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Current Status of D-ATIS and D-VOLMET Implementation

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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: Review CNS/ATM systems planning and implementation:
2) MET related issues**

**CURRENT STATUS OF D-ATIS AND D-VOLMET
IMPLEMENTATION**

(Presented by Hong Kong, China)

SUMMARY

This paper reports on the current status of implementation of the D-ATIS and D-VOLMET services in Hong Kong, China and proposes that guidance material be made available to assist States in the implementation of D-ATIS in the Asia/Pacific Region.

1. INTRODUCTION

1.1 Hong Kong, China implemented the Digital-Automatic Terminal Information Service (D-ATIS) and Digital-Meteorological Information for Aircraft in Flight (D-VOLMET) services in 2001 supporting the uplinking of HKIA Aerodrome and OPMET information to the cockpit. This paper reports the current status of these services in Hong Kong, China.

1.2 This paper also proposes that guidance material on the format should be provided to assist States in the implementation of D-ATIS in the Asia/Pacific Region.

2. Implementation of D-ATIS and D-VOLMET in Hong Kong, China

2.1 Since the introduction of the D-ATIS and D-VOLMET services in Hong Kong, China in 2001, aircraft equipped with suitable ACARS VHF data link facilities and avionics can request full scripts of the ATIS and VOLMET messages and have them automatically printed inside the cockpit. These datalink services are operated in parallel with the Voice-ATIS and VOLMET broadcasts. Samples of the arrival and departure D-ATIS messages and D-VOLMET message issued by Hong Kong, China are given in Figure 1.

2.2 In the first 5 months of this year, there were on average around 100 uplink requests for D-VOLMET messages per month. On the other hand, the number of uplink requests for D-ATIS messages is still growing, reaching 23,114 (16,428 for arrival D-ATIS and 6,686 for departure D-ATIS) in May 2005 – a four-fold increase in two years (Figure 2).

2.3 The introduction of more specific terminal weather information (such as runway-specific windshear warnings) earlier this year has increased the length of the ATIS messages. The D-ATIS service enables pilots to acquire this latest information on terminal weather conditions without increasing the cockpit workload and eliminating possible errors due to reception/transcription.

3. Format of D-ATIS messages

3.1 The type of information to be included in D-ATIS has been specified in Annex 11. The Annex provisions and other available ICAO documents however do not currently provide specific guidance on how the information should be presented in D-ATIS. Different States may have different practices in presenting the D-ATIS messages.

3.2 A comment was recently received from airline users that there was duplication of numeric values and words for the same values in the D-ATIS messages provided by some ASIA/PAC airports, for example,

“QNH 1019 (ONE ZERO ONE NINE)” or
“WIND 080 (ZERO EIGHT ZERO) DEG 10 (ONE ZERO) KT”.

It is the users’ understanding that for certain important information, e.g. “F5 (FLAP FIVE)”, such duplication serves the purpose of cross-checking so that transmission errors could be identified. However, it is doubtful whether such duplication is necessary for D-ATIS messages and indeed the users find such duplication unnecessary.

3.3 Upon checking with ICAO, it is noted that some work is taking place in drafting guidance material for the format of D-ATIS messages as part of the *ATS Planning Manual* (Doc 9426). In this draft guidance material, the format presented is similar to the template provided in Annex 3 in respect of the local routine and local special reports (Table A3-1 of Appendix 3 to Annex 3). In this connection, the above-mentioned duplication has been confirmed to be unnecessary. In view of the progressive implementation of D-ATIS in the Asia/Pacific Region and the user’s need for guidance on the format of the messages, the meeting may wish to invite ICAO to make available the guidance material on the format of D-ATIS messages and formulate the following draft Conclusion:

Draft Conclusion 9/xx – Guidance on implementation of D-ATIS

That, ICAO be invited to make available the guidance material on the format of D-ATIS messages.

4. ACTION BY THE MEETING

4.1 The meeting is invited to:

- (a) note the information in this paper; and
- (b) agree on the proposed draft conclusion.

