

CHAPTER 6

Judiciary

**Judiciary Administration's work in
implementing projects under
Information Technology Strategy Plan**

**Audit Commission
Hong Kong
28 October 2019**

This audit review was carried out under a set of guidelines tabled in the Provisional Legislative Council by the Chairman of the Public Accounts Committee on 11 February 1998. The guidelines were agreed between the Public Accounts Committee and the Director of Audit and accepted by the Government of the Hong Kong Special Administrative Region.

Report No. 73 of the Director of Audit contains 10 Chapters which are available on our website at <https://www.aud.gov.hk>

Audit Commission
26th floor, Immigration Tower
7 Gloucester Road
Wan Chai
Hong Kong

Tel : (852) 2829 4210
Fax : (852) 2824 2087
E-mail : enquiry@aud.gov.hk

JUDICIARY ADMINISTRATION'S WORK IN IMPLEMENTING PROJECTS UNDER INFORMATION TECHNOLOGY STRATEGY PLAN

Contents

	Paragraph
EXECUTIVE SUMMARY	
PART 1: INTRODUCTION	1.1 – 1.14
Audit review	1.15
General response from the Judiciary	1.16
Acknowledgement	1.17
PART 2: PROGRESS IN PROJECT IMPLEMENTATION AND PROBLEMS ENCOUNTERED	2.1 – 2.3
Progress in project implementation	2.4 – 2.7
Problems encountered during project implementation	2.8 – 2.24
Audit recommendations	2.25
Response from the Judiciary and the Government	2.26 – 2.28
PART 3: PROJECT GOVERNANCE	3.1 – 3.2
Change of governance structure	3.3 – 3.6

	Paragraph
Project monitoring	3.7 – 3.13
Reporting of project progress	3.14 – 3.18
Audit recommendations	3.19
Response from the Judiciary	3.20
 PART 4: OTHER RELATED ISSUES	 4.1
Provision of e-services	4.2 – 4.12
Audit recommendations	4.13
Response from the Judiciary	4.14
Enhancement of audio-visual presentation equipment in courtrooms	4.15 – 4.23
Audit recommendations	4.24
Response from the Judiciary	4.25
Promotion of the use of e-bundles	4.26 – 4.33
Audit recommendations	4.34
Response from the Judiciary	4.35

Appendices	Page
A: Courts and tribunals in Hong Kong (30 June 2019)	78 – 79
B: Judiciary: Organisation chart (extract) (30 June 2019)	80
C: Governance structure for implementation of Information Technology Strategy Plan (30 June 2019)	81
D: Acronyms and abbreviations	82

JUDICIARY ADMINISTRATION'S WORK IN IMPLEMENTING PROJECTS UNDER INFORMATION TECHNOLOGY STRATEGY PLAN

Executive Summary

1. The Judiciary, headed by the Chief Justice of the Court of Final Appeal, is responsible for the administration of justice in Hong Kong. It hears all criminal cases and civil disputes. The Judiciary Administration is headed by the Judiciary Administrator, who assists the Chief Justice in the overall administration of the Judiciary. It provides support to the courts in the administration of justice and their operations. The Judiciary uses information technology (IT) extensively to support its operations and services to the public. In 2011 and 2012, the Judiciary conducted an Information System Strategy Study which formulated an Information Technology Strategy Plan (ITSP) on the application of IT in support of its operations for the coming ten years and beyond. Under ITSP, the Judiciary seeks to implement by phases an integrated court case management system (iCMS) to integrate, streamline and standardise court processes across different levels of courts and tribunals, and to put in place a number of non-court systems to meet the Judiciary's operational requirements. The implementation of ITSP is divided into two phases:

- (a) Phase 1 comprises two stages. Stage 1 mainly covers IT infrastructure foundation and the development of iCMS for the District Court, the Summons Courts of the Magistrates' Courts and the related court offices. Stage 2 mainly covers the development of iCMS for the Court of Final Appeal, the High Court, the Competition Tribunal, the non-Summons Courts of the Magistrates' Courts and the Small Claims Tribunal; and
- (b) Phase 2 covers iCMS for the remaining courts and tribunals.

In May 2013, the Judiciary obtained the Legislative Council Finance Committee (FC)'s funding approval of \$682.4 million for the implementation of ITSP Phase 1, with scheduled completion dates for Stage 1 and Stage 2 in June 2016 and December 2019 respectively. The Audit Commission (Audit) has recently conducted a review to examine the Judiciary Administration's work in implementing projects under ITSP and other related issues.

Progress in project implementation and problems encountered

2. *Delays in completion of projects under ITSP Phase 1.* According to the 2013 FC paper, the implementation plan of ITSP Phase 1 comprised four activities. Audit examination found that as of June 2019, there had been slippages (ranging from 6 to 57 months) in all the four activities:

- (a) *Activity A “Technical studies”.* Technical studies were completed in April 2015, i.e. a delay of 10 months as compared with the original target completion date of June 2014;
- (b) *Activity B “Implementation of IT infrastructure and Stage 1 court systems”.* The implementation work, originally scheduled to be completed by June 2016, was still in progress. The revised target completion date was March 2021, i.e. a delay of 57 months;
- (c) *Activity C “Implementation of non-court systems”.* The implementation work, originally scheduled to be completed by June 2019, was still in progress. If compared with the revised target completion date of December 2019, there would be a delay of 6 months. However, based on information as of September 2019 provided by the Judiciary Administration, some non-court systems would only be progressively rolled out from December 2019 to September 2021, suggesting that Activity C would unlikely be completed by December 2019; and
- (d) *Activity D “Implementation of Stage 2 court systems”.* The implementation work, originally scheduled to be completed by December 2019, was only at a preliminary stage. If compared with the revised target completion date of September 2022, there would be a delay of 33 months. Moreover, the slippage of earlier Activities B and C might have knock-on effects on Activity D.

The Judiciary anticipated that the implementation of ITSP would bring about improvement in access to justice, workflow automation, operational efficiency, and improve services to court users and the community as a whole. There is a need for the Judiciary Administration to step up monitoring of the implementation of all projects under ITSP Phase 1 and expedite actions where possible to complete the

Executive Summary

outstanding projects with a view to reaping the full benefits as early as practicable (paras. 2.2, 2.4, 2.6 and 2.7).

3. ***Problems encountered during project implementation.*** Audit noted that in the course of implementing projects under ITSP Phase 1, the Judiciary Administration encountered the following key problems (para. 2.8):

- (a) ***Change of delivery mode and manpower shortage.*** On the advice of the Office of the Government Chief Information Officer (OGCIO), to reduce project risks, the Judiciary Administration in September 2013 changed the total outsourcing approach for the implementation of projects under ITSP to a hybrid one, i.e. outsourcing plus in-house efforts. As time and efforts were spent to discuss and plan for the change of delivery mode, the commencement of ITSP implementation was deferred from mid-2013 to early 2014 (para. 2.10). In this connection, Audit noted the following issues:
 - (i) ***Shortage and high turnover of contract staff.*** Arising from the change of delivery mode, it was necessary to engage 20 to 70 contract staff per year from 2013-14 to 2018-19. However, due to recruitment difficulties, there was a significant shortage of manpower at the rank of Analyst/Programmer, ranging from 2 to 32 staff (i.e. an average of 14 staff per annum) during the period. Moreover, the turnover rates of contract staff involved in the implementation of ITSP for the period from 2014-15 to 2018-19 were considerable, ranging from 6.8% to 33.7% (paras. 2.11, 2.13 and 2.14); and
 - (ii) ***Delays in hiring contractors.*** To address the manpower shortage, four outsourcing contractors were engaged to perform the programming and system development work of Stage 1 court systems. While the hiring process should be in parallel with the system analysis and design (SA&D) work so that the programming work could start immediately upon completion of SA&D, Audit noted that the hiring of the last outsourcing contractor was only completed in September 2016, i.e. four months after the completion of SA&D in May 2016 (para. 2.13);

