

**For discussion  
on 26 February 2013**

**Legislative Council  
Panel on Administration of Justice and Legal Services**

**Implementation of Projects under  
the Information Technology Strategy Plan of the Judiciary**

**PURPOSE**

This paper seeks Members' support for the implementation of the Information Technology Strategy Plan ("ITSP") of the Judiciary, particularly with regard to its Six-year Action Plan.

**BACKGROUND**

**Information Systems Strategy Study in the 1990s**

2. The Judiciary conducted its first Information Systems Strategy Study about twenty years ago. Based on the recommendation then formulated, the Judiciary set up its Information Technology ("IT") infrastructure and implemented a series of application systems to support its operations.

**The 2011-2012 Information Systems Strategy Study**

3. In 2011 to 2012, the Judiciary conducted another round of Information Systems Strategy Study ("ISSS") to formulate an up-to-date and comprehensive strategy plan on the use of IT in support of its operations for the coming ten years and beyond.

4. The Judiciary engaged a consultancy firm for conducting the ISSS. The consultants reviewed the current state of use of IT in the Judiciary and identified the improvement areas to keep pace with the development of information technology and to meet the projected operational needs of the

Judiciary. With the input of the Judiciary and extensive consultation with the internal and external stakeholders, the consultants envisioned the to-be state on the use of IT in the Judiciary in the coming decade and made recommendations on business processes and the enabling IT infrastructure. As a major deliverable under the ISSS, the consultants have prepared an ITSP which sets out the recommendations on the IT direction for the Judiciary in the long term. It specifically includes a Six-year Action Plan which draws up a portfolio of IT projects and activities for the Judiciary to take forward in the implementation of the ITSP.

## **JUSTIFICATIONS**

### **Current Position**

5. There are at present 62 application systems supporting the day-to-day operation of the Judiciary. There are ten separate case management systems serving all level of courts and tribunals. These systems are critical to the courts and registries operations. There are 24 court-related systems providing support for court-related services such as the bailiff service and the jury services, etc. The remaining 28 systems provide support for various administrative functions in many areas, e.g. financial, human resource and office automation areas. Over the years, these systems as well as the IT infrastructure have been enhanced and updated from time to time to cater for new requirements.

6. Since 2003, the Technology Court has been established in the High Court Building for case hearing requiring Internet communications, video conferencing and the use of other technological equipment. A few courts at other court premises are equipped with closed circuit television facilities to support provision of evidence by vulnerable witnesses.

7. The findings of the ISSS confirm that the Judiciary's IT infrastructure and application systems have been able to provide support at the basic level of service. However, the following areas for improvement are identified –

- (a) **Sustainability:** Many of these application systems have been used for many years. The overall architecture design is becoming obsolete and hence synchronization with the latest developments of technology and user expectation is required. The aging issues have also resulted in increasing demand for resources to support the systems and to handle their compatibility with other hardware and software components. It is necessary for the Judiciary to

replace these application systems to ensure sustainable operation in the long run.

- (b) **Need for standardisation:** The case management systems are the core application systems in the Judiciary. There are ten case management systems, each is separate from each other, maintaining information of cases of a particular court level. The systems were originally designed to operate in standalone mode. There is also a disparity in functions across the systems at different levels of courts and tribunals. As a result, the ways in which data are defined, captured and used are not standardised among systems. Over the years, interface mechanisms have been built to facilitate limited data exchange among systems to support transfer of case and processing of appeals. Owing to the disparity of data definition, structure and usage, data exchange among systems still requires duplicate inputting efforts and additional resources. It has also caused difficulties for the Judiciary in generating reports and compiling statistics based on data maintained in different systems.
- (c) **Need for functional enhancement:** The existing systems only provide limited functions and many work processes are still being performed manually. Enhancements to various systems have been made from time to time to cater for changes in legislative and operational requirements. However, the outdated design of some of the applications has been a hindrance for implementing major system enhancements. This has in turn limited the capability of the Judiciary in making use of IT to improve efficiency of operation and provide better support to court users.
- (d) **Need for better support to stakeholders:** There is limited IT support to facilitate the Judges and Judicial Officers and other court users in the litigation processes. Currently, the court processes are in many ways operated manually under a paper-based environment. Court users have to attend court registries in person to submit documents, to make payment and conduct other court processes. Judges and Judicial Officers, Judiciary staff, parties and their legal representatives, as well as litigants-in-person (“LIPs”) have to handle paper documents in the entire span of a litigation process. There are increasingly more complicated cases with large volumes of bundles which are not easy to transport, store and use. Although most of the bundles may have been prepared by electronic means, the efficiency achievable by the use

