Legislative Council Panel on Trade and Industry

Case Processing System of the Customs and Excise Department

Introduction

This paper sets out the plan of the Customs and Excise Department (C&ED) to develop a computerised Case Processing System (CAPS).

Background

2. At present, C&ED relies largely on manual efforts to handle a case from the detection of a suspected crime to the final disposal of related seizures. Processing of a case normally comprises four stages, namely, collection and analysis of information, investigation based on intelligence developed, arrest and prosecution of offenders, and disposal of seized items. Processing of information and documentation during these stages often involves repetitive entries of similar data for various purposes and delivery of information and documents from one party to the other.

Intelligence

3. Intelligence is normally developed from complaints or information received from the public or other enforcement agencies. Currently, particulars of the suspects involved and a brief summary of what has occurred are recorded on an Information Report Form (IRF). The IRF is collated and indexed in the Central Intelligence Office (CIO). Copies of the preliminarily processed information are then dispatched manually to investigators and their supervisors under confidential cover. This process is labour-intensive and time-consuming.

4. In 1999, the total pieces of information received were 10,267, which represents an increase of about 40% as compared with the previous year. The problem will be amplified when massive information is to be processed. Furthermore, the repetitive entries of information and the duplication of IRF for dispatch at CIO unnecessarily increase the chance of human errors and exposure of sensitive data.

Investigation

- 5. The case officer-in-charge will organise investigation upon receiving an IRF. This normally begins with checking and verification of the relevant background information, such as vehicle ownership records, vehicle crossing and land search records, etc. via CIO for analysis and assessment. At present, background information is provided to investigators through manual despatch. This lengthens the time required for checking and analysis and hence unduly affects the efficiency of investigation work.
- 6. Based on the advice of the Independent Commission Against Corruption (ICAC), our investigators submit bi-monthly reports to CIO for monitoring of the investigation progress. The reports are conveyed manually to CIO and the contents are entered into the central database of the Customs Control System. Since over 15,000 active investigation files are being monitored manually, the workload involved is immense. There is always a gap between the time when reports are submitted and when updated information are available to the investigators due to the manual processes involved. The speed and quality of investigation work suffer as a result.

Prosecution

7. When it is established that an offence has been committed, the suspects will be prosecuted under the appropriate ordinance. To prepare for court proceedings, documents in a case file are copied to the prosecutor, the officer-in-charge and the government counsel. The preparation and despatch of the documents to various parties are time-consuming and labour-intensive.

8. In 1999, there were over 12,400 court hearings for cases with arrests and seizures. The figure increased by 10.46% as compared with 1998, which indicates a rising workload for prosecution. Moreover, an average annual increase of high court cases at 28.65% has been observed since 1997, which reflects that cases have become more complicated. The increase in both magnitude and complexity of cases will further exacerbate the problems with the existing manual-based processes.

Disposal of seized items

9. After the conclusion of a case, the seized items involved will be disposed of according to the Court's decision. The disposal procedure involves a series of documentation on the case file that requires repetitive data entries made by the prosecutor, the officer-in-charge and the supplies officer. During the course, the case file is passed manually from one officer to another. When data errors are detected, the file will have to be returned the officer responsible for rectification. The manual processes therefore often hinder prompt disposal of the seized items.

The Need for Change

10. We estimate that the workload of case processing would increase in the coming years as indicated by the rising figures of both information for investigation and court hearings from 1997 to 1999. It is conceivable that the current manual-based processing method will not be able to cope with the increasing workload. Figures of information received for investigation and court hearings from 1997 to 1999 are charted at Annex A.

Proposed System

11. The prime objective of implementing CAPS is to provide an efficient and effective support system for case processing in C&ED.

12. The proposed CAPS will link up over 500 workstations located at 42 sites. It will provide a centralized database to speed up the data retrieval process, allow sharing of records and generate reports for operational support. It will also provide timely statistics to the management for planning and decision-making, and will be able to interface with other C&ED computer systems.