Executive Summary

- (b) ***Long lead time in procurement of IT infrastructure.*** Under ITSP, the required hardware, software and services for upgrading the central IT facilities were procured through an open tender exercise. Due to an over-optimistic work schedule for tendering work involving the Government Logistics Department and the Department of Justice, there was a delay of 13 months in completing the tender exercise and awarding the contract (paras. 2.16 and 2.17);
- (c) ***Long time taken in developing Stage 1 court systems.*** The development of Stage 1 court systems generally involved three stages, namely: (i) collection of user requirements; (ii) SA&D; and (iii) implementation and user acceptance tests (UATs). Audit found that additional time had been taken to collect user requirements and complete SA&D, causing an overall delay of 11 months. Also, a substantial number of change requests (about 1,400 as of December 2017) were raised during UATs, resulting in a further delay of about two years (paras. 2.18 to 2.20); and
- (d) ***Engagement of prosecuting departments and agencies to prepare for the rollout of iCMS.*** At Stage 1 of ITSP Phase 1, iCMS would be implemented in the Summons Courts of the Magistrates' Courts. About 40 prosecuting departments and agencies were expected to migrate from the Judiciary's existing electronic platform to iCMS for submitting summons applications handled by the Summons Courts within a period of three years after the rolling out of iCMS in all the Magistrates' Courts. Since 2015, the Judiciary Administration had been engaging the prosecuting departments and agencies to prepare for the rollout of iCMS. Audit found that: (i) from June 2016 to August 2017, the Judiciary Administration held 19 engagement meetings with the prosecuting departments and agencies on the rollout of iCMS. However, internal notes of meeting were only prepared for 4 meetings; (ii) while another round of briefings to the prosecuting departments and agencies was planned to be held on the design and usage of the web portal in mid-2017, such briefings were only provided to two key prosecuting departments in January and August 2018 respectively; and (iii) there were a few unresolved issues between government departments on the setting up of system interface with iCMS, such as the one between the Hong Kong Police Force and the Transport Department relating to traffic-related offences, which had been discussed since 2016 and remained unresolved up to July 2019 (paras. 2.22 to 2.24).

Executive Summary

Project governance

4. ***Governance structure of ITSP.*** The governance structure of ITSP can be broadly divided into two groups, i.e. one led by Judges and Judicial Officers (JJOs) and the other led by the Judiciary Administrator (the project owner of ITSP). The group led by JJOs mainly includes the Committee on Information Technology (CIT), which is the overarching body overseeing the development and implementation of ITSP at the strategic level. Three working groups are set up to advise CIT on various issues. The group led by the Judiciary Administrator mainly includes the Information Technology Strategy Plan Steering Committee (the Steering Committee), which is a dedicated administrative committee set up to oversee the detailed implementation of ITSP. The Steering Committee is supported by an Information Technology Strategy Plan Delivery and Assurance team (ITSP Delivery and Assurance Team) and a Programme Management Office. The Government Chief Information Officer participates in the Steering Committee as the Government's IT advisor. The terms of reference of CIT and the key roles and responsibilities of the Steering Committee are defined in the Programme Management Plan (paras. 1.10, 1.11 and 3.2).

5. ***Areas for improvement.*** Audit examination of the project governance of ITSP has revealed the following areas for improvement:

- (a) ***Need to review the governance structure of ITSP.*** According to the original governance structure endorsed by CIT in April 2013, the Steering Committee would monitor the implementation of ITSP at a strategic level, and project management responsibilities (such as committing project resources, and endorsing acceptance of project plans and deliverables) would be delegated to three project steering committees and their respective project assurance teams set up under the Steering Committee. In February 2014, the three project steering committees and their respective project assurance teams were grouped collectively under ITSP Delivery and Assurance Team. However, Audit found that the project management responsibilities had not been delegated to ITSP Delivery and Assurance Team. Therefore, the Steering Committee might need to arrange more frequent meetings to discharge its project management responsibilities. There is merit in reviewing the need for delegating some of the project management responsibilities to ITSP Delivery and Assurance Team to avoid overloading the Steering Committee (paras. 3.3 to 3.5);

Executive Summary

- (b) ***Need to ensure that any revisions to governance structure are properly endorsed.*** According to the Judiciary Administration, as the implementation of ITSP progressed, the ways and mechanism in overseeing its implementation might need to be adjusted to cater for its operational needs, particularly in light of experience and having regard to the nature of work required at different stages of the projects. For example, for the implementation of Stage 1 court systems, the relevant project study teams under the Steering Committee and the relevant advisory committees under CIT had been consolidated since May 2017. Audit however found that such revision had not been properly reflected in the Programme Management Plan endorsed by the Steering Committee (para. 3.6);
- (c) ***Need to convene timely meetings for the Steering Committee and provide more timely project progress updates to CIT.*** From May 2013 to June 2019, 15 Steering Committee meetings were held. Audit found that fewer meetings had been held since 2016 and the intervals between meetings had become longer. For CIT, the numbers of meetings held and ITSP-related papers issued to members were also on a decreasing trend from April 2013 to June 2019. In particular, from January 2018 to June 2019, no CIT meeting had been held and no ITSP-related papers had been issued to CIT members (paras. 3.8 and 3.10);
- (d) ***Need to improve timeliness of submission of monthly highlight reports and their quality.*** The Programme Management Office is required to provide the Steering Committee and ITSP Delivery and Assurance Team with a monthly highlight report on the overall progress of ITSP and any project risks, issues and change requests. Audit examination found that: (i) of 65 monthly highlight reports from March 2014 to July 2019, 46 (71 %) were not timely submitted in the following month; (ii) some of the monthly highlight reports tended to present over-optimistic overall project status; and (iii) all the 65 reports did not report project issues and change requests (para. 3.12); and
- (e) ***Need to maintain proper records on the Steering Committee's approvals of revisions of completion dates of project activities.*** Revision of completion dates of project activities is one type of project changes that should be approved at the Steering Committee's meetings. Audit examination of the papers and minutes of all the 15 Steering Committee meetings from May 2013 to June 2019 found that approvals for revision of

Executive Summary

completion dates of project activities had not been explicitly sought during the meetings (para. 3.13).

6. ***Annual progress reports to FC.*** The Government undertakes to provide FC Members with an annual progress report on the implementation of major computer projects (para. 3.14). Audit examination has revealed the following areas for improvement:

- (a) ***Need to report completion dates by stages.*** In all the five annual progress reports submitted to FC from 2014 to 2018, only the overall project completion date of ITSP projects (i.e. completion date of Stage 2 court systems) and narrative updates on the latest project status and achievements of key milestones were reported. In order to present a complete picture of the project progress, it is more desirable to report the scheduled/revised completion dates by stages (para. 3.16(a)); and
- (b) ***Need to ensure that completion dates reported are up-to-date.*** According to the information papers on ITSP progress update issued to members of the Steering Committee in January 2018, the overall completion date of implementing ITSP was deferred from December 2019 to June 2021. However, the overall completion date had not been updated in the annual progress report submitted to FC in October 2018 showing the position as of March 2018 (para. 3.16(b)).

7. ***Need to improve progress reports to OGCIO.*** The Judiciary Administration is required to submit progress reports for OGCIO to monitor the health status of the projects under ITSP (para. 1.12). Audit examination found that:

- (a) there were cases of omissions and delays in reporting revised/actual completion dates in the progress reports. For example, the completion date of Activity D (i.e. Implementation of Stage 2 court systems) was deferred in June 2017 but the revised completion date had not been reported in any progress reports submitted to OGCIO. Subsequently, the completion date was further deferred in January 2018 but the revised completion date was only reported in July 2018 (i.e. a delay of six months) (para. 3.18(a)); and

Executive Summary

- (b) there were also cases of not indicating approvals for revising the completion dates, not documenting analysis on project slippage, or reporting inaccurate revised completion dates in the progress reports (para. 3.18(b) to (d)).