of electronic documents cannot be realised under the current paper-based environment.

### **Objectives of the ITSP**

8. The ITSP is aimed at enabling the Judiciary to achieve the following objectives –

- (a) to replenish the existing IT systems by latest technologies to ensure sustainable operation in the long run;
- (b) to provide more effective and efficient services of a higher quality to all stakeholders in support of the administration of justice through process re-engineering enabled by the use of IT;
- (c) to facilitate active case management throughout the entire litigation/adjudication and ancillary process in improving access to justice for the benefit of all stakeholders; and
- (d) to respond responsibly to the general rising expectations from users and society.

### **Proposals under the ITSP**

9. The ITSP proposes that an integrated court management system be implemented to streamline and standardise court processes, across different levels of court as appropriate and put in place a number of non-court systems to meet the operational requirements of the Judiciary. The key initiatives recommended under the ITSP are –

- (a) **To implement an integrated court management system:** An integrated court management system would be set up to support the automation of litigation processes of courts and tribunals. The system would be designed to leverage the commonality of the processes while addressing the unique requirements of specific courts and tribunals. This integrated court management system would enable appropriate data sharing, data driven workflow and support the use of electronic documents.
- (b) **To standardise processes across different court levels and across non-court sections:** The court and non-court processes would be reviewed and standardised as appropriate.

- (c) **To streamline operations through business process re-engineering and improved automation:** The Judiciary would aim to improve the overall efficiency of its operation through business process re-engineering enabled by the use of IT. Automation of work processes would be introduced as appropriate.
- (d) **To establish an integrated data architecture:** An integrated data architecture with centralized governance would be established to support the operation of the Judiciary.
- (e) **To enable and encourage electronic services for various types of transactions:** Electronic services would be introduced in phases in many of the court processes in which court users interact with the Judiciary. Major initiatives being developed include –
  - i. a new webpage would be launched for court users and the public to obtain information from the Judiciary and to conduct electronic transactions. The webpage would be accessible through personal computers, or mobile devices which can be connected to the Internet;
  - ii. documents, such as case initiation documents for civil cases and charge sheets for criminal cases, may be submitted electronically to the Judiciary;
  - iii. to enhance convenience to court users, the Judiciary would seek to explore the feasibility of accepting the use of various payment means, including electronic payment methods;
  - iv. consideration would also be given to introducing electronic mode of listing as appropriate to support scheduling of case hearing right from the stage of making a request up to the ultimate fixing of hearing dates; and
  - v. the scope of information and documents to be made available for electronic search would be expanded gradually.

It is anticipated that implementation of electronic services would reduce the need for court users to visit the courts or court registries in person.

- (f) **To enable electronic court records:** In combination with expanded electronic services, the Judiciary would seek to support the use of electronic records in court proceedings and move towards a “less paper” environment. Electronic versions of documents will facilitate Judges and Judicial Officers, parties and practitioners in carrying out their work. The retrieval of information and record keeping will be more efficient and effective. The Judiciary would implement necessary security measures to ensure authenticity and integrity of the electronic records.
  
- (g) **To enhance knowledge management, court and non-court records management:** The Judiciary would seek to enhance its knowledge management and records management capability based on the electronic information to be accumulated in the future processes. This will enable more efficient management of information and sharing of knowledge among members of the Judiciary.
  
