

For information
on 15 June 2000

Legislative Council Panel on Security

Police Information Systems Strategy Review

Purpose

We briefed Members on the impending Information Systems Strategy Review (ISSR) to be conducted by the Hong Kong Police Force (HKPF) at the meeting held on 5 November 1998 and undertook to report back in due course on the findings. This paper informs Members of such and introduces the HKPF's new five-year Information Systems Strategic Plan (ISSP).

Background

2. Implementation of HKPF's first, ambitious and fast-tracked Information Systems Strategy Plan (ISSP) commenced in 1993 and was completed in 1999.
3. In view of the rapid development of information technology, organisations should always have in place, at any point in time, an on-going Information Systems Strategy (ISS). In 1998, therefore, it was decided to review the existing ISS to ensure that it was in line with the Force's Strategic Directions and Programme Plans. It was also agreed that the review should be an extension of the existing ISS and embrace all Capital Account information systems (IS) projects of the Police.
4. IBM Consulting Group was commissioned to work with Information Systems Wing (ISW) of HKPF and conduct an ISSR, and further recommend a new five-year ISSP for the Police. The ISSR was completed in three phases in 1998-99.
5. The focus of the new ISSP is primarily on administrative computer systems which are basically decision-support systems.

The Review

The Police Environment

6 HKPF is facing increasing challenges to make more effective use of resource available to maintain or even enhance its level of services without compromising the quality. There are examples of other police forces that have failed to appreciate these changes and have been forced to reduce their quality of policing services. HKPF acknowledges the need to adapt to new circumstances and has embarked on a programme of cultural change and continuous improvement to meet the needs of the future.

7. Information technology is a key element in the development of law enforcement processes as well as in improving productivity. New technologies have the potential to significantly alter the way in which police operate, and information systems such as intelligent text mining and data warehouses can substantially enhance investigative capabilities, and ensure that information is made available when required.

8. The ISSR concluded that HKPF is now relatively well placed in terms of the provision of information systems and the technology that underpins them. It is imperative, however, that the Force maintain this position; not by a further ‘big bang’ as was the case with the first ISSP but by a more structured, incremental approach that continues to add value to HKPF’s information systems and improve the return on investment. It follows that this will also result in continued improvement to the quality of HKPF’s services to the public – our primary objective.

9. For the new ISSP, a portfolio of information systems projects has been assembled. They are considered to be important for achieving the Force’s strategic goals and delivery of its law enforcement programmes over the next five years and beyond. The portfolio consists of various business improvement projects covering a range of activities as described in the ensuing paragraphs.

Proposed Projects

10. **Strategic Imperative** - these projects focus on the following four key areas where HKPF needs to excel if it is to deliver “value for money” and continue to improve performance -

- ***Strategic Management and Decision Support*** – systems to address the need for senior officers to have access to relevant and accurate information for making informed strategic and tactical decisions, and monitoring the performance of HKPF’s programmes;

- ***Financial Management*** – systems to enhance financial systems and processes of the Force;

- ***Learning Organisation*** – use of electronic collaboration and communication technologies to promote corporate values and share of information within the Force, and

- ***e-Police (Internet and Intranet Strategies)*** – commitment to actively support Government electronic services initiatives to improve community access to Government services.

11. **Operational Performance** – these projects focus on improving HKPF’s operational law enforcement capabilities:

- ***Crime Information and Investigation*** – systems to improve the targeting of criminal activities through better use of intelligence and to ensure that comprehensive criminal records are maintained.

12. **Support Efficiency** – these projects emphasize on the application of the world’s “best practice” to improve performance and to redirect manpower resources to core operational activities. They are expected to deliver significant savings over current operating costs. The following major processes have been identified as capable of bringing a return on investment:

- ***Traffic Process Improvement*** – reviewing and revising the current traffic offence process so as to streamline the workflow and reduce the paperwork and resources involved in handling traffic summons and prosecutions as well as traffic infringement notices. This will include redesigning of the process flow and determining suitable technologies to enable the future processes.
- ***Personnel Management and Conditions of Service Workflow Improvement*** – reviewing the current recruitment, career

management, conditions of service, personnel data management and quartering management processes with a view to reducing the cost and manpower involved. The processes will be re-designed by making use of electronic workflow technologies; and

- ***Training Delivery*** – use of computer-assisted training and streamlining of training and course management.
- ***Financial Support Enhancements*** – provision of a complete accounting and financial system that is tailored to the needs of the Force.

13. The ISSP also addresses two other areas:

- **Investment Opportunities** – it is noted that new law enforcement technology, together with technologies developed for managing information in other environments, has the potential to deliver significant strategic benefits but may involve significant risks. Hence, the Force should minimise the risks and costs involved in adopting new technologies through closely-controlled pilot processes. Under a collaborative research project between HKPF and the Chinese University of Hong Kong, named Artificial Intelligence Crime Analysis and Management System (AICAMS), the Force has started research on the application of Artificial Intelligence, Knowledge-based Systems and Map-based Systems for improvement in resources deployment and crime detection. The System has been successfully implemented in Tuen Mun. With the implementation of the ISSP, the Force can develop the next generation AICAMS, i.e. AICAMS II by making use of advanced digital technologies for intelligence analysis and crime case profiling; and
- **Quick Win Opportunities** – three projects as described below are critical to the overall IS Portfolio and should be launched prior to the commencement of the ISSP –
 - ◆ ***Account Management*** – establishment of Account Managers within ISW to provide customer focused account management services relating to the application of information technology to all formations within the Force;

- ◆ *Communication, Collaboration and Co-ordination* – to enhance the effectiveness of internal collaboration through electronic communication technology; and
- ◆ *Resource Management Data Mart* – to provide resource management information to the Force senior management for optimum manpower resource deployment.

Implementation

14. The new ISSP will be implemented in two phases. The first two years (Phase I) of the ISSP will cover all the foundation/pilot projects and the feasibility studies for the remaining projects. The remaining three years (Phase II) will involve the implementation of the remaining projects in accordance with the findings and recommendations from Phase I. The implementation schedule will be such that dependent projects will only commence after the necessary pieces from preceding projects are in place. This phased implementation accords with the government policy that an ISSP should be reviewed about three years after the commencement of its implementation in order to take account of any changes to business needs, workload and other assumptions made at the time of the ISSR.

15. The Police intend to fund Phase I internally but will need to seek funding from the Finance Committee for the implementation of Phase II in, nominally, two years' time.

Security Bureau
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