GEN 3.5 METEOROLOGICAL SERVICES

1. Responsible services

The meteorological services for civil aviation are provided by the Meteorological Department of the Ministry of Digital Economy and Society:

Meteorological Department 4353 Sukhumvit Road Bangkok 10260 Thailand

Tel: +662 399 4566-74 Fax: +662 399 4597-8 AFS: VTBBYMYX

The service is provided in accordance with the provisions contained in the following ICAO documents:

Annex 3 – Meteorological Service for International Air Navigation

Doc 7030 - Regional Supplementary Procedures

Differences to these provisions are detailed in subsection GEN 1.7.

2. Area of responsibility

Meteorological services are provided within Bangkok FIR.

3. Meteorological observations and reports

Table **GEN 3.5.3** Meteorological observations and reports

Name of Station / Location indicator	Type & frequency of observation/ automatic observation equipment	Type of MET report & Supplementary Information included	Observation System & Site (s)	Hours of operation	Climatological information
1	2	3	4	5	6
Bangkok/ SUVARNABHU MI International VTBS	Half hourly routine plus special observations/ Automatic: NIL	METAR, SPECI, MET REPORT, SPECIAL TREND	Complete observation station: 350 M from THR 01R, THR 01L, THR 19L and THR 19R	H24	Climatological table AVBL
Bangkok / DON MUEANG International VTBD	Half hourly routine plus special observations/ Automatic: NIL	METAR, SPECI, MET REPORT, SPECIAL TREND	Complete observation station: 390 M from THR 21R and 160 M from THR 03L	H24	Climatological table AVBL
CHIANG MAI International VTCC	Half hourly routine plus special observations/ Automatic: NIL	METAR, SPECI, MET REPORT, SPECIAL TREND	Complete observation station: 300 M from THR 18 and 402 M from THR 36	H24	Climatological table AVBL
CHIANGRAI / MAE FAH LUANG- CHIANG RAI International VTCT	Hourly routine plus special observations/ Automatic: NIL	METAR, SPECI, MET REPORT, SPECIAL TREND	Complete observation station: 436 M from THR 03 and 445 M from THR 21	H24	Climatological table AVBL
KHON KAEN VTUK	Hourly routine plus special observations/ Automatic: NIL	METAR, SPECI, MET REPORT, SPECIAL TREND	Complete observation station: 300 M from THR 03 and THR 21	H24	Climatological table AVBL

Name of Station / Location indicator	Type & frequency of observation/ automatic observation equipment	Type of MET report & Supplementary Information included	Observation System & Site (s)	Hours of operation	Climatological information
1	2	3	4	5	6
PHUKET International VTSP	Half hourly routine plus special observations/ Automatic: NIL	METAR, SPECI, MET REPORT, SPECIAL TREND	Complete observation station: 205 M from THR 09 and 405 M from THR 27	H24	Climatological table AVBL
SONGKHLA / HAT YAI International VTSS	Half hourly routine plus special observations/ Automatic: NIL	METAR, SPECI, MET REPORT, SPECIAL TREND	Complete observation station: 425 M from THR 08 and 399 M from THR 26	H24	Climatological table AVBL
UBON RATCHATHANI VTUU	Hourly routine plus special observations/ Automatic: NIL	METAR, SPECI, MET REPORT, SPECIAL TREND	Complete observation station: 420 M from THR 05 and 390 M from THR 23	H24	Climatological table AVBL

4. Types of services

Personal briefing and consultation for flight crew members are provided for all international aerodromes.