Other related issues

8. ***Provision of e-services.*** The Judiciary’s website provides information about schedules of court hearings and related matters mainly via the Daily Cause Lists and e-hearing date enquiry services. The website also provides other judicial information such as judgments of various levels of courts via the online Legal Reference System (paras. 4.5 and 4.7). Audit examination has revealed the following areas for improvement:

- (a) ***Need to consider improving dissemination of future hearing information.*** The Daily Cause Lists provide a more user-friendly enquiry function (i.e. a search could be conducted by party name in addition to case number) than the e-hearing date enquiry services. However, the information provided is for hearings on the next working day only. Users who wish to enquire information about future hearings can only conduct a search via the e-hearing date enquiry services provided that the case number is known (para. 4.6(a));
- (b) ***Need to consider enhancing search functions of Legal Reference System.*** Audit visited other legal reference websites in Hong Kong and other jurisdictions and noted that their search functions were more user-friendly. In particular, they allowed more search parameters to be used in a conjunctive manner and longer date range for search by date of judgment, and offered more options for sorting the list of judgments (para. 4.8);
- (c) ***Need to ensure accuracy of information uploaded onto the Judiciary’s website.*** Audit visited the Judiciary’s website and noted a few discrepancies in the provision of judicial information, such as inaccurate judgment date and update time of the Daily Cause Lists (para. 4.10); and
- (d) ***Need to improve mobile-friendliness of e-services.*** Audit noted that some e-services provided through the Judiciary’s website had not been enhanced to adopt a “mobile-friendly design” to facilitate public access through mobile devices (para. 4.12).

Executive Summary

9. *Need to provide enhanced/up-to-date audio-visual presentation systems (AVPS).* Apart from IT systems which cover computers and their peripherals, various types of audio-visual equipment have been installed in courtrooms. As of January 2019, there were AVPS installed in 102 (49%) of 208 courtrooms for the playback of evidence in different formats through computers and media players, and the broadcasting of electronic documents to the public during hearings. According to a review conducted by the Judiciary Administration in 2016, about 47% of AVPS had been installed for over 10 years with outdated/obsolete devices. The outdated/obsolete AVPS did not support signals inputted from notebook computers or portable equipment brought in by court users and their display resolution was far behind the current audio-visual technology. For example, AVPS in 12 courtrooms of the District Court were equipped with small size monitors (ranging from 6.4 to 12 inches) and connected through analog signal cables. As of March 2019, 11 of the 12 courtrooms were still using outdated/obsolete AVPS (paras. 4.15, 4.17 and 4.18).

10. *Need to expedite legislative amendments and consider promoting wider use of Electronic Bundles in Portable Document Format (EBPDF).* To facilitate court proceedings, in 2011, the Judiciary made available the use of EBPDF at the High Court where paper bundles were scanned into portable document format for uploading to IT devices for JJOs and counsels to view and make notes and to conduct hearings with the use of EBPDF. Since 2016, users of the District Court have been able to submit hearing bundles via an e-submission platform. Audit found that the utilisation of EBPDF in the High Court and the District Court was very low from 2011 to 2018. In Audit's view, for improving operational efficiency and achieving environmental friendliness, there is merit in encouraging wider use of EBPDF at all levels of courts in the long run. As the existing legislation requires the submission of paper bundles to the court, the Judiciary Administration needs to expedite actions to complete the legislative amendments to remove such legal restrictions (paras. 4.28, 4.31, 4.32(b) and 4.33).

Audit recommendations

11. **Audit recommendations are made in the respective sections of this Audit Report. Only the key ones are highlighted in this Executive Summary. Audit has recommended that the Judiciary Administrator should:**

Executive Summary

- (a) **step up monitoring of the implementation of all projects under ITSP Phase 1 and expedite actions where possible to complete the outstanding projects as early as practicable (para. 2.25(a));**
- (b) **taking into account lessons drawn from the problems encountered during project implementation, enhance the planning and implementation of future IT projects (para. 2.25(b));**
- (c) **improve the engagement work with the prosecuting departments and agencies in preparing for the rollout of iCMS (para. 2.25(c));**
- (d) **consider reviewing the current governance structure of ITSP and ensure that any revisions are properly endorsed by the appropriate authority (para. 3.19(a));**
- (e) **improve the project governance under ITSP and the reporting of project progress (para. 3.19(b) and (c));**
- (f) **consider improving the dissemination of court hearing information through the Judiciary’s website and explore possible enhancements to the online Legal Reference System (para. 4.13(a) and (b));**
- (g) **remind the Judiciary Administration’s staff to ensure the accuracy and consistency of information before uploading onto the Judiciary’s website (para. 4.13(c));**
- (h) **enhance e-services by adopting a “mobile-friendly design” to facilitate public access through mobile devices (para. 4.13(f));**
- (i) **take measures to ensure that enhanced/up-to-date AVPS are provided to support court proceedings (para. 4.24(a)); and**
- (j) **expedite actions to complete the legislative amendments for using the electronic mode of handling court-related documents and consider whether and, if so, how best to promote the wider use of EBPDF at various court levels in the long run (para. 4.34(a) and (b)).**

Executive Summary

Response from the Judiciary

12. The Judiciary Administrator generally agrees with the audit recommendations.

PART 1: INTRODUCTION

1.1 This PART describes the background to the audit and outlines the audit objectives and scope.

Background

1.2 The Judiciary, headed by the Chief Justice of the Court of Final Appeal, is responsible for the administration of justice in Hong Kong. It hears all criminal cases and civil disputes, including disputes between individuals and the Government. The Judiciary is independent of the executive authorities and legislature. Different levels of courts and tribunals hear and adjudicate criminal cases and civil disputes. They comprise the Court of Final Appeal, the High Court (which includes the Court of Appeal and the Court of First Instance), the Competition Tribunal, the District Court (which includes the Family Court), the Lands Tribunal, the Magistrates' Courts (Note 1) (which include the Juvenile Courts — Note 2), the Coroner's Court, the Labour Tribunal, the Small Claims Tribunal, and the Obscene Articles Tribunal (see Appendix A for details).

Judiciary Administration

1.3 The Judiciary Administration is headed by the Judiciary Administrator, who assists the Chief Justice in the overall administration of the Judiciary. It provides support to the courts in the administration of justice and their operations. It comprises the following four Divisions:

- (a) ***Operations Division.*** It is responsible for overseeing the operations of court registries, providing court support services to judges and judicial officers (JJOs), providing bailiff services, providing interpretation, translation and certification services, and planning and implementing information technology (IT) strategies;

Note 1: *There are seven Magistrates' Courts, i.e. the Eastern, Kowloon City, Kwun Tong, West Kowloon, Shatin, Fanling and Tuen Mun Magistrates' Courts.*

Note 2: *They are situated in the Eastern, Kowloon City, West Kowloon, Fanling and Tuen Mun Magistrates' Courts.*

Introduction

- (b) ***Development Division.*** It is responsible for providing administrative assistance to the Chief Justice, handling legislative exercises relating to the Judiciary, interfacing with the Government, liaising with the legal profession, overseeing major events and exchange activities with judiciaries in other jurisdictions, handling press and media related matters, as well as promoting public understanding of the Judiciary's role and work;
- (c) ***Quality Division.*** It is responsible for providing management review and management information, providing legal reference and operating the Judiciary libraries, handling complaints and providing digital audio recording and transcription services; and
- (d) ***Corporate Services Division.*** It is responsible for providing support services and managing human resource matters relating to JJOs, planning and implementation of accommodation projects and court security measures, overseeing finance and supplies matters, human resource management of support staff, as well as general administration of the Judiciary.

As at 31 March 2019, the Judiciary had an establishment of 1,961 posts, comprising 219 judicial posts and 1,742 non-judicial civil service posts. The estimated expenditure in 2019-20 is \$2.1 billion. An extract of the Judiciary's organisation chart is at Appendix B.

