

*International Civil Aviation Organization*

ICAO

## WORKING PAPER (WP/09)

ASIA AND PACIFIC (APAC) TWENTY-FOURTH  
MEETING OF THE METEOROLOGICAL  
INFORMATION EXCHANGE WORKING  
GROUP (MET/IE WG/24)

Nadi, Fiji, 21 to 24 April 2026

**Agenda Item 3: Quality Control, Monitoring, and Management of Meteorological Information Exchange****REVIEW OF WS/LS SIGMET TEST 2025**

(Presented by Singapore)

**SUMMARY**

This paper presents the analysis of the data collected during the WS/LS SIGMET Test that was conducted on 26 November 2025.

**1. INTRODUCTION**

1.1 The MET Divisional Meeting (2002) formulated Recommendation 1/12 b), Implementation of SIGMET requirements, which called, inter alia, for the relevant Planning and Implementation Regional Groups (PIRGs) to conduct periodic tests on the issuance and reception of SIGMET messages, especially those for volcanic ash.

1.2 Information on the requirements for the dissemination and exchange of SIGMET is published in the Asia/Pacific (APAC) Regional SIGMET Guide (11th edition July 2024). This document also outlines the procedures for conducting SIGMET tests. The test procedures encompass the three types of SIGMETs, namely:

- SIGMET for Volcanic ash (WV/LV SIGMET)
- SIGMET for Tropical cyclones (WC/LY SIGMET)
- SIGMET for weather and other phenomena apart from tropical cyclones and volcanic ash (WS/LS SIGMET)

**2. DISCUSSION**Schedule and procedure of SIGMET tests

2.1 In the State Letter dated 24 October 2025, ICAO invited State's designated operational units to participate in the ICAO APAC SIGMET Tests 2025. The WS/LS SIGMET Test 2025 was scheduled on 26 November 2025, in which Meteorological Watch Offices (MWOs) involved shall issue WS/LS SIGMET test messages at 0200UTC. Regional OPMET Data Banks (RODBs) and World Area Forecast Centres (WAFCs) shall record and summarise the messages.

2.1.1 RODB Bangkok, RODB Brisbane, RODB Tokyo, RODB Nadi, RODB Singapore and the WAFAC London provided reception summaries of the WS/LS SIGMET Test 2025 to RODB Singapore, which is the WS/LS SIGMET test focal point in the APAC region. The summarized data reception of

the five Asia/Pacific RODBs and WAFC London is shown in Appendix A and Appendix B for TAC and IWXXM respectively. No submission was received from WAFC Washington.

WS SIGMET Test Analysis

2.2 26 of the possible 29 States listed in the APAC Regional SIGMET Test Procedures 2025 participated in WS SIGMET Test 2025. The following 3 states shown in Table 1 did not issue WS SIGMET test messages in 2025:

1	AFGHANISTAN
2	DPR KOREA
3	NAURU

Table 1: States that did not participate in WS SIGMET Test 2025

2.3 Afghanistan has yet to participate in any WS/LS SIGMET Tests to date.

2.4 The State participation rate was 90% in 2025, which fares better than 2021(79%), 2022 (86%) and 2024 (83%) and comparable to 2023 (90%).

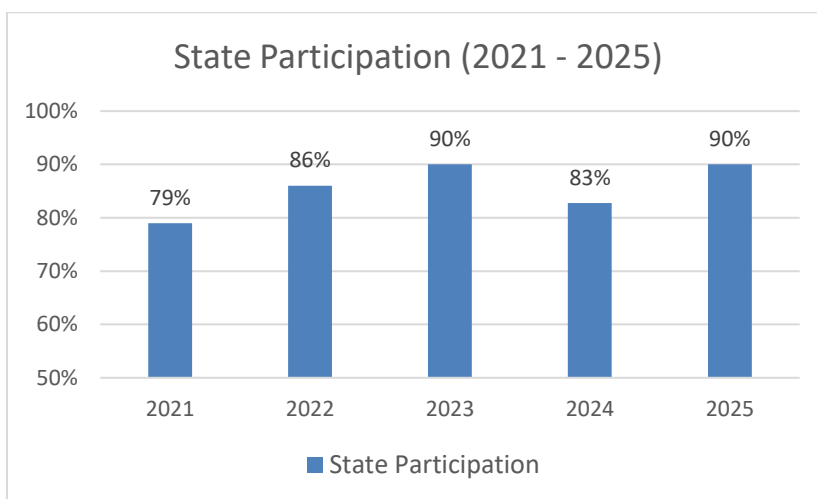


Figure 1: Comparison of state participation for WS SIGMET test over the past 5 years

2.5 Disregarding the three States that did not participate, 49 WS SIGMET test messages were issued by the MWOs during the WS SIGMET Test 2025. The reception of WS SIGMET test by the five Asia/Pacific RODBs and WAFC London is listed in Table 2 below:

WS SIGMET Test 2025	RODB Bangkok	RODB Brisbane	RODB Singapore	RODB Tokyo	RODB Nadi	WAFC London	WAFC Washington	Total
Number of Reception	46 of 49	44 of 49	48 of 49	46 of 49	45 of 49	32 of 49	0 of 49	261 of 343
Percentage of Reception	94%	90%	98%	94%	92%	65%	0%	76%

Table 2: APAC RODBs', WAFC London and Washingtons' reception of WS Test SIGMET

2.6 A comparison of the WS SIGMET test reception rate between 2021 and 2025 is presented in Figure 2. It shows the reception rate remains high over the years, with majority of the reception rate achieving 90% or more.

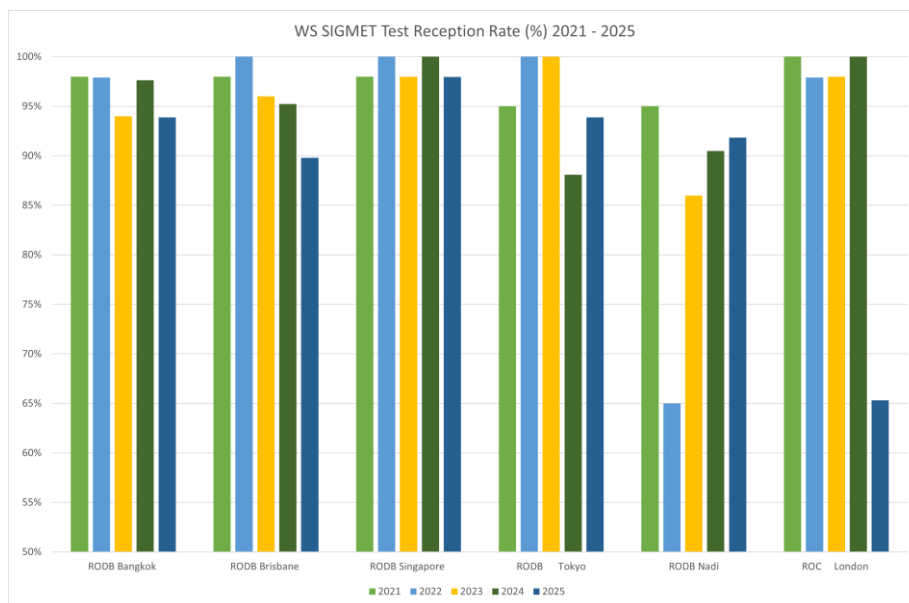


Figure 2: WS SIGMET test reception rate for the past 5 years

2.7 While the WS SIGMET Test reception rate remains high overall in 2025, the issues on incorrect use of the priority and header errors in the transmission persisted.

LS SIGMET Test Analysis

2.8 A total of 14 (48%) of the possible 29 States listed in the APAC Regional SIGMET Test Procedures 2025 participated in LS SIGMET Test 2025. In contrast, 10 (34%) of the possible 29 States issued LS SIGMET during the SIGMET Test in 2024. It is encouraging to see continued improvement regarding the dissemination of SIGMET in IWXXM format.

2.9 Among the five RODBs in the APAC region, RODB Bangkok, Singapore and Tokyo submitted reception result of IWXXM to the focal point for compilation and analysis. In addition, WAFC London also submitted reception result as received via SADIS.

2.10 In total, 31 LS SIGMET test messages were issued by the MWOs during the LS SIGMET Test 2025. The reception of LS SIGMET test by the APAC RODBs is listed in Table 3 below:

LS SIGMET Test 2025	RODB Bangkok	RODB Singapore	RODB Tokyo	Total
Number of Reception	28 of 31	31 of 31	29 of 31	88 of 93
Percentage of Reception	90%	100%	94%	95%

Table 3: APAC RODBs’ reception of LS SIGMET test

Conclusion

2.11 The State participation rate for the 2025 WS SIGMET test remains high. The following 3 States namely Afghanistan, DPR Korea and Nauru did not participate in the 2025 WS SIGMET test. The State

participation rate is 90% which is higher when compared to the WS SIGMET test 2024 participation rate of 83%.

2.12 The issue on incorrect use of the priority and transmission header for the test messages persists in WS SIGMET test 2025.

2.13 In terms of LS SIGMET test participation, it is encouraging to see continued improvement as compared to previous years.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to discuss the following:

- a) the results of the WS/LS SIGMET test presented above; and
- b) the necessary follow-up issues arising from the WS/LS SIGMET Test 2025.