- 4.1 The Meteorological Office and Meteorological Watch Office at Bangkok/Suvarnabhumi International Airport operate throughout 24 hours and provide the following services for civil aviation:
 - a) Full meteorological documentation for current operational planning for all flights operating out of Bangkok/Suvarnabhumi International Airport, whenever possible the pilot-in-command or his representative is given personal briefing by a forecaster at the Meteorological Office, otherwise briefing may be carried out by telephone:
 - b) Area meteorological watch over Bangkok FIR with the supply of meteorological information including SIGMET information to aircraft in flight through the Bangkok ATS radio channels;
 - c) Continuous VOLMET broadcasts of aviation weather reports and SIGMET information are also included in HF/SSB broadcasts: SIGMET for Bangkok FIR, Yangon FIR; METAR/SPECI with TREND for Bangkok/Suvarnabhumi, Yangon/Mingaladon, Hanoi/Noibai, Ho Chi Minh/Tan Sonnhat, Phanom Penh, Vientiane/Wattay, Rayong/U-Tapao, Chiang Mai, Phuket, Bangkok/Donmuang; TAF for Suvarnabhumi; and
 - d) Meteorological informational for Air Traffic Service.
- 4.2 The Meteorological Office at CHIANG MAI International Airport (VTCC-48327), SONGKHLA / HAT YAI International Airport (VTSS-48569), PHUKET International Airport (VTSP-48565), KHON KAEN Airport (VTUK-48381) and UBON RATCHATHANI Airport (VTUU-48407) operate throughout 24 hours and provide the following services for civil aviation:
 - a) Meteorological documentation for current operational planning for all flights operating out of the international airports, whenever possible the pilot-in-command or his representative is given personal briefing by a forecaster at the Meteorological Office, otherwise briefing may be carried out by telephone;
 - b) Meteorological information including SIGMET information to aircraft in flight through the ATS radio channels; and
 - c) Meteorological information for Air Traffic Services.
- 4.3 Details of documentation supplied for each flight are determined by agreement between operator and meteorological office. In general, the pilot-in-command is provided with documentation comprising
 - Forecasts of upper wind and upper-air temperature and SIGWX phenomena.
 - METAR or SPECI (including trend forecasts as issued in accordance with regional air navigation agreement) for the aerodromes of departure and intended landing, and for take-off, en-route and destination alternate aerodromes.
 - TAF or amended TAF for the aerodromes of departure and intended landing, and for take-off, en-route.
 - SIGMET information and appropriate special air-reports relevant to the whole route.
 - volcanic ash and tropical cyclone advisory information relevant to the whole route.

- and, if appropriate, as determined by regional air navigation agreement, area forecasts for low-level flights in chart, and space weather advisory information relevant to the whole route. For flights of two hours' duration or less, after a short stop or turn around, flight documentation shall be limited to the information operationally needed, as agreed between the meteorological office and the operator concerned, but in all cases it shall at least comprise information on
- METAR or SPECI (including trend forecasts as issued in accordance with regional air navigation agreement) for the aerodromes of departure and intended landing, and for take-off, en-route and destination alternate aerodromes.
- TAF or amended TAF for the aerodromes of departure and intended landing, and for take-off, en-route.
- SIGMET information and appropriate special air-reports relevant to the whole route.
- volcanic ash and tropical cyclone advisory information relevant to the whole route.
- and, if appropriate, as determined by regional air navigation agreement, area forecasts for low-level flights in chart, and space weather advisory information relevant to the whole route.
- 4.4 Routine aerodrome forecasts received from other meteorological offices are included in meteorological documentation without modification.

5. Notification required from operators

Notification from operators in respect of briefing, consultation, flight documentation and other meteorological information needed by them is normally required (reference ICAO Annex 3, 2.3). Such notification should be received as prior as possible and at least 1 hour before the expected time of departure for non-scheduled flight would be required at Bangkok Meteorological office.