Information Technology Strategy Plan

1.4 The Judiciary uses IT extensively to support its operations and services to the public. It has built up an infrastructure and network to support information communications and developed application systems to meet its operational requirements. As at 30 June 2019, there were 62 application systems (Note 3) supporting the day-to-day operations of the Judiciary. Over the years, these systems

Note 3: *The 62 application systems comprised: (a) 10 separate case management systems serving different levels of courts and tribunals; (b) 22 court-related systems providing support for court-related services such as bailiff services and jury services; and (c) 30 systems providing support for various administrative functions (e.g. resource and operations management).*

and IT infrastructure have been enhanced and updated from time to time to cater for new requirements.

1.5 ***Key initiatives of Information Technology Strategy Plan (ITSP).*** In 2011 and 2012, the Judiciary conducted an Information System Strategy Study (ISSS) which formulated ITSP on the application of IT in support of its operations for the coming ten years and beyond. Under ITSP, the Judiciary seeks to implement by phases an integrated court case management system (iCMS) to integrate, streamline and standardise court processes across different levels of courts and tribunals where appropriate, and to put in place a number of non-court systems to meet the operational requirements of the Judiciary. The key initiatives of ITSP included:

- (a) ***Implementing iCMS.*** iCMS would be set up to support the 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. It would enable appropriate data sharing, data driven workflow and support the use of electronic documents;
- (b) ***Standardising processes.*** The court and non-court processes across different court levels and across non-court sections would be reviewed and standardised as appropriate;
- (c) ***Streamlining operations.*** The Judiciary aimed to improve the overall efficiency of its operations through business process re-engineering and improved automation by the use of IT;
- (d) ***Establishing an integrated data architecture.*** An integrated data architecture with centralised governance would be established to support the operations of the Judiciary;
- (e) ***Enabling and encouraging electronic services.*** Electronic services (e-services) would be introduced in phases in many of the court processes enabling court users to interact with the Judiciary. Major proposed initiatives included a new webpage, electronic submission of documents to the courts, acceptance of electronic payment, electronic mode of listing and expansion of the scope of information and documents to be made available

Introduction

for electronic search. These would reduce the need for court users to visit the courts or court registries in person;

- (f) ***Enabling electronic court records.*** In combination with expanded e-services, the Judiciary would seek to support the use of electronic records in court proceedings and move towards a “less paper” environment; and
- (g) ***Enhancing courtroom technologies.*** The courtrooms would be equipped with appropriate IT infrastructure, necessary equipment and communication network to support court hearings, including the use, retrieval and display of electronic documents. With built-in infrastructure, the use of electronic bundles (e-bundles — see para. 4.28), legal research and video conferencing could be set up in courtrooms more readily if such activities were required and permitted by courts.

1.6 The Judiciary anticipated that the implementation of ITSP would bring about improvement in access to justice, workflow automation, operational efficiency, and improve services to court users and the community as a whole.

Implementation of projects under ITSP

1.7 ***Implementation plan.*** Pursuant to ISSS, the implementation of ITSP is divided into two phases. A six-year action plan has been formulated for Phase 1, which is further sub-divided into two stages:

- (a) Stage 1 mainly covers IT infrastructure foundation and the development of iCMS for the District Court, the Summons Courts of the Magistrates’ Courts and the related court offices; and
- (b) Stage 2 mainly covers the development of iCMS for the Court of Final Appeal, the High Court, the Competition Tribunal, the non-Summons Courts of the Magistrates’ Courts and the Small Claims Tribunal.

ITSP Phase 2 development work covers iCMS for the remaining courts and tribunals (comprising the Family Court, Lands Tribunal, Coroner’s Court, Labour Tribunal and Obscene Articles Tribunal).

1.8 **Funding approval.** With the support of the Office of the Government Chief Information Officer (OGCIO — Note 4), in May 2013, the Judiciary obtained the Legislative Council (LegCo) Finance Committee (FC)’s funding approval of \$682.4 million under Head 710 (Computerisation) of the Capital Works Reserve Fund (Note 5) for the implementation of ITSP Phase 1, with scheduled completion dates for Stage 1 and Stage 2 in June 2016 and December 2019 respectively. According to the Judiciary, with the foundations to be built and the experience to be gained in Phase 1, it would work out concrete plans and submit a funding application for the implementation of Phase 2 at a later time.

1.9 **Information Technology Office.** Before the implementation of ITSP, the IT organisation of the Judiciary Administration comprised the Information Technology Management Section under the Quality Division (responsible for day-to-day IT operations) and the Project Management Office under the Operations Division (responsible for planning and taking forward ITSP). To achieve greater synergy, the two units were merged in December 2013 to form the Information Technology Office under the Operations Division. It comprises two wings, namely the Information Technology Office (Technical) and the Information Technology Office (Operational) (see Appendix B). While the latter manages the business aspects of the application, development and maintenance of IT systems, the former is responsible for providing technical advice and support for the implementation of ITSP and other application and development of IT, as well as managing the day-to-day IT operations. As at 30 June 2019, the Information Technology Office had 213 staff, comprising 64 civil servants and 149 contract staff.

1.10 **Governance structure of ITSP.** With reference to the practice guides issued by OGCIO, the implementation of ITSP is under the direction of a “programme

Note 4: *OGCIO is responsible for overseeing the use of information and communications technology within the Government.*

Note 5: *The Capital Works Reserve Fund was set up for financing the Public Works Programme, acquisition of land, capital subventions and major systems and equipment items. OGCIO is responsible for monitoring the overall expenditure under Head 710 (Computerisation) of the Fund with special focus on Subhead 700GX – New Administrative Computer Systems (block allocation). The Financial Secretary has delegated to the Controlling Officers of the relevant procuring departments of major computerisation projects exceeding \$10 million each the power to authorise expenditure from Head 710 of the Fund.*

Introduction

owner” (the Judiciary Administrator for the projects under ITSP) and a “project steering committee”. Working groups and advisory committees, supported by relevant project teams, are formed with a view to ensuring that the design and delivery of ITSP is in line with legislative and policy issues. According to the Judiciary Administration, the governance structure of ITSP can be broadly divided into two groups, i.e. one led by JJOs and the other led by the Judiciary Administrator. With the benefits of operational experience and in response to the need for more intensive deliberations on detailed policies, and legislative and operational issues at the later stage of ITSP implementation, there have been simplifications and refinements to the governance structure over the past few years. Details of the current governance structure are as follows:

- (a) **Group led by JJOs.** The group led by JJOs is to provide overall steer and inputs regarding legislative, policy and operational aspects. It also helps ensure that the functions to be delivered under ITSP would be in line with the legislative and policy objectives of court operations in the administration of justice. It mainly includes the following:
 - (i) **Committee on Information Technology (CIT).** It takes holistic ownership of ITSP programme. It is the overarching body overseeing the development and implementation of ITSP at the strategic level. It is chaired by a Permanent Judge of the Court of Final Appeal and comprises 11 members (Note 6);
 - (ii) **Working Groups.** Under CIT, three working groups (namely the Working Group on iCMS, Working Group on Court Record Management and Advisory Group on Data Policy and Architecture) are formed to provide high-level advice on issues that span across the different levels of courts and operations; and
 - (iii) **Policy and Legislative Group and Operational Groups.** In connection with Stage 1 implementation (see para. 1.7(a)), the Policy and Legislative Group, which is led by a Judge of the Court

Note 6: *Members are another Permanent Judge of the Court of Final Appeal, the Chief Judge of the High Court, two Justices of Appeal of the Court of Appeal of the High Court, the Registrar of the High Court, a Judge of the Court of First Instance of the High Court, the Chief District Judge, a District Judge, the Chief Magistrate, the Registrar of the District Court and the Judiciary Administrator.*

of First Instance of the High Court and reports to the Working Group on iCMS, has been in operation since May 2017 to lead discussions on detailed policy and legislative issues for the District Court and the Summons Courts of the Magistrates' Courts. Two Operational Groups, respectively for the District Court and the Summons Courts of the Magistrates' Courts (led by the relevant court leaders (i.e. the Chief District Judge and the Chief Magistrate)), have been in operation since May 2017 to provide steer on operational matters (Note 7); and