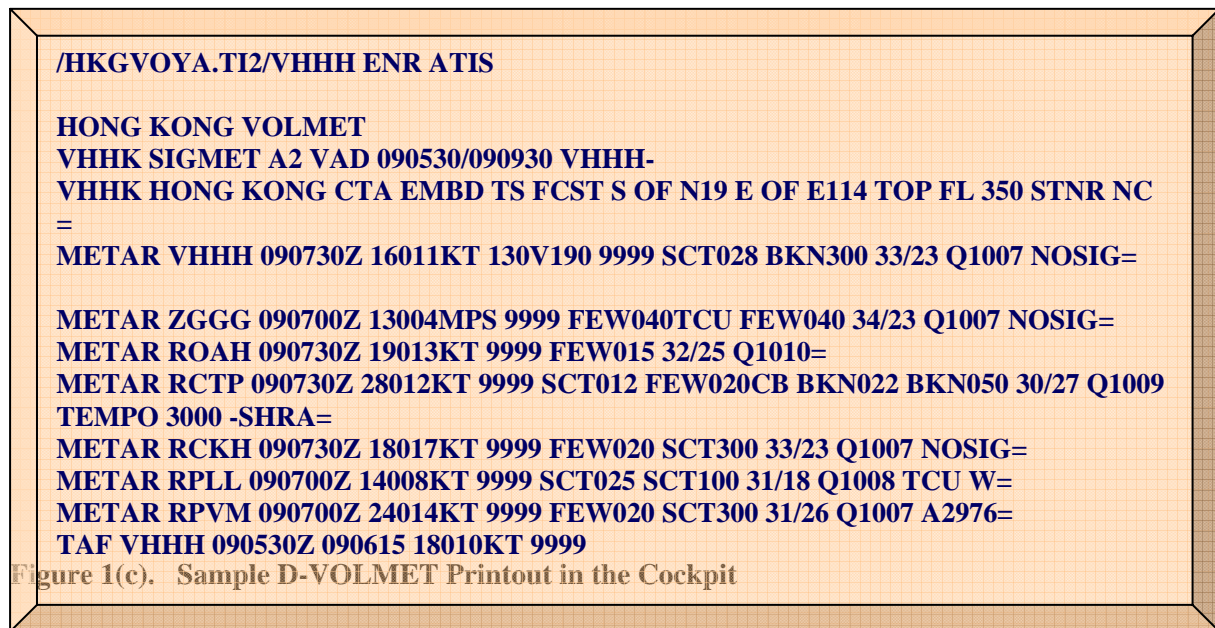
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```
/HKGATYA.TI2/VHHH ARR ATIS T  
2205Z  
HONG KONG ATIS  
ARR RWY 07R  
RWY 07L CLSD FOR MAINT  
SIG WS FCST 07R  
WIND 080 DEG 10 KT  
VIS 10 KM  
CLOUD FEW 3000FT  
TEMP 24 DP 16 QNH 1019  
ACK T ON FIRST CONTACT WITH APPROACH
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Figure 1(a). Sample Arrival D-ATIS Printout in the Cockpit

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/HKGATYA.TI2/VHHH DEP ATIS Z  
2205Z  
HONG KONG ATIS  
DEP EWY 07R  
RWY 07L CLSD FOR MAINT  
SIG WS FCST AND REP 07R  
WIND 080 DEG 07 KT  
VIS 10 KM  
CLOUD FEW 3000FT  
TEMP 24 DP 16 QNH 1019  
ACK Z ON FIRST CONTACT WITH GROUND
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Figure 1(b). Sample Departure D-ATIS Printout in the Cockpit



**Statistics on D-ATIS Requests at Hong Kong International Airport
 (June 2003 - May 2005)**

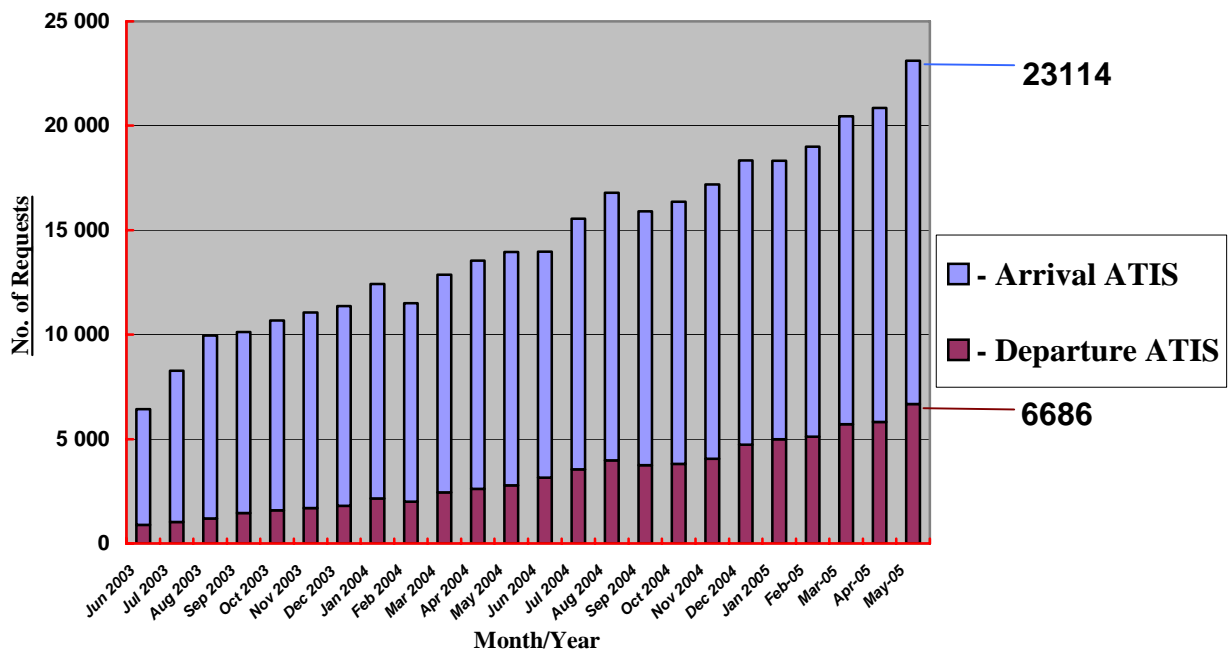


Figure 2. Statistics of D-ATIS requests in Hong Kong, China