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MET/IE WG/24  
Appendix A to WP/09

**APPENDIX A: WS SIGMET Test 2025 Results Received from APAC RODBs and WAFC London**

State	Meteorological Watch Office (MWO)		WMO AHL (SIGMET Guide)			Transmitted Header				RODB and EUR ROC Reception						Remark		
	Location	MWO				Priority	TTAAii	CCCC	YYGGgg	VTBB	YBBN	WSSS	RJTD	NFFN	EBBR		KWBC	
AFGHANISTAN	KABUL	OAKB	WSAH31	OAKB	OAKX													
AUSTRALIA	BRISBANE	YBRF	WSAU21	YBRF	YBBB	FF	WSAU21	YMRF	260200	02:00	02:00	02:00		02:00	02:01		Transmitted header error	
	BRISBANE	YBRF	WSAU21	YBRF	YMMM	FF	WSAU21	YMRF	260200	02:00	02:00	02:00		02:00			Transmitted header error	
	MELBOURNE	YMRF	WSAU21	YMRF	YBBB	FF	WSAU21	YMRF	260159	01:59	01:59	01:59	01:59	01:59	02:00			
	MELBOURNE	YMRF	WSAU21	YMRF	YMMM	FF	WSAU21	YMRF	260200	01:59	01:59	01:59	01:59	01:59				
	MELBOURNE (WMC)	YMMC	WSAU21	YMMC	YBBB	FF	WSAU21	YMMC	260200	02:01	02:00	02:00	02:00	02:00	02:01			
MELBOURNE (WMC)	YMMC	WSAU21	YMMC	YMMM	FF	WSAU21	YMMC	260200	02:01	02:00	02:00	02:00	02:00					
BANGLADESH	DHAKA	VGHS	WSBW20	VGHS	VGFR	FF	WSBW20	VGHS	260205	02:10		02:07	02:13			02:09		
CAMBODIA	PHNOM PENH	VDPP	WSKP31	VDPP	VDPF	FF	WSKP31	VDPP	260200	01:59		01:59	01:59	01:59	02:00			
CHINA	BEIJING	ZBAA	WSCI33	ZBAA	ZBPE	FF	WSCI33	ZBAA	260205	02:01	02:00	02:00	02:00	02:00				
	CHENGDU	ZUUU	WSCI36	ZUUU	ZPKM	FF	WSCI36	ZUUU	260205	02:09	02:06	02:06	02:06	02:05				
	GUANGZHOU	ZGGG	WSCI35	ZGGG	ZGZU	FF	WSCI35	ZGGG	260200	02:01	02:01	02:01	02:01	02:02	02:02			
	HAIKOU	ZJHK	WSCI35	ZJHK	ZJSA	FF	WSCI35	ZJHK	260201	02:03	02:02	02:02	02:03	02:02	02:03			
	HONG KONG	VHHH	WSSS20	VHHH	VHHK	FF	WSSS20	VHHH	260200	02:02	02:01	02:01	02:01	02:00	02:03			
	SHANGHAI	ZSSS	WSCI34	ZSSS	ZSHA	FF	WSCI34	ZSSS	260200	02:02	02:01	02:01	02:01	02:00	02:02			
	SHENYANG	ZYTX	WSCI38	ZYTX	ZYSH	FF	WSCI38	ZYTX	260200	02:00	02:00	02:00	02:00	02:00	02:01			
	TAIBEI	RCTP	WSCI31	RCTP	RCAA	FF	WSCI31	RCTP	260203	02:05	02:03	02:03	02:03	02:03	02:06	02:05		
	URUMQI	ZWWW	WSCI39	ZWWW	ZWUQ	FF	WSCI39	ZWWW	260201	02:04	02:03	02:03	02:03	02:01	02:05			
	WUHAN	ZHHH	WSCI45	ZHHH	ZHWH	FF	WSCI45	ZHHH	260205	02:03	02:02	02:02	02:03	02:00				
	XI'AN	ZLXY	WSCI37	ZLXY	ZLHW	FF	WSCI37	ZLXY	260205	02:07	02:05	02:05	02:05	02:05	02:07			
	DPR KOREA	SUNAN	ZKPY	WSKR31	ZKPY	ZKKP												
	FIJI	NADI	NFFN	WSFJ01.02.	NFFN	NFFF	FF	WSFJ02	NFFN	260200	02:00	02:00	02:00	02:00	01:59			
FRENCH POLYNESIA	TAHITI	NTAA	WSPF21.22.23.24	NTAA	NFFF	FF	WSPF21	NTAA	260205	02:08	02:05	02:05	02:05	02:05	02:07			
INDIA	CHENNAI	VOMM	WSIN31	VOMM	VOMF	FF	WSIN31	VOMM	260200	02:03	02:01	02:01	02:01		02:03			
	KOLKATA	VECC	WSIN31	VECC	VECF	FF	WSIN31	VECC	260200	02:00	02:00	02:00	02:00	02:00	02:01			
