

NOTE FOR FINANCE COMMITTEE

Supplementary Information on CAPITAL WORKS RESERVE FUND HEAD 710 - COMPUTERISATION Subhead A014XM - Air Cargo Clearance System

INTRODUCTION

At the Finance Committee meeting of 28 February 1997 to discuss the proposal on the Air Cargo Clearance System (ACCS) (FCR(96-97)112), we undertook to report to Members the savings and benefits that could be achieved when the project was fully implemented. This paper provides such a report.

BACKGROUND

2. When the airport was located in Kowloon City, officers of the Customs and Excise Department (C&ED) manually scrutinised cargo manifests to detect contraband and goods which were prohibited or restricted for import or export. They then relied on a cargo operator's computer system to instruct the cargo operator to release the consignments or detain them for further action.

3. On 28 February 1997, Members approved a commitment of \$127.80 million for the development of the ACCS at the new airport at Chek Lap Kok to provide-

- (a) electronic links between C&ED and individual air cargo operators to facilitate the transfer of cargo information and customs clearance instructions, and tracking of movement of consignments among the air cargo operators;
- (b) an electronic link between the ACCS and the existing Customs Control System (CCS) to facilitate the retrieval, correlation, analysis and updating of intelligence; and

/(c)

- (c) automated matching of the particulars of cargoes with the intelligence in the CCS and the lists of prohibited and restricted items.

4. At the meeting, we undertook to report to Members the savings and benefits that could be achieved when the ACCS was fully implemented.

5. The whole project was completed at \$117.96 million, well within the approved budget of \$127.80 million. Full system implementation was postponed from October 1999 to February 2000 due to the delayed opening of the new airport and the extra time required by the cargo operators to synchronise their systems with the ACCS.

SAVINGS AND BENEFITS

6. Now that the ACCS has been in operation for three years, we are able to ascertain the savings and benefits of the system which are reported below.

Savings

7. With the introduction of the ACCS, manual updating of importer information and consignment history in the CCS and the central database of C&ED is no longer required. As a result, two Customs Officer posts were saved and the officers have been redeployed for other tasks since July 1998. This represents realisable savings of \$631,536 in staff cost a year.

8. Taking into account the actual workload statistics since February 2000, 70 additional Customs Officer posts which would otherwise be required to perform the following duties manually are saved-

- (a) generation of detention notices for selected cargoes, statistical and exception reports and document for cargo examination; and
- (b) delivery of detention notices to airlines and cargo terminal operators.

This represents an avoidance in staff cost of \$22.10 million a year.

9. Without the ACCS, we would have to install 74 additional CCS terminals for the matching of importer information. As the ACCS now provides linkage with the CCS and importer information is exchanged on a daily basis, we can dispense with such installation which would have cost \$1.68 million for installation and \$0.37 million for annual maintenance from 1999-2000 onwards.

10. In addition, with the ACCS, we are able to achieve notional annual savings of \$1.47 million in staff cost through the automation of the following functions-

- (a) C&ED's watch list and target list are searched automatically by the ACCS for the purpose of selecting consignments for examination;
- (b) all transactions in cargo selection and examination are now logged automatically by the ACCS and tracing reports are also provided by the system;
- (c) importer records are now maintained in the ACCS with fast matching facilities;
- (d) records of consignments are now automatically updated and maintained in the ACCS; and
- (e) default constraint codes are accorded by the ACCS automatically based on, for example, the lists of prohibited articles.

Encl. Details of the notional savings in staff cost are set out at the Enclosure.

11. The savings in recurrent expenditure mentioned in paragraphs 7 to 10 above amount to \$24.57 million. In addition, there is an one-off notional saving of \$1.68 million as cost avoidance in connection with the installation of the CCS terminals.

/Efficiency

Efficiency Benefits

12. Upon the implementation of the ACCS, efficiency benefits have also been achieved in the following aspects -

Speed of cargo clearance

13. One of the major achievements resulting from the implementation of the ACCS is faster customs clearance. Airlines and cargo operators can now submit cargo information to the Airport Customs prior to the arrival of incoming flights and receive pre-arrival Customs clearance instructions through the ACCS. The normal cargo clearance procedure has been advanced by at least 2 hours.

Handling capacity

14. There has been a remarkable growth in air cargo volume over the years. The air cargo volume grew from 1.63 million tonnes in 1999 by some 52% to 2.48 million tonnes in 2002. The Airport Customs processed a daily average of 220 incoming flights with 25 000 consignments in 1999. In 2002, the daily average for incoming flights processed increased to 287 with 34 380 consignments. This represents an increase of 9 380 consignments (38%) when compared with the throughput in 1999. Notwithstanding such a substantial increase in air cargo volume, partly due to the efficiency gain brought about by the ACCS, C&ED has been able to complete the examination of all detained cargoes within 80 minutes from the time of request (improved from 90 minutes since 1999).

Data security and accuracy

15. With the implementation of the ACCS, C&ED now has its own data system independent of the records kept by the cargo operators. It can make use of the ACCS to search data on individual consignments and run reports to trace cargo movement and identify anomalies. Since these functions are performed in C&ED's own system, data security is ensured. The ACCS also provides a secured environment to house C&ED's watch list and target list for the profiling of high-risk consignments. The automatic matching of such intelligence with cargo data in the ACCS enhances accuracy in the cargo selection process and has proved to be of great value for C&ED's enforcement actions.

/Smuggling

Smuggling trend analysis

16. Before the installation of the ACCS, smuggling trend analysis was done manually by collecting and collating large amount of information from local and overseas sources. The process was difficult and labour-intensive. With the ACCS, officers at the airport can now make use of the importer matching function and other computing facilities to retrieve specific information on all consignments imported within a certain period, with a view to establishing the usual norm of imports and singling out peculiar consignments for further analysis.

Common platform for cargo operators

17. The ACCS, developed specifically for cargo clearance purpose, adopts a common interfacing standard to link up with all cargo operators' computer systems. All cargo operators can now receive the same level of service from C&ED and are able to communicate with C&ED directly and independently.

CONCLUSION

18. The implementation of the ACCS system has enabled C&ED not only to achieve the savings mentioned in paragraphs 7 to 11 above, but also to improve its service to the community through pre-arrival clearance and shorter clearance time. It has greatly enhanced C&ED's enforcement capability and improved its performance despite the rapid growth in air cargo volume.

**Notional Savings from Productivity Improvement
Through Functions Provided by the Air Cargo Clearance System**

| Description | Rank of Staff | Annual Savings in Staff Hour | Notional Annual Savings in No. of Staff | Notional Annual Savings in HK\$ |
|--|----------------------------|---|--|--|
| Searching watch list and screening high risk consignment in cargo selection | Sr. Inspector | 91 | 0.04 | 46,738 |
| Logging customs activities in cargo selection | Sr. Inspector | 1 022 | 0.47 | 549,172 |
| Searching importer records in cargo selection | Sr. Customs Officer | 929 | 0.43 | 209,263 |
| Searching importer records in cargo examination | Sr. Customs Officer | 1 186 | 0.54 | 262,796 |
| Maintaining records in cargo selection | Customs Officer | 502 | 0.23 | 72,627 |
| Logging consignments processed in cargo examination | Customs Officer | 1 858 | 0.85 | 268,403 |
| Inputting constraint codes in cargo selection | Assistant Clerical Officer | 390 | 0.17 | <u>58,558</u> |
| | | | | <u>1,467,557</u> |