(b) ***Group led by Judiciary Administrator.*** The group led by the Judiciary Administrator is responsible for the more detailed aspects, including planning, monitoring and financial controls of ITSP implementation. It mainly includes the following:

(i) ***Information Technology Strategy Plan Steering Committee (hereinafter referred to as the Steering Committee).*** It is a dedicated administrative committee set up to oversee the detailed implementation of ITSP and ensure that ITSP aligns with the Judiciary's long-term strategy. It is chaired by the Judiciary Administrator and comprises the Government Chief Information Officer and four other members (Note 8). In view of the multitude of activities, studies and projects involved in ITSP, the Steering Committee has been supported by the Information Technology Strategy Plan Delivery and Assurance Team (hereinafter referred to

Note 7: *According to the Judiciary Administration, prior to May 2017, the project studies relating to legislative study, the District Court and the Summons Courts of the Magistrates' Courts were carried out by project study teams under the Project Studies Steering Group (led by the senior management of the Judiciary Administration) and steered by the relevant advisory committees (led by JJOs). To streamline the operation in project studies, the relevant project study teams under the Project Studies Steering Group and the relevant advisory committees were replaced by the Policy and Legislative Group and the two Operational Groups in May 2017.*

Note 8: *The four other members are the Deputy Judiciary Administrator (Development), the Deputy Judiciary Administrator (Operations), the Assistant Judiciary Administrator (Quality and Information Technology) and the Chief Systems Manager (Information Technology).*

Introduction

as ITSP Delivery and Assurance Team) and the Programme Management Office since February 2014;

- (ii) ***ITSP Delivery and Assurance Team.*** It provides steer and oversees the progress and quality assurance areas of key delivery work under ITSP (Note 9); and
- (iii) ***Programme Management Office.*** A Programme Management Office, which reports to the Steering Committee, was established in February 2014 to support the day-to-day management of ITSP.

Apart from the two governance groups in (a) and (b) above which have been established specifically for the implementation of ITSP, the Judiciary Administration has also established an internal monitoring mechanism, which currently comprises the monthly ITSP Core Group meetings for more frequent and in-depth discussions of strategic issues that are more administrative in nature, and the Quarterly Meetings on IT Projects for facilitating the overall management and control of ITSP implementation (Note 10). The governance structure for the implementation of ITSP as at 30 June 2019 is at Appendix C.

1.11 ***Role of OGCIO.*** OGCIO plays a proactive and visible role in monitoring and advising on large-scale, complex and high-risk projects (Note 11). OGCIO

Note 9: *Prior to February 2014, the Steering Committee was supported by three project steering committees responsible for similar subjects of the three Working Groups under CIT (i.e. (a) iCMS and associated projects; (b) data-related projects; and (c) infrastructure project). The project steering committees were supported by the respective project assurance teams to oversee project progress. To simplify the governance structure, the three project steering committees and their respective project assurance teams were grouped under a single team, i.e. ITSP Delivery and Assurance Team in February 2014.*

Note 10: *According to the Judiciary Administration, ITSP Core Group meetings commenced in May 2018. The Quarterly Meetings on IT Projects, which commenced in January 2019, replaced a similar monthly meeting namely the Internal Monitoring Meeting. Both ITSP Core Group meetings and the Quarterly Meetings on IT Projects are chaired by the Judiciary Administrator.*

Note 11: *According to the Judiciary Administration, though the Judiciary is not a bureau/department, OGCIO provides the same level of advice and support to the Judiciary in this regard.*

Circular No. 2/2011 specifies the involvement of OGCIO in the project governance mechanism. The implementation of ITSP is a Tier 1 project (i.e. project costing over \$100 million). According to the Circular, the Government Chief Information Officer participates in the project steering committee (i.e. the Steering Committee — see para. 1.10(b)(i)) as the Government’s IT advisor to review the project organisation, progress against major milestones, and provide professional and management advice where applicable on the technical and industrial aspects.

1.12 ***Progress reports.*** In line with OGCIO Circular No. 2/2011, the Judiciary Administration is required to submit progress reports in a prescribed format for OGCIO to monitor the health status of the projects under ITSP and to provide timely advice where necessary. OGCIO is also required to consolidate an annual progress report on the implementation of major computer projects from bureaux and departments (B/Ds) for submission to LegCo (Note 12).

1.13 ***Stakeholder consultations.*** The Judiciary Administration has conducted consultations with stakeholders at different stages of ITSP project implementation:

- (a) before submitting the funding application for ITSP, a consultation document was issued to 57 relevant stakeholder organisations in May 2012, including the legal professional bodies, government B/Ds, agencies and organisations, to invite their comments on the preliminary proposals of ITSP. In the event, 26 organisations provided comments which in general were supportive and encouraging;
- (b) in 2014 and 2015, the Judiciary Administration conducted consultations with external stakeholders including the Department of Justice (DoJ), legal professionals and related government departments before the issuance of the Policy Statements on the implementation of ITSP in October 2014 and April 2015 (Note 13);

Note 12: *At the FC meeting held in November 1992, the Government undertook to provide LegCo Members with an annual progress report on the implementation of major computer projects funded under Head 710 of the Capital Works Reserve Fund, which cost over \$10 million each.*

Note 13: *Having taken into consideration the inputs and suggestions from the stakeholders, endorsed Policy Statement documents (covering policy issues including time sensitivity, identity authentication, document authentication, payment options, handling of documents for use in litigation process) were issued.*

Introduction

- (c) in 2016 and 2017, the Judiciary Administration conducted engagement briefings with organisations which were relevant for Stage 1 implementation (see para. 1.7(a)) including about 40 prosecuting departments and agencies currently using the Case and Summons Management System (CASEMAN — Note 14) in the Summons Courts of the Magistrates' Courts (Note 15). The use of CASEMAN for the types of cases covered by the Summons Courts of the Magistrates' Courts would become obsolete after a sunset period of three years from the date of the rolling out of iCMS to the Summons Courts of all seven Magistrates' Courts. To prepare for the implementation, the prosecuting departments and agencies are encouraged to make any necessary arrangements (such as developing a system interface with iCMS). The sunset period is to allow sufficient time for the prosecuting departments and agencies to make the arrangements; and
- (d) in 2018 and 2019, the Judiciary Administration consulted the relevant stakeholders, including the prosecuting departments and agencies and the legal professional bodies, on the proposed legislation, Practice Directions and administrative arrangements relating to the implementation of Stage 1 of ITSP. An on-going engagement with the stakeholders on issues including operational and technical ones is in progress.

1.14 **Legislative amendments.** At present, while the Electronic Transactions Ordinance (Cap. 553) is generally applicable in Hong Kong, court proceedings are excluded from the operation of its material provisions. On the other hand, the legislation relating to court procedures, dispersed over a number of ordinances/rules, does not fully envisage the possibility of electronic mode of handling. Legislative amendments are therefore needed for implementing ITSP. In April 2019, the

Note 14: *CASEMAN is a case management system used in the seven Magistrates' Courts. It supports summons applications by the prosecuting departments and agencies and other related processes. The prosecuting departments and agencies may use CASEMAN to commence processing with the Judiciary by making summons applications, check case allocation results and check hearing results upon conclusion of the summons cases.*

Note 15: *The Summons Courts of the Magistrates' Courts handle case types including driving offence points summons, fixed penalty summons and departmental summons.*

Judiciary Administration briefed the LegCo Panel on Administration of Justice and Legal Services, among others, that:

- (a) a new bill would be introduced to provide for an overall legislative framework for the electronic mode of handling court-related documents eventually covering all court levels; and
- (b) subject to the enactment of the legislative amendments (including the new bill and some court rules), e-services would be launched as an additional option for court users to interface with courts.

Audit review

1.15 In 2011, Audit Commission (Audit) completed a review of “Administrative and court support work of the Judiciary Administration”, the results of which were reported in Chapter 2 of the Director of Audit’s Report No. 56 of March 2011. In May 2019, Audit commenced a review to examine the Judiciary Administration’s work in implementing projects under ITSP and other related issues, focusing on:

- (a) progress in project implementation and problems encountered (PART 2);
- (b) project governance (PART 3); and
- (c) other related issues (PART 4).

