of Mode S DAPs in the Asia and Pacific Regions;
- 6) To encourage research and development, trials and demonstrations in the field of Mode S DAPs application; and
- 7) Draft Conclusions and Decisions to be formulated relating to matters in the field of Mode S DAPS that come within the scope of the SURICG work plan.

*[Note: Mode S DAPS Working Group will report to SURICG and SURICG will coordinate with CNS Sub-group.]*

**Current Members:** The working group is currently comprised of representatives from Cambodia, China, Hong Kong China, India, Japan, Republic of Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand and Viet Nam, and is led by China and Singapore.

**Term of Reference**

		<b>Efforts thus far</b>
<b>The Objectives of Mode S DAPs Working Group are to:</b>		
1	Ensure harmonized implementation of Mode S DAPs in the Asia and Pacific Regions according to Surveillance Strategy adopted by APANPIRG;	Discussed at this meeting.
2	Facilitate the implementation of Mode S DAPs application in the Asia and Pacific Regions using the project management principles where appropriate to maximize its benefit to region; and	High level principle is in the draft guidance material.
3	Review, identify and address major issues in technical, operational and regulatory aspects to facilitate the Mode S DAPs implementation in the Asia and Pacific Regions.	Issues are being discussed in the Working Group.
<b>Deliverables to meet the Objectives:</b>		
1	Progress report to be submitted to SURICG addressing the Mode S DAPs Working Group deliverables (listed in 2 to 7 below);	
2	To study and identify applicable Mode S DAPs applications in the Asia and Pacific Regions considering: - Concept of use/operation - Cost of system - Requirement of surveillance systems (focusing on radar) - Matching functionality in ATC automation system - Other currently available or emerging technologies; - ICAO Global Air Navigation Plan (GANP) and Aviation System Block Upgrades (ASBU); - Evaluation method for Mode S DAPs performance.	Applications are being discussed in the Working Group.
3	To identify and develop the regional requirements of Mode S DAPs capability in the area of aircraft equipage, surveillance systems (focusing on radar) and ATC automation system, taking into account the relevant performance expectations of the Asia/Pacific Seamless ATM Plan;	Discussed at this meeting.
4	To develop roadmap with a view to formulate mandates for Mode S DAPs application in the Asia and Pacific Regions taking into account of: - Available equipment standards - Readiness of airspace users and ATS providers - Development of standardized and systematic approach to Mode S DAPs application;	Discussed at this meeting.
5	To develop guidance materials to educate States and airspace users on the use of Mode S DAPs in the Asia and Pacific Regions:	Guidance material to educated States is adopted by SURICG/4. No guidance material for airspace users available yet.
6	To encourage research and development, trials and demonstrations in the field of Mode S DAPs application; and	Research and development activities are being shared in the Working Group.
7	Draft Conclusions and Decisions to be formulated relating to matters in the field of Mode S DAPS that come within the scope of the SURICG work plan.	On going.

-----