- (h) **To enhance courtroom technologies:** The courtrooms would be equipped with appropriate IT infrastructure, necessary equipment and communication network to support court hearing, including the use, retrieval and display of electronic documents. With built-in infrastructure, the use of electronic bundle, legal research and video conferencing, etc., can be set up in the courtroom much more readily if such activities are required and permitted by the court. The implementation of courtroom IT facilities would be carefully scheduled so as to minimise disruption to court operations. The Judiciary would also align the implementation schedule of courtroom IT facilities with the relocation project of the Court of Final Appeal and the construction project of West Kowloon Law Courts Building.
  
- (i) **To improve reporting and collection of statistics:** Coupled with standardisation of data and court processes, the future systems would be designed to facilitate compilation of management information, thus enabling more effective planning and operation.

### **Technical Enhancement to Meet Future Needs**

10. The ITSP defines the long-term IT direction of the Judiciary and maps out the high level design of the application landscape, the data

architecture, the security features and the IT infrastructure for enabling the provision of IT support for the future operation of the Judiciary.

11. The consultants analyze the applicability of IT best practices, IT standards and services for adoption by the Judiciary and make recommendations on IT practices and standards to be adopted, the technical components and the implementation approach, etc.

12. The Office of the Government Chief Information Officer of the Administration was consulted regarding the use of IT throughout the ISSS and supports the implementation of the ITSP and the Six-year Action Plan.

13. The Judiciary has all along observed the developments in the IT services in other jurisdictions. It is noted that there is a general trend of greater use of IT in other jurisdictions.

## **IMPLEMENTATION PLAN**

14. The Six-year Action Plan maps out the requisite activities for implementing the initiatives defined in the ITSP.

15. Based on the assessment of the logical grouping and prioritization of implementation of the courts and tribunals in terms of the anticipated benefits and current pressure points, the ISSS recommends including the implementation of the integrated court management system for the following courts and tribunals in the Six-year Action Plan as the first phase of implementation –

- (a) the Court of Final Appeal;
- (b) the High Court, including the Probate Registry;
- (c) the District Court;
- (d) the Magistrates' Courts; and
- (e) the Small Claims Tribunal.

16. This first phase of implementation is further broken down into two stages, each lasting for about three years, for better management. The first stage focuses on building up the technical and infrastructure foundation components, conducting process re-engineering, streamlining and standardising court operations, and implementing the integrated court management system in

the District Court and the Summons Courts of the Magistrates' Courts. The second stage will include rolling out the new system to the Court of Final Appeal, the High Court, the Small Claims Tribunal and the non-summons Courts of the Magistrates' Courts.

17. The ISSS recommends that the integrated court management system for the remaining courts and tribunals (including Family Court, Labour Tribunal, Lands Tribunal, Obscene Article Tribunal and the Coroner's Court) be implemented in the seventh to ninth year as the second phase implementation. With the foundations to be built and the experience to be gained in the first phase, the Judiciary will work out concrete plans and make funding application for the implementation of the integrated court management system for the remaining courts and tribunals (i.e. second phase implementation) at a later time.

18. On the timeline of the ITSP, the ISSS recommends that subject to funding approval, the Judiciary would commence the implementation in accordance with the following schedule –

<u>ACTIVITIES</u>	<u>TENTATIVE SCHEDULE</u>
(a) Technical studies and implementation of IT infrastructure and Stage 1 court systems	July 2013 to June 2016
(b) Implementation of non-court systems	July 2015 to June 2019
(c) Implementation of Stage 2 court systems	July 2016 to Dec 2019

## **BENEFITS**

### **Qualitative benefits**

19. According to the ISSS, it is anticipated that the implementation of the ITSP will bring about the following qualitative benefits –

#### ***General benefits***

- (a) **Improved access to justice:** The Judiciary's services will be more accessible hence improving the access to justice;