	MUMBAI	VABB	WSIN31	VABB	VABF	FF	WSIN31	VABB	260200	02:03	02:01	02:01	02:01	02:01	02:03			
	NEW DELHI	VIDP	WSIN31	VIDP	VIDF	FF	WSIN31	VIDP	260200	02:01	02:00	02:00	02:00	02:00				
INDONESIA	JAKARTA	WIII	WSID20	WIII	WIIF	FF	WSID20	WIII	260201	02:02		02:01	02:01	02:01				
	MAKASSAR	WAAA	WSID21	WAAA	WAAF	GG	WSID21	WAAA	260200	02:01	02:00	02:00	02:00	02:00	02:01		Incorrect priority	
JAPAN	TOKYO	RJTD	WSJP31	RJTD	RJJJ	FF	WSJP31	RJTD	260205	02:09	02:05	02:05	02:05	02:05				
LAO PDR	VIENTIANE	VLVT	WSLA31	VLVT	VLVT	FF	WVLA31	VLVT	260205	02:02	02:01		02:01	02:00			Transmitted header error	
MALAYSIA	KUALA LUMPUR	WMKK	WSMS31	WMKK	WBFC	FF	WSMS31	WMKK	260200	02:00	02:00	02:00	02:00	02:00	02:01			
	KUALA LUMPUR	WMKK	WSMS31	WMKK	WMFC	FF	WSMS31	WMKK	260200	02:01	02:00	02:00	02:00	02:00	02:01			
MALDIVES	MALE	VRMM	WSMV31	VRMM	VRMF	FF	WSMV31	VRMM	260200			02:03	02:03		02:04			
MONGOLIA	ULAANBAATAR	ZMUB	WSMO31	ZMUB	ZMUB	FF	WSMO31	ZMUB	260203			02:05						
MYANMAR	YANGON	VYYY	WSBM31	VYYY	VYYY	FF	WSBM31	VYYY	260200	01:59	01:59	01:59	01:59	02:00	02:01			
NAURU	NAURU	ANYN	WSNW20	ANYN	ANAU													
NEPAL	KATHMANDU	VNKT	WSNP31	VNKT	VNSM	FF	WSNP31	VNKT	260200	02:00	02:00	02:00	02:00	02:00	02:01			
NEW ZEALAND	WELLINGTON	NZKL	WSNZ21	NZKL	NZZC	FF	WSNZ21	NZKL	260204	02:09	02:05	02:05	02:05	02:05	02:07			
	WELLINGTON	NZKL	WSPS21	NZKL	NZZO	FF	WSPS21	NZKL	260202	02:05	02:04	02:04	02:04	02:04	02:05			
PAKISTAN	KARACHI	OPKC	WSPK31	OPKC	OPKR	FF	WSPK31	OPKC	260200	02:03	02:02	02:02	02:02	02:02				
	LAHORE	OPLA	WSPK31	OPLA	OPLR	FF	WSPK31	OPLA	260200	02:00	02:00	02:00	02:00	02:00	02:01			
PAPUA NEW GUINEA	PORT MORESBY	AYPY	WSNG20	AYPY	AYPM	FF	WSNG20	AYPY	260222	02:25	02:24	02:24	02:24	02:24				
PHILIPPINES	MANILA	RPLL	WSPH31	RPLL	RPHI	FF	WSPH31	RPLL	260200		02:00	02:00	02:00	02:00	02:01			
REPUBLIC OF KOREA	INCHEON	RKSI	WSK031	RKSI	RKRR	FF	WSK031	RKSI	260200	02:03	02:02	02:02	02:02	02:02	02:03			
SINGAPORE	SINGAPORE	WSSS	WSSR20	WSSS	WSJC	FF	WSSR20	WSSS	260200	02:02	02:01	02:01	02:01	02:01	02:02			
SOLOMON ISLANDS	HONIARA	AGGH	WSSO20	AGGH	AGGG	FF	WSSO20	AGGH	260200	02:01	02:00	02:01	02:01	02:00	02:02			
SRI LANKA	COLOMBO	VCBI	WSSB31	VCBI	VCBI	FF	WSSB31	VCBI	260205	02:07	02:05	02:05	02:05	02:05				
THAILAND	BANGKOK	VTBS	WSTH31	VTBS	VTBB	FF	WSTH31	VTBS	260201	02:02	02:01	02:02	02:01	02:01	02:02			
UNITED STATES	HONOLULU	PHFO	WSPA01-13	PHFO	KZAK	GG	WSPA03	PHFO	260200	02:01	02:00	02:00	02:00	02:02	02:15		Incorrect priority	
VIET NAM	GIA LAM	VVGL	WSVS31	VVGL	VVHN	FF	WSVS31	VVGL	260200	01:59	01:59	01:59	01:59	01:59				
	GIA LAM	VVGL	WSVS31	VVGL	VVHM	FF	WSVS31	VVGL	260202	02:01	02:01	02:01	02:01	02:01				

