

For information

**Legislative Council  
Panel on Economic Services**

**YEAR 2000 PROGRAMME OF THE AIRPORT AUTHORITY**

**INTRODUCTION**

The Airport Authority (“the Authority”) has kept the Legislative Council Panel on Economic Services informed of the progress of its Year 2000 (Y2K) Programme. This paper updates members on the position of its Y2K Programme *as at 8 October 1999*. Updates from Hong Kong Air Cargo Terminals Ltd. and Asia Airfreight Terminal Co. Ltd. are at Annexes 1 and 2 respectively.

**PROGRESS IN COMPLIANCE VERIFICATION**

2. The Authority has completed all necessary rectification work for, and verified the compliance status of, each of the 124 systems in its Y2K inventory by 31 August 1999, one month ahead of its original schedule. The compliance status of these systems has been verified such that:

- (a) they are Y2K compliant; or
- (b) they will not be affected by the Y2K problem; or
- (c) any non-compliant component in them does not affect the useful functioning of the system or airport operations.

3. The Authority has also verified that the two systems related to the North Runway are Y2K compliant. The systems related to the Northwest Concourse extension project will be Y2K compliant before the Northwest Concourse is brought into full service.

4. A stringent control mechanism on any subsequent changes to a verified system is enforced to ensure that its compliance status is maintained.

***Integration Testing***

5. Integration testing is defined as the testing of (a) data interfaces between the Authority’s own systems, and (b) *direct* data interfaces between the Authority’s systems and external systems.

6. Integration testing has been completed on all the links between the Authority’s own systems where date information is transferred.

7. Data exchange between the Authority's systems and external systems mainly occurs in the transfer of flight information and information supporting the passenger and baggage check-in processes. Integration testing has been completed on all *direct* data interfaces with external systems where date information is transferred, using the Authority's testing facility. Testing was conducted with eight business partners, namely Cathay Pacific Airways Ltd., the Hong Kong Observatory, the Civil Aviation Department, Société Internationale de Télécommunications Aéronautiques (SITA), the MTR Corporation, Cable & Wireless HKT Ltd., Hong Kong Air Cargo Terminals Ltd. (HACTL) and Hong Kong Airport Services Ltd. (HAS).

8. Most integration tests were conducted between two connected systems. However, there were two multiple-system tests where up to four interconnected systems were tested by transferring data concurrently between them. These two tests involved the Authority's Flight Information Display System (FIDS) and Airport Operational Database (AODB), the Flight Data Display Service (FDDS) of Cable & Wireless HKT Ltd. and two respective business partners receiving flight information directly into their systems, namely HACTL and HAS.

### ***End-to-End Validation***

9. End-to-end validation marks the final stage of the Authority's Y2K compliance verification efforts. This stage followed and complemented the testing of standalone systems and integration testing. It aimed at further reducing Y2K-related risk.

10. Five principal operational areas, namely passenger and baggage handling, and the movement of aircraft, cargo and mail, were analysed. Systems that support these five areas were identified. They include the Authority's own systems and those of business partners, whether connected to Authority's systems or not. The compliance status of each system identified was validated. The validation comprised reviews of specific test reports and workshops with relevant business partners, in order to obtain confirmation from the owner of each system, either a business partner or the Authority itself, that the system had been properly tested and verified to be Y2K compliant.

11. As a result of the end-to-end validation process, two additional tests were subsequently conducted and successfully completed, namely

- (i) a test of the Flight Information Display System (FIDS) display devices in the Passenger Terminal Building; and

- (ii) an integration test of the Traffic Control & Surveillance System – Airport Operational Database (TCCS-AODB) interface.

### ***Risk Assessment***

12. As part of the overall Y2K risk management process, the Authority, aided by KPMG Consulting, has started an overall risk assessment which will review the key Y2K exposure of the Authority and determine if any further risk management actions are required. The overall risk assessment will focus on the Authority's operations, and will include any exposure from the Authority's own systems, business partners, and other external factors. The review is scheduled to be completed by the end of October.

13. In addition, KPMG Consulting, the external consultant, has been advising the Authority on the development and implementation of its Y2K Programme and reporting progress regularly to the Board and Y2K Steering Committee of the Authority. A copy of KPMG Consulting's progress report dated 9 August 1999 has been forwarded to this Panel for reference. Together with the review of the Y2K Programme by the Authority's Internal Audit Department, the Authority considers that there are adequate quality assurance measures for the Programme.

