



International Civil Aviation Organization

**NINTH MEETING OF THE
COMMUNICATIONS/NAVIGATION/SURVEILLANCE AND
METEOROLOGY SUB-GROUP OF APANPIRG
(CNS/MET SG/9)**

Bangkok, Thailand, 11–15 July 2005

**Agenda Item 13 (2) Review CNS/ATM systems planning and implementation:
2) MET related issues**

TERMINAL METEOROLOGICAL FORECAST (TerMET)

(Presented by Hong Kong, China)

SUMMARY

This paper introduces a new MET product being developed by Hong Kong, China, in support of ATM operations.

1. INTRODUCTION

1.1 Para. 9 of Report of the Chairman of the METATM TF at CNS/MET SG/7 and CNS/ATM IC SG/10 recommended that the MET authorities/providers considered supplementing ATM with meteorological information that can be provided with little development. To expedite its provision, the Task Force suggested the utilization of readily available systems.

1.2 The recommendation was subsequently included as part of the programme of CNS/ATM Systems in Hong Kong, China to study the provision of terminal weather information for ATM. It was recognized that the existing forecast products, such as TAF, were not always sufficient to meet the ATM requirements. In order to support ATM operations, Hong Kong, China is in the process of developing new MET products, tailored from existing products where possible, to support ATM operations.

2. DISCUSSION

2.1 Consultation with ATM users was made to understand the ATM specific MET requirements with the aim of increasing the efficiency of ATM. One of the planned new products by Hong Kong, China is the “Terminal Meteorological Forecast (TerMET), which is a sequential aerodrome forecast for the meteorological variables (wind, visibility, cloud, significant weather) having aviation impact. In particular, based on ATM requirement, the forecast MET variables would be displayed in textual format with red colour highlighting those forecast figures reaching thresholds that would affect ATM operations. A sample product display is provided in the Appendix.

2.2 This product would be generated basically from existing MET information and forecasts, including METAR, TREND forecast, forecast for take-off and TAF every hour. The algorithm is being developed to automatically generate a “first guess” product from these reports and forecasts. Forecasters would then modify the “first guess” as necessary.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information provided in this paper.

SAMPLE of Terminal Meteorological Forecast (TerMET) (under development)

Appendix

TerMet

Hong Kong International Airport

Runway 07

Issue time: 05090415Z

	Present				
Time (UTC)	0400	0500	0600	0700	0800
Wind	220/16	220/16	220/16	210/15	210/15
TEMPO		VRB25	VRB25	--	--
Tailwind (kt)	14	14	14	11	11
TEMPO		--	--	--	--
Crosswind (kt)	+8	+8	+8	+10	+10
TEMPO		--	--	--	--
Prevailing Visibility	10km	10km	10km	8km	8km
TEMPO		1500m	1500m	3000m	3000m
Cloud ceiling	8000	8000	8000	8000	8000
TEMPO		4000	4000	4000	4000
Cloud base	600	600	600	600	600
TEMPO		400	400	400	400
SIGWX	SHRA	--	--	--	--
TEMPO		TSRA +SHRA	TSRA +SHRA	SHRA	SHRA

Criteria for highlighting the data in red

Tailwind	exceeding 5 kts
Crosswind	exceeding 20 kts
Visibility	less than 5000m
Cloud Ceiling	1000 ft or below
Cloud Base	less than 1500 ft