Anticipated Benefits

Efficiency Improvements

- 13. With the establishment of the system network and central database, CAPS will enable speedy information flow by transferring case documents electronically. It will be accessed spontaneously and simultaneously. The expected efficiency improvement areas include:
 - (i) intelligence dissemination will be reduced from 4 days to within 1 day;
 - (ii) compilation of background check results for investigation will be reduced from 1 week to within 1 day;
 - (iii) preparation of reports on progress and result of each court attendance will be shortened by 20 minutes per day per prosecutor;
 - (iv) research on precedent cases, such as legal advice and court judgement, etc, will be reduced from 3 hours to several minutes; and
 - (v) disposal cycle for seized items will be reduced by 6 days.

Enhanced security of intelligence and case information

14. Stringent security features of CAPS will enable the transmission of sensitive intelligence and case information in the network under a secured environment. Access rights will be assigned to authorized officers only. In addition to the adoption of the normal user ID and password checking mechanism, security devices such as smart cards will be employed. Besides, all transactions will be automatically tracked by the system as audit trails in accordance with the ICAC's requirement.

Enhanced operational capabilities with improved quality work

- 15. With CAPS, information can be disseminated for investigation in good time. Furthermore, background information and other useful data will be available to the investigator immediately. CAPS will therefore enhance the operational capabilities of the C&ED.
- 16. CAPS will also provide a centralized library for storing reference materials on laws, legal advice, court judgements, departmental orders and procedures, etc. These are essential for frontline officers to improve the quality of their work. For example, officers can instantly find out the proper way to handle the evidence of a computer-related crime at scene by referring to the relevant legal advice in the electronic library.

Effective tool to senior management

17. CAPS will enable timely reports and statistics to be provided for analysis of modus operandi and trends of illegal activities, and for formulating departmental policies and strategies for combating crime.

Savings

18. There will be staff savings through the streamlining of work and elimination of certain manual processes. The CAPS will result in annual gross savings of \$21.6 million within the Government, of which \$4.5 million is realizable savings mainly from the deletion of 14 posts, and \$17.1 million is notional savings.

Cost

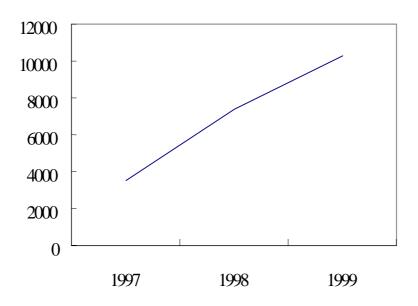
19. The estimated non-recurrent cost of the proposed system is \$63,880,000. This comprises \$62,825,000 for the purchase of computer hardware, software, site preparation, implementation services, etc., and \$1,055,000 for in-house development staff cost of C&ED and Information Technology Services Department. The estimated annual recurrent cost is \$2,928,000 for the first year and \$10,098,000 for the second year onwards. The detailed breakdown of the recurrent cost is at Annex B.

Way Forward

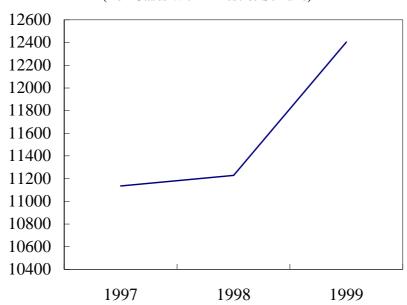
20. Subject to comments by Members, we will make a submission to the Finance Committee on 23 June for approval of the commitment required.

Trade and Industry Bureau June 2000

Total No. of Information for Investigation



Total No. of Court Hearings (For Cases with Arrest & Seizure)



Recurrent Expenditure of CAPS

Recurrent expenditure	2001-02 \$'000	2002-03 onwards \$'000
(a) Hardware	195	1,154
(b) Software	80	766
(c) System maintenance	1,846	5,536
(d) Miscellaneous	807	2,642
		
Total	2,928	10,098

Note

- 1. As regards (a) above, the expenditure of \$1,154,000 is for the maintenance of computer hardware.
- 2. As regards (b) above, the expenditure of \$766,000 is for the maintenance of software.
- 3. As regards (c) above, the expenditure of \$5,536,000 is for contract staff services to provide on-going system support and maintenance including system management, network and workstation support, provision of helpdesk services, user identity administration, day-to-day system operations, fund controlling, liaison with users, study and research on system enhancements and end-user training.
- 4. As regards (d) above, the expenditure of \$2,642,000 is for providing ongoing external training to C&ED staff, data lines rental, purchase of consumables and miscellaneous expenses.