14. Government's Y2K Task Force, comprising representatives from the Information Technology and Broadcasting Bureau, the Office of The Telecommunications Authority, the Electrical and Mechanical Services Department and the Information Technology Services Department, and officers of the Economic Services Bureau and Civil Aviation Department, have also visited the Airport Authority. Although the visit was not intended to provide an audit or certification of the Y2K compliance status of the Authority, it provided the Government further information on how AA had tackled their Y2K work. Focus of the visit was on the Flight Information Display System (FIDS), Baggage Handling System (BHS) and the Access Control System (ACS).

### **BUSINESS PARTNERS**

15. The Authority through a letter sent by the Chief Executive Officer, has requested all 41 business partners in the high and medium criticality groups to submit a written statement confirming that their airport operation related systems are Y2K compliant. With the exception of Northwest Airlines, the other 40 business partners have submitted their compliance statements. The Authority is following up with Northwest Airlines and expects a confirmation from them soon.

16. The Authority's Millennium Task Force, in which all 26 business partners in the high criticality group are represented, has held 10 meetings since January to ensure better co-ordination among members in their Y2K compliance efforts and contingency planning.

17. Briefings by key service providers, such as CLP Power Hong Kong Limited, Cable & Wireless HKT Limited, and Mobil Oil Hong Kong Limited, on their Y2K programmes have been arranged for members of the Task Force.

18. For a better understanding of individual business partners' progress, the Authority has paid site visits to 37 business partners in the high and medium criticality groups.

19. The Authority has also held bilateral meetings with 12 business partners in the high and medium criticality groups to address Y2K issues of common concern.

## **CONTINGENCY PLANNING AND DRILLS**

20. The Airport Authority Y2K Contingency Procedures Manual (the Manual) was issued on 25 August. In preparing the Manual, relevant business partners were consulted through a series of workshops and drills in which they were invited to participate. The Manual spells out all the procedures that are to be implemented to maintain continuity of critical airport operations, namely the processing of passengers, baggage, cargo and mail, in the event of any Y2K-related system failure.

21. With the experience gained during the management of the rollover onto the first Y2K critical day, 9 September 1999, the Authority further refined the contingency procedures in the Manual and an update was issued on 4 October. In the light of drills and exercises to be conducted over the remaining months of the year, in co-ordination with relevant business partners, the Manual is likely to be further improved and refined.

22. During the rollover onto 9 September, the Authority's Command and Control Centre was activated between 2000 hours on 8 September and 1000 hours on 9 September to co-ordinate with key business partners and the Civil Aviation Department in keeping track of systems status in the aviation sector. As expected, no Y2K-related system failure was reported during this period. However, the command, control and reporting structure established to manage possible crises during the millennium transition was thoroughly tested. Despite minor deficiencies observed relating to insufficient fax and printer facilities inside the Airport Emergency Centre, which have been followed up and rectified, the results of this exercise were satisfactory.

23. In an effort to track the progress of business partners' readiness in their contingency planning, the Authority has requested all the 26 business partners in the high criticality group to submit a copy of their contingency plans. As of 8 October, 19 plans have been received. Although the Authority is not in a position to scrutinise business partners' contingency plans to ensure their adequacy, it has engaged an expert who has many years of airport experience to review the plans, with an aim to identify any obvious gaps or omissions particularly in areas where there are interfaces with other airport service providers. The Authority will follow up the remaining seven business partners for their plans and the target is to complete the review by the end of October.

### **Y2K WEB PAGE**

24. For quick and easy reference by its business partners and the public, the Authority has set up in its web site a new page on progress of the Y2K Programme. This page will be updated regularly as the Programme progresses.

### **LOOKING FORWARD**

25. Now that the Y2K compliance status of all the operating systems has been verified, the Authority is focusing its efforts and attention on contingency plans. More drills and exercises on the contingency procedures will be conducted over the remaining months of the year, in co-ordination with relevant business partners. Such drills and exercises will facilitate the further improvements and refinements to the contingency procedures.

Airport Authority  
October 1999

Progress of Y2K Business Contingency Planning at HACTL

**1. Objective**

This is an update on the progress and achievements of HACTL's Y2K business contingency planning since February 1999.

After completion of system testing for HACTL's all 28 mission-critical systems in May 1999, HACTL is confident that it is fully Y2K compliant.

Being a responsible cargo operator, HACTL has focused on the testing and communications of Year-2000 Business Continuity and Contingency Plan (Y2K BCCP) to prepare for any unforeseen disruptions caused to its operations since this May.