6. Aircraft reports

NIL

7. VOLMET service

Table GEN 3.5.7 VOLMET Service

Name of station	CALL SIGN Identificati on (EM)	Frequency	Broadcast period	Hours Of service	Aerodromes / Heliports included	Content & format of REP and FCST & Remarks
1	2	3	4	5	6	7
Bangkok	BANGKOK	11387 KHZ	H+10 to H+15	2310 - 1145 Z	BANGKOK FIR	SIGMET (as available)
	VOLMET J3E	6676 KHZ 2965 KHZ	and H+40 to H+45	H24 1210 - 2245 Z	YANGON FIR	SIGMET (as available)
					BANGKOK/ SUVARNABHUMI	METAR/ SPECI with TREND
					YANGON/ MINGALADON	METAR/ SPECI with TREND
					HANOI/NOIBAI	METAR/ SPECI with TREND
					HO CHI MINH/ TAN SON NHAT	METAR/ SPECI with TREND
					PHNOM PENH	METAR/ SPECI with TREND
					VIENTIANE/ WATTAY	METAR/ SPECI with TREND
					RAYONG/ U- TAPAO	METAR/ SPECI with TREND
					CHIANG MAI	METAR/ SPECI with TREND
					PHUKET	METAR/ SPECI with TREND
					BANGKOK / DON MUEANG	METAR/ SPECI with TREND
					BANGKOK/ SUVARNABHUMI	TAF (valid for 9 hrs)

8. SIGMET and Aerodrome Warning Service

8.1 SIGMET Service

8.1.1 For the safety of air traffic, the meteorological watch office provides round the clock meteorological watch service for the Bangkok FIR. This service consists of a continuous weather watch within the Bangkok FIR and the issuance of SIGMET information for this area.

Table GEN 3.5.8 SIGMET service

Name of MWO / Location indicators	Hours	FIR or CTA served	Type of SIGMET / validity	Specific procedures	ATS unit served	Additional information
1	2	3	4	5	6	7
Bangkok/ VTBS	H24	Bangkok FIR	- WS SIGMET/ not more than 4 hours - WC SIGMET/ up to 6 hours - WV SIGMET/ up to 6 hours	NIL	Bangkok ACC	NIL

Note: WS SIGMET for phenomena other than volcanic ash cloud or tropical cyclone.

WC SIGMET for tropical cyclone.

WV SIGMET for volcanic ash.

- 8.1.2 The meteorological watch office issues SIGMET information in abbreviated plain language concerning the occurrence or expected occurrence of specified en-route weather and other phenomena in the atmosphere that may affect the safety of aircraft operations, and of the development of those phenomena in time and space, in the Bangkok FIR. The specified en-route weather and other phenomena in the atmosphere are as follows:
 - thunderstorms
 - severe turbulence
 - severe icing
 - tropical cyclone
 - volcanic ash
- 8.1.3 Tropical cyclone SIGMET messages issued are based on advisory information provided by Tropical Cyclone Advisory Centres and Tropical cyclone forecast issued by Thai Meteorological Department.
- 8.1.4 Volcanic ash SIGMET messages issued are based on advisory information provided by Volcanic Ash Advisory Centres.
- 8.1.5 SIGMET information is disseminated via the AFTN and broadcast in VOLMET service during the period of validity of the SIGMET information (see Table GEN 3.5.7 VOLMET Service).

8.2 Aerodrome Warnings Service

- 8.2.1 Aerodrome warnings are issued by the aerodrome meteorological office designated by the meteorological authority concerned and give concise information of meteorological conditions which could adversely affect aircraft on the ground, including parked aircraft, and the aerodrome facilities and services.
- 8.2.2 The aerodrome meteorological office issues aerodrome warnings in both abbreviated plain language and plain language if one or several of the following phenomena are occurring or expected to occur at the airport:
 - tropical cyclone
 - thunderstorm
 - hail
 - fog
 - strong surface wind and gusts
 - tsunami

9. Other automated meteorological services

Table GEN 3.5.9 Other automated meteorological services

Service name	Information available	Area, route and aerodrome coverage	Telephone, telex and telefax numbers / remarks
1	2	3	4
NIL	NIL	NIL	NIL

10. ATS/MET REPORTING POINT CHART

NIL