Audit has found room for improvement in the above areas and has made a number of recommendations to address the issues.

General response from the Judiciary

1.16 The Judiciary Administrator generally agrees with the audit recommendations.

Acknowledgement

1.17 Audit would like to acknowledge with gratitude the full cooperation of the staff of the Judiciary Administration during the course of the audit review.

PART 2: PROGRESS IN PROJECT IMPLEMENTATION AND PROBLEMS ENCOUNTERED

2.1 This PART examines the implementation of projects under ITSP, focusing on the following areas:

- (a) progress in project implementation (paras. 2.4 to 2.7); and
- (b) problems encountered during project implementation (paras. 2.8 to 2.24).

Implementation schedule of ITSP Phase 1

2.2 Having regard to the recommendations of ISSS, under ITSP, iCMS would be implemented in two phases (i.e. Phases 1 and 2) to streamline and standardise the electronic court processes across different levels of courts. A number of non-court systems would also be put in place to meet the operational requirements of the Judiciary. Phase 1 is further broken down into two stages under the six-year action plan for better management (see para. 1.7). The implementation plan of Phase 1 stated in the 2013 FC paper (see para. 1.8) is shown in Table 1.

Table 1

**Implementation plan of Phase 1 of ITSP
(May 2013)**

Activity	Commencement date	Completion date	Duration (No. of months)
(A) Technical studies	July 2013	June 2014	12
(B) Implementation of IT infrastructure and Stage 1 court systems	July 2013	June 2016	36
(C) Implementation of non-court systems	July 2015	June 2019	48
(D) Implementation of Stage 2 court systems	July 2016	December 2019	42

Source: Audit analysis of Judiciary Administration records

Projects and activities under ITSP Phase 1

2.3 While ITSP Phase 1 is generally divided into four activities (i.e. Activities A to D) in the implementation plan (see Table 1 in para. 2.2), there are 57 individual projects/activities to be implemented under the six-year action plan. For the purpose of financial monitoring, the Judiciary Administration has grouped the individual projects/activities under the following nine project bundles:

- (a) ***Implement iCMS bundle 1.*** It includes the development and implementation of eight application modules of iCMS (see Table 4 in para. 2.6(a)) for the District Court, the Summons Courts of the Magistrates' Courts and the related court offices;
- (b) ***Implement iCMS bundle 2.*** It includes the development and implementation of various application modules of iCMS for the courts, tribunals and court offices under Phase 1 not covered in (a);
- (c) ***Develop non-court related applications.*** It includes the development and implementation of a number of non-court related applications such as resource scheduling tools and contract management tools (see item (i) of Table 5 in para. 2.6(b));
- (d) ***Revamp Judiciary websites and implement web portals.*** It includes revamping the Judiciary websites to increase their user-friendliness and enriching their content, as well as developing new web portals as a platform for future e-services;
- (e) ***Implement Human Resources Management System.*** It includes the development and implementation of a new system to replace the existing human resources systems to improve and extend IT coverage on human resources management services for both JJOs and non-judicial staff;
- (f) ***Implement Integrated Fund Management System.*** It includes the development and implementation of a new fund management system to replace the existing Judiciary Suitors' Funds Accounting System to improve the Judiciary's internal accounting functions. The new system will be integrated with iCMS so that all funds associated with a particular court case are traceable;

Progress in project implementation and problems encountered

- (g) ***Implement Electronic Information Management System.*** It includes the development and implementation of an electronic information management system to enable the smooth and consistent use of electronic information by internal users of the Judiciary;
- (h) ***Upgrade network and infrastructure.*** It includes the upgrade of the existing IT infrastructure and network to support the implementation of various projects under ITSP; and
- (i) ***Enhance courtroom technologies.*** It includes the provision of computers in courtrooms for JJOs and clerks to access iCMS during hearings, and facilitate JJOs to view e-bundles and conduct simple trial related actions. It also includes the upgrade of video conferencing, projectors and other visual equipment (such as additional and larger monitors).

As at 30 June 2019, \$362 million (53%) of the approved funding of \$682.4 million (see para. 1.8) had been spent. The estimated and actual expenditures of project bundles are shown at Table 2.

Progress in project implementation and problems encountered

Table 2

**Estimated and actual expenditures of project bundles
under ITSP Phase 1
(30 June 2019)**

Project bundle	Estimated expenditure (\$ million)	Actual expenditure (\$ million)
(1) Implement iCMS bundle 1	138.3	126.4
(2) Implement iCMS bundle 2	120.9	13.7
(3) Develop non-court related applications	2.8	1.0
(4) Revamp Judiciary websites and implement web portals	1.8	0.8
(5) Implement Human Resources Management System	4.8	4.1
(6) Implement Integrated Fund Management System	2.1	1.0
(7) Implement Electronic Information Management System	14.0	8.0
(8) Upgrade network and infrastructure	221.4	182.4
(9) Enhance courtroom technologies	99.8	24.6
Contingency and reserve	76.5	—
Total	682.4	362.0

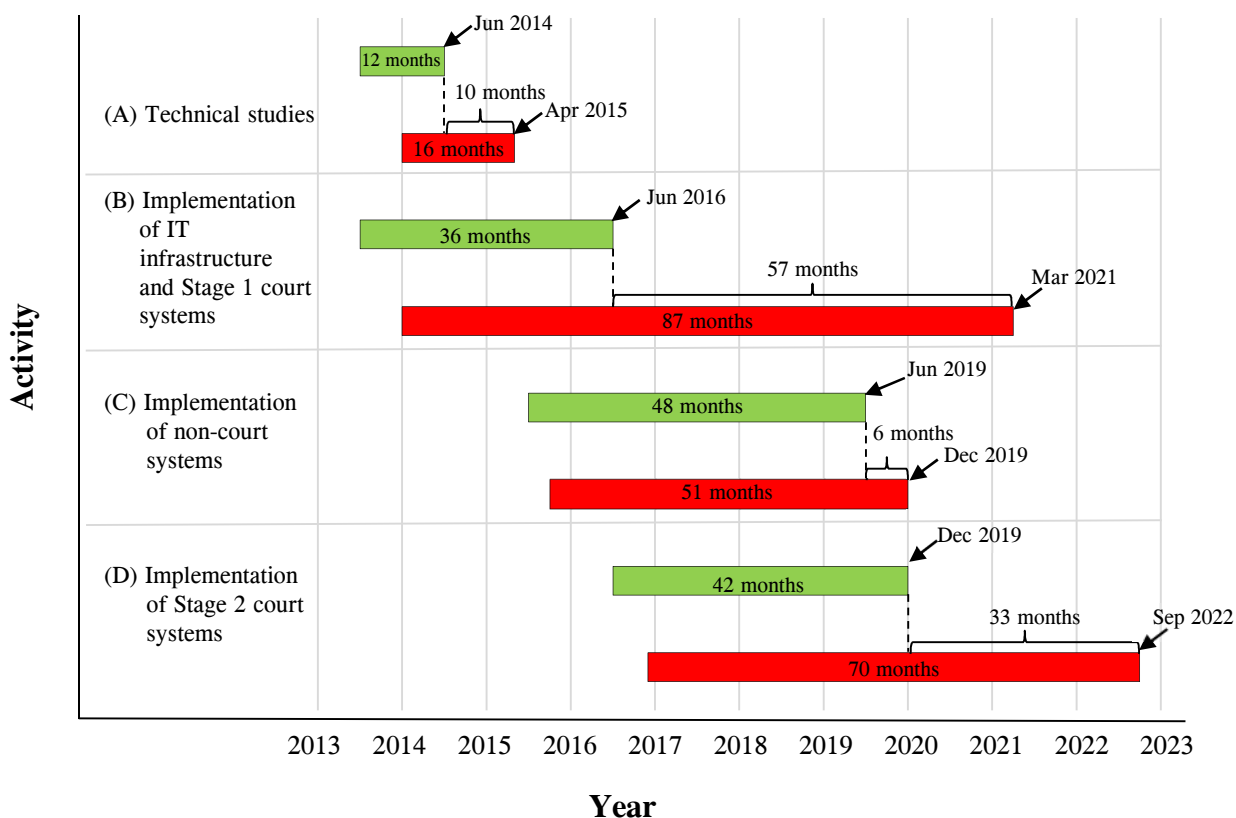
Source: Judiciary Administration records

Progress in project implementation

Delays in completion of projects under ITSP Phase 1

2.4 **Implementation progress by activity.** Audit analysed the actual/revi­sed target completion dates of all four activities of ITSP Phase 1 as reported in the progress report submitted by the Judiciary Administration to OG­CIO (see para. 1.12) as at 30 June 2019 against the completion dates stated in the 2013 FC paper. The analysis revealed that there were slippages (ranging from 6 to 57 months) in all four activities of ITSP Phase 1 (see Figure 1).