**2. Y2K Business Continuity and Contingency Plan (Y2K BCCP)**

2.1 To ensure the continuity of cargo operations, the first draft of HACTL's Y2K BCCP was issued on 11 February 1999. The plan comprises

2.1.1 Year-2000 Business **Contingency** Plans, formulated by all HACTL departments to address all contingencies that would arise from the disruption of any individual business processes and

2.1.2 The Year-2000 Business **Continuity** Plan is to ensure the continuity of cargo operations in the event of any Y2K-linked interruption, whether caused by critical internal systems or external parties.

2.2 Between 1 April 1999 and 14 May 1999, "viability walk throughs" of business continuity and contingency plans were undertaken with customer airlines, business partners such as ground handling agents, ramp handling operators, air freight forwarders, Customs & Excise Department and the Airport Authority.

2.3 A revised version of the plan was issued on 30 May 1999, taking into account the insights gained from the viability exercises, and general consultation with outside parties. Four briefing sessions on the revised version were arranged on 1st, 2<sup>nd</sup>, 3rd June and 9<sup>th</sup> August respectively for

2.3.1 Government departments and the Airport Authority,

- 2.3.2 Customer airlines and business partners
- 2.3.3 The forwarder community.
- 2.3.4 The Hong Kong Association of Aircargo Truckers Limited and the perishable shippers.
- 2.4 As part of the contingency plan agreed with our business partners, a staged transition programme will be implemented to minimize the potential disruptions to cargo passing through the terminal during the transition. Details are as follows:-
  - 2.4.1 export cargo will be ready for dispatch to the apron before 2230 hours on 31/12/99 for the 1/1/2000 flights departing on or before 1400 hours;
  - 2.4.2 import shipments will be pre-staged at truck dock ready for release to cargo agents and public.
  - 2.4.3 The services for all the special handling cargo, perishable cargo, live plant and animal, strong room, transshipment cargo and express cargo will be maintained at normal services level during the transition period.
- 2.5 Appropriate resources will be in place to cater for any potential disruptions, including:
  - 2.5.1 Standby generators will be installed;
  - 2.5.2 Additional communication facilities such as mobile phones and radio telephones will be in place;
  - 2.5.3 Sufficient staff level will be in place;
  - 2.5.4 Additional land area available at both airside and landside for cargo handling;
  - 2.5.5 Hotline for cargo community enquiries.

### **3. Staff Training**

With the agreed Plan in place, HACTL proceeded to train its operations staff on Y2K fallback from early June to the end of August 1999.

### **4. Validation Test**

- 4.1 The purpose of the Validation Test conducted on 9 June 1999 was to verify the capability of the HACTL Y2K BCCP in ensuring continuity in the event of unforeseen disruption to any critical HACTL systems.
- 4.2 Major customer airlines, air freight forwarders, Customs & Excise Department and the Airport Authority participated in the validation test. The test was conducted with observers from air cargo

industry such as Hong Kong Air Freight Forwarding Association (HAFFA).

- 4.3 The continuity procedures outlined in the HACTL Y2K BCCP proved to be practical and acceptable to the air cargo industry.

## 5. **Integration Drills**

- 5.1 The 1st phase of Integration Drills took place from late August to early September. There was extensive involvement from the air cargo community in the drills.
- 5.2 With the support of key air cargo community members and the full participation of HACTL's staff, the Y2K BCCP for 8/9 and 9/9 roll over was successfully implemented.
- 5.3 A 2nd phase of Integration Drills will be conducted from 16 November 1999 to 4 December 1999.
- 5.4 HACTL will join the airport-wide Y2K dress rehearsal, tentatively scheduled on 3 & 4 December 1999.

## **ASIA AIRFREIGHT TERMINAL CO LTD**

### *Update on year 2000 Compliance Programme*

#### **1. PURPOSE**

- 1.1. This paper reports the updates of the Year 2000 (Y2K) compliance programme of Asia Airfreight Terminal Co Ltd (AAT) up to October 19, 1999.

#### **2. COMPLIANCE STATUS**

- 2.1. The Cargo Management System (CMS) passed the Y2K compliance test in July 1999. Therefore, all the nine identified critical systems of the terminal were tested and verified to be Y2K compliant.

#### **3. CONTINGENCY PLANNING**

- 3.1. Three more drills were conducted on August 27 and October 7 with Singapore Airlines and on October 8 with United Airlines. Based on the feedback from the airlines, we are fine-tuning the contingency plans.
- 3.2. The refresher training will be conducted in the third week of November, 1999.

#### **4. LOOKING AHEAD**

- 4.1. The shareholders have also offered to second additional manpower (both experienced and inexperienced) to standby during the rollover. The Contingency Control Committee will be set up to monitor the rollover.