- (b) **Improved workflow automation:** The standardised data architecture and streamlined work process across the Judiciary will introduce greater degree of workflow automation, leading to a reduction in manual work in many operational and support functions;
- (c) **Improved operational efficiency:** The internal operational efficiency will be improved by using IT to facilitate staff collaboration and information sharing across different court levels and sections as staff carry out their duties;
- (d) **Improved management information:** The response time for scheduled and ad hoc management information needs will be improved;
- (e) **Improved data security:** The security of data in information systems will be more effectively supported by a number of measures, including the setting up of a centralized and integrated data architecture, the formulation and enforcement of data policies and procedures and the provision of data encryption technologies and backup facilities;
- (f) **Improved service availability:** The availability of computer services will be more effectively monitored, thus reducing the likelihood of service delays and interruptions;
- (g) **Improved utilization of computing resources:** The new infrastructure will be designed to enable flexible allocation of computing resources thus facilitating improved utilization of computing resources;
- (h) **Improved scalability:** The future expansion of IT systems would be facilitated through a scalable design using a building block approach which allows software or hardware components to be added in a modular way;
- (i) **Reduced risks:** By using up-to-date technologies, the risks associated with running decommissioned and unsupported technologies will be reduced;

### *Service benefits*

- (j) **Improved service to court users:** With the implementation of ITSP, the Judiciary will be equipped with appropriate IT facilities to provide more effective and efficient services to all stakeholders, and to respond responsibly to the rising expectation of users and the community. Electronic services to be introduced will enable court users to interact with the Judiciary in a more convenient fashion. The interaction will be timely, efficient, accurate and environmental friendly;
- (k) **Enhanced efficiency of court activities:** The efficiency of many of the court-related functions will be enhanced through the use of technology. This will in turn result in more efficient utilisation of court time;

### *Case management benefits*

- (l) **Active case management:** The case management and resource management will be improved by using automatic alerts, integrated workflows, and improved case monitoring mechanisms;
- (m) **Improved ability to handle complicated cases:** The capability to handle increasingly-complex cases, with growing volumes of documents and data, will be increased;

### *Communications benefits*

- (n) **Safeguard for the privacy of individuals:** The court information will be transmitted and stored more securely; and
- (o) **Enhanced communication with external stakeholders:** The communications with external stakeholders such as the legal profession, institutional and individual court users, etc., will be enhanced.

### **Cost Savings**

20. Other than the qualitative benefits described in paragraph 19 above, there are also tangible, quantifiable benefits that can be realised from improving the use of IT in the Judiciary. It is anticipated that the implementation of projects under this submission will bring about an estimated

total savings of \$81,108,000 in 2019-20. The total saving are made up of three main categories –

- (a) realisable savings of \$26,472,000 per year from reducing the software, hardware and other associated expenditure in maintaining the existing systems;
- (b) notional savings as a result of improved operational efficiency for Judges and Judicial Officer and Judiciary staff of \$44,404,000 per year; and
- (c) notional cost-avoidances from the avoidance of potential future costs such as avoidance of paper storage accommodation costs, potential hardware / software replacement costs, etc. of \$10,232,000 per year.

## **FINANCIAL IMPLICATIONS**

### **Non-recurrent Expenditure**

21. The estimated non-recurrent expenditure over a six-year period from 2013-14 to 2018-19 is \$682,430,000. The breakdown is shown as follows –

	\$'000
(a) Hardware	144,385
(b) Software	147,595
(c) Implementation services	239,168
(d) Contract Staff	75,048
(e) Site preparation	9,190
(f) Communication lines	386
(g) Training Cost	4,619
(h) Contingency	62,039
<b>Total</b>	<b>682,430</b>

### **Other Non-recurrent Expenditure**

22. The proposed implementation of the ITSP will require the setting up of a project team, consisting of both Judiciary staff and IT professional grade staff, for handling the multifarious responsibilities involved in tendering, project management, support for system analysis and design, and conducting acceptance tests. This will entail a total of non-recurrent staff cost of \$69,990,000 from 2013-14 to 2018-19.

## **Recurrent Expenditure**

23. It is estimated that the annual recurrent expenditure, including the hardware and software maintenance, on-going system support services, communication lines and consumables, arising from the projects will be \$271,000 in 2013-14 and will progressively increase to \$56,782,000 in 2018-19.