Figure 1
Implementation progress of ITSP Phase 1
(30 June 2019)



Legend: Implementation schedule per 2013 FC paper
 Actual implementation timeframe/revi­sed implementation schedule

Source: *Audit analysis of Judiciary Administration records*

Progress in project implementation and problems encountered

2.5 **Percentage of completion by project bundle.** The technical studies under Activity A were completed in April 2015. As at 30 June 2019, the Judiciary Administration continued to implement the other projects under ITSP Phase 1, which were categorised into nine project bundles under Activities B to D. On a monthly basis, the Judiciary Administration monitors the percentage of cumulative expenditure against the percentage of completion for each project bundle (Note 16) under ITSP Phase 1. As at 30 June 2019, the percentage of completion of the work (not expenditure) relating to the nine project bundles ranged from 4% to 89% (see Table 3).

Table 3
Percentage of completion of projects
under ITSP Phase 1 by project bundle
(30 June 2019)

Project bundle	Percentage of completion
(a) Bundles implemented under Activity B “Implementation of IT infrastructure and Stage 1 court systems”	
(i) Implement iCMS bundle 1	89%
(ii) Revamp Judiciary websites and implement web portals	33%
(b) Bundles implemented under Activity C “Implementation of non-court systems”	
(i) Develop non-court related applications	36%
(ii) Implement Human Resources Management System	72%
(iii) Implement Integrated Fund Management System	34%
(iv) Implement Electronic Information Management System	50%
(c) Bundle implemented under Activity D “Implementation of Stage 2 court systems”	
(i) Implement iCMS bundle 2	4%
(d) Bundles implemented across multiple Activities (Note)	
(i) Upgrade network and infrastructure	82%
(ii) Enhance courtroom technologies	26%

Source: Audit analysis of Judiciary Administration records

Note: The two project bundles were scheduled to be implemented throughout Activity B “Implementation of IT infrastructure and Stage 1 court systems” and Activity D “Implementation of Stage 2 court systems”.

Note 16: *According to the Judiciary Administration, the percentage of completion refers to the extent of completion in terms of the implementation progress of individual project bundles.*

Progress in project implementation and problems encountered

2.6 *Audit analysis on latest implementation progress.* As compared with the original implementation plan in the 2013 FC paper (see Table 1 in para. 2.2), there was a 10-month slippage on completion of the technical studies under Activity A in April 2015. Audit further analysed the implementation progress of the other Activities from June to September 2019 and found the following:

- (a) *Activity B “Implementation of IT infrastructure and Stage 1 court systems”.* Most of the outstanding application modules of Stage 1 court systems were expected to be rolled out progressively from October 2019, except for the e-filing services, which were scheduled to be rolled out by December 2020 subject to the enactment of the relevant legislation and readiness of the key stakeholders (see Table 4). The target rollout dates were generally in line with the revised completion date of March 2021 (Note 17) for Activity B “Implementation of IT infrastructure and Stage 1 court systems” (see Figure 1 in para. 2.4);

Note 17: *According to the Judiciary Administration, the revised target completion date was March 2021 (instead of December 2020) because three months had been planned for introducing enhancements to Stage 1 court systems, if any, after the enactment of the relevant legislation.*

Progress in project implementation and problems encountered

Table 4

**Implementation progress of Stage 1 court systems by application module
(30 September 2019)**

Application module (Note 1)	Actual/target rollout date for		
	District Court	Summons Courts of the Magistrates' Courts	Bailiff Section
(i) Court diary functions	Jun 2019	Oct 2019 * (Note 2)	N/A
(ii) Listing and filing related modules	Jun 2019	Oct 2019 * (Note 2)	N/A
(iii) Hearing modules	Jun 2019	Oct 2019 * (Note 2)	N/A
(iv) Mobile application for bailiff	N/A	N/A	Jun 2019
(v) Bailiff related modules	Jun 2019	Oct 2019 * (Note 2)	Jun & Oct 2019 *
(vi) Summons specific modules	N/A	Oct 2019 * (Note 2)	N/A
(vii) E-filing services	Dec 2020 * (Note 3)	Dec 2020 * (Note 3)	N/A
(viii) Payment collection modules	Dec 2016	Jan 2018	N/A

Legend: * Target rollout date

Source: *Audit analysis of Judiciary Administration records*

Note 1: The eight application modules of iCMS support the courts' end-to-end processes, including: (a) filing (e.g. case initiation and processing of incoming documents); (b) listing (e.g. generation of various court schedules and rosters); (c) hearing (e.g. party registration, display of court documents and announcement of judgments with generation of payment notices); and (d) post-hearing (e.g. enforcement and execution).

Note 2: The relevant application modules were scheduled to be rolled out to the Kowloon City Magistrates' Courts in October 2019 and would be extended incrementally to the remaining six Magistrates' Courts shortly thereafter.

Note 3: The relevant application module was scheduled to be rolled out after the enactment of the relevant legislation (see para. 1.14).

Progress in project implementation and problems encountered

- (b) *Activity C “Implementation of non-court systems”*. As the percentage of completion as of June 2019 for the four relevant project bundles only ranged from 34% to 72% (see item (b) of Table 3 in para. 2.5), it was unlikely that Activity C “Implementation of non-court systems” could be completed by December 2019 (see Figure 1 in para. 2.4). Based on information as of September 2019 provided by the Judiciary Administration, apart from the Transport Service Utilisation Reporting application which was rolled out in February 2018, and the Electronic Records Management System and the Collaborative Workspace solutions which were rolled out to five pilot sections of the Judiciary Administration in November 2018, other non-court related applications/systems would be progressively rolled out from December 2019 to September 2021 (see Table 5); and

Progress in project implementation and problems encountered

Table 5

Implementation progress of non-court related applications/systems (30 September 2019)

Non-court related application/system	Actual/target rollout date
(i) Non-court related applications:	
(1) Transport Service Utilisation Reporting	Feb 2018
(2) Conference Room Booking	Dec 2019
(3) Asset Management	Dec 2019
(4) Working Stores and Distilled Water Ordering	Dec 2019
(5) Contract Management	Dec 2019
(6) E-Apostille Service	Jun 2020
(ii) Human Resources Management System	Dec 2019
(iii) Integrated Fund Management System	Jun 2020
(iv) Electronic Information Management System:	
(1) Electronic Records Management System and Collaborative Workspace solutions (to five pilot sections of the Judiciary Administration)	Nov 2018
(2) Knowledge Management System and wider rollout of Electronic Records Management System and Collaborative Workspace solutions	Sep 2021

Source: Audit analysis of Judiciary Administration records

- (c) **Activity D “Implementation of Stage 2 court systems”**. Up to June 2019, Activity D “Implementation of Stage 2 court systems” was only at a preliminary stage (i.e. the percentage of completion for the relevant project bundle was only 4% — see item (c) of Table 3 in para. 2.5). Moreover, given the slippage of earlier Activities B and C (i.e. “Implementation of IT infrastructure and Stage 1 court systems” and “Implementation of non-court systems”) which would only be completed by December 2020 and September 2021 respectively, there might be knock-on effects on Activity D.

Progress in project implementation and problems encountered

2.7 The Judiciary anticipated that the implementation of ITSP would bring about improvement in access to justice, workflow automation, operational efficiency, and improve services to court users and the community as a whole (see para. 1.6). However, based on the progress report submitted by the Judiciary Administration to OGCIO as at 30 June 2019, there would be a slippage of at least 33 months in completing the projects technically under ITSP Phase 1 in September 2022 (Note 18) (see Figure 1 in para. 2.4) as compared with the target completion date of December 2019 stated in the 2013 FC paper. In Audit's view, there is a need for the Judiciary Administration to step up monitoring of the implementation of all projects under ITSP Phase 1 and expedite actions where possible to complete the outstanding projects with a view to reaping the full benefits as early as practicable. The Judiciary Administration also needs to draw lessons from the problems encountered in project implementation as detailed in paragraphs 2.8 to 2.24.

Problems encountered during project implementation

2.8 In light of the project slippage (see paras. 2.4 to 2.7), Audit examined the Judiciary Administration's project management records of ITSP to ascertain the reasons for the delays and identify lessons to be learnt. Audit noted that in the course of implementing projects under ITSP Phase 1, the Judiciary Administration encountered the following key problems:

- (a) change of delivery mode and manpower shortage (paras. 2.9 to 2.15);
- (b) long lead time in procurement of IT infrastructure (paras. 2.16 and 2.17);
- (c) long time taken in developing Stage 1 court systems (paras. 2.18 to 2.21);
and
- (d) engagement of prosecuting departments and agencies to prepare for the rollout of iCMS (paras. 2.22 to 2.24).

Note 18: *According to the Judiciary Administration, the estimated completion date for ITSP Phase 1 in September 2022 only reflected the technical aspects of the project. As of September 2019, the Judiciary Administration had just started the detailed planning work for Stage 2 of ITSP implementation. It would take into account all relevant aspects, including legislative and policy formulation work, development of operational details, financial considerations and technical aspects before formulating a practicable timetable ahead.*

Change of delivery mode and manpower shortage

2.9 *Change of delivery mode.* According to the Judiciary Administration, pursuant to ISSS, ITSP project portfolio and procurement strategy for projects under the six-year action plan (see para. 1.7) had all along been planned on the premise that most of the required services for system design together with implementation would be acquired through outsourcing and that the design and implementation of the core application (i.e. the total solution of implementing iCMS) would be acquired through open tenders. The outsourcing approach was endorsed by the Steering Committee (see para. 1.10(b)(i)) at its first meeting in June 2013. However, at the second meeting of the Steering Committee held in August 2013, OGCIO commented that:

- (a) it would be very risky to pursue outsourcing for a total solution for the iCMS, which would include system analysis and design (SA&D), programming, implementation and system integration;
- (b) it was most likely that a successful tenderer could not be identified or there would be serious risks that the project might not be able to be completed satisfactorily within budget; and
- (c) to reduce the project risk, the Judiciary Administration was recommended to critically consider conducting SA&D of iCMS with in-house resources, i.e. civil service staff supplemented by staff engaged under term contracts centrally administered by OGCIO (commonly known as T-contract staff — Note 19).

2.10 On the advice of OGCIO, the Judiciary Administration in September 2013 concluded that, to reduce the project risks:

- (a) the total outsourcing approach should be changed to a hybrid one, i.e. outsourcing plus in-house efforts;

Note 19: *According to OGCIO Circular No. 4/2010 on management of IT professional resources in B/Ds, as a supplement, B/Ds may consider employing additional contract IT professionals to meet their ad-hoc and short-term service needs. OGCIO administers centrally-arranged contracts for the provision of IT contract staff services to the Government.*

Progress in project implementation and problems encountered

- (b) for SA&D, system integration and system maintenance, they should best be conducted mainly by in-house efforts; and
- (c) as regards implementation and programming tasks, they should be taken forward by outsourcing plus in-house efforts.

According to the Judiciary Administration, time and efforts had to be naturally spent to discuss and plan for the change of delivery mode, including the implications on manpower resource requirements (see para. 2.11) and changes in procurement plans. As a result, the commencement of ITSP implementation was deferred from mid-2013 to early 2014. Specifically, the Judiciary Administration reported to the Steering Committee the implications of the changed delivery mode and the revised procurement plans in February and May 2014 respectively.

2.11 ***Additional manpower resource requirements.*** At the fourth meeting of the Steering Committee held in February 2014, an assessment of the implications in manpower resource requirements arising from the change of delivery mode (see para. 2.10) was submitted to the Steering Committee for endorsement, as follows:

- (a) ***Civil servants.*** There was an urgent need to enhance the IT technical team to ensure that the team would be equipped with sufficient in-house staff to carry out the intended work (Note 20); and
- (b) ***T-contract staff.*** To supplement the civil service manpower resources, it was necessary to engage T-contract staff. According to a T-contract staff engagement plan for the implementation of ITSP, 20 to 70 T-contract staff would be engaged per year in the six-year period from 2013-14 to 2018-19 (see Table 6).

Note 20: *According to the Judiciary Administration's records, 14 dedicated time-limited posts were created in 2013-14 and the number of posts gradually increased to 28 in 2017-18 and 2018-19. Besides, 13 permanent posts were created from 2013-14 to 2018-19 to perform work relating to, but not limited to, Phase 1 of ITSP.*

Progress in project implementation and problems encountered

Table 6

**Engagement plan of T-contract staff
for the implementation of ITSP
(2013-14 to 2018-19)**

Year	Rank			Total planned number of T-contract staff (Note) (d) = (a) + (b) + (c)
	Project Manager (a) (Number)	Systems Analyst (b) (Number)	Analyst/ Programmer (c) (Number)	
2013-14	5	12	3	20
2014-15	5	20	20	45
2015-16	5	20	45	70
2016-17	5	20	45	70
2017-18	5	20	30	55
2018-19	5	20	25	50

Source: Judiciary Administration records

Note: According to the Judiciary Administration, the number of T-contract staff engaged would reach the peak during the programming stage as more Analyst/Programmer rank staff would be deployed in carrying out programming work.

2.12 **Shortage of T-contract staff at Analyst/Programmer rank.** According to the Judiciary Administration, probably because of the market conditions at the relevant times, there were difficulties over the years in recruiting sufficient T-contract staff at the rank of Analyst/Programmer for the implementation of projects under ITSP, especially for the programming work of Stage 1 court systems. The planned and actual numbers of T-contract staff at the rank of Analyst/Programmer engaged in the six years from 2013-14 to 2018-19 are shown in Table 7.

Progress in project implementation and problems encountered

Table 7

**Planned and actual numbers of T-contract staff
at the rank of Analyst/Programmer
for the implementation of ITSP
(2013-14 to 2018-19)**

Year	Planned number of T-contract staff (a)	Actual number of T-contract staff (Note) (b)	Shortage	
			Number (c) = (a) - (b)	Percentage (d) = (c) ÷ (a) × 100%
2013-14	3	0	3	100%
2014-15	20	3	17	85%
2015-16	45	6	39	87%
2016-17	45	8	37	82%
2017-18	30	5	25	83%
2018-19	25	10	15	60%

Source: *Audit analysis of Judiciary Administration records*

Note: *The number of T-contract staff deployed varied from time to time. For the purpose of this analysis, the number of T-contract staff who were engaged as at 15 March of each year (i.e. the cut-off date for arranging payment in each financial year) was counted as the number of T-contract staff deployed in the year.*

2.13 **Actions taken to address Analyst/Programmer manpower shortage.** In view of the difficulties in recruiting T-contract staff at the rank of Analyst/Programmer for programming work of Stage 1 court systems, which was originally planned to be rolled out by end June 2016, the Judiciary Administration implemented the following measures to address the