24. It is estimated that no recurrent staff costs will be incurred between 2013-14 and 2015-16. Annual additional recurrent staff costs requiring for supporting the new infrastructure and application for 2016-17, 2017-18 and 2019-20 will be \$8,169,000, \$8,169,000 and \$10,797,000 respectively.

## **JUDICIARY'S POSITION**

25. The Judiciary has accepted the ITSP and the Six-year Action Plan recommended by the ISSS. The Judiciary agrees with the findings of the ISSS that there is an immediate need for the Judiciary to replace the existing systems to ensure sustainable operation in the long run.

26. With the long-term IT direction envisioned under the ITSP, the implementation exercise would be planned with careful considerations. There is no other viable alternative to the implementation of the Six-year Action Plan. If the Judiciary fails to secure funding for the implementation of the Six-year Action Plan, the Judiciary will have to explore other means to replace the systems, perhaps by planning the replacement at project level. As such, the targets of achieving standardisation of work processes and greater synergies in the Judiciary's operations will be difficult to achieve.

27. To ensure access to justice, it is planned that electronic services will be introduced as an additional option for court users to interface with the Judiciary. The Judiciary plans to continue maintaining the existing channels of interface so that court users without IT facilities or skills may still choose to use conventional ways to interact with the Judiciary. At the same time, the Judiciary will implement measures to facilitate and encourage greater adoption of electronic services through various means in order to maximize the benefits of efficiency and convenience that could be derived from the use of electronic services. The Judiciary also plans to set up self-help centres with necessary computer devices, software and connectivity for performing electronic transactions to assist court users and in particular LIPs who wish to communicate with the Judiciary through electronic means. Court staff will provide assistance to users of the self-help centres where necessary.

28. The Judiciary notes that current legislation concerning court operation does not cater for the full scale implementation of many of the initiatives. To ensure that the changes to be introduced will be in compliance with the statutory requirements, the Judiciary has embarked on a study regarding possible amendments to legislation. The Judiciary will consult the stakeholders, in particular the legal profession and the court users, on specific proposals at a later stage. The intention is to complete the study in time to tie in with the implementation of the ITSP.

## **CONSULTATION WITH STAKEHOLDERS**

29. The Judiciary considers that it is very important for the ITSP to align with the long term objectives of the Judiciary. In formulating the ITSP, Judges and Judicial Officers and support staff have been actively involved.

30. Apart from conducting extensive internal review and consultation, in the early stage of the ISSS, the Judiciary sought views of the Hong Kong Bar Association, the Law Society of Hong Kong and relevant government departments of the Administration on the possible use of IT in the operation of the Judiciary and their interaction with the Judiciary. In May 2012, Judiciary issued a consultation document to 57 relevant stakeholder organizations, including the legal professional bodies, bureaux and departments in the Administration, agencies and organizations. The consultation document described the key preliminary proposals of the ITSP and invited stakeholders to comment on the proposals. Altogether 26 organizations, including all major stakeholders, provided comments to the Judiciary. In general, the feedback was supportive and encouraging. Most of the stakeholders welcomed the proposals in the ITSP and expressed their support.

31. In particular, the Hong Kong Bar Association and the Law Society of Hong Kong indicated their support to the proposals stated in the consultation document. They also gave valuable suggestions to the Judiciary. Some stakeholders shared with the Judiciary their experience in implementing electronic services, provided advice on areas for attention and made suggestions on areas for improvement. Some stakeholders indicated that they were ready to adopt the proposed electronic services.

32. In October and November 2012, the Judiciary also consulted the Family Court Users' Committee, the Civil Court Users' Committee and the Criminal Court Users' Committee on the proposals in the ITSP. In general, the Committees showed support for the ITSP. Besides, IT professional bodies have also been consulted.

## **ADVICE SOUGHT**

33. Members are invited to comment on the proposal. Subject to Members' support, the Judiciary will seek funding approval from the Finance Committee in May 2013.

**Judiciary Administration**  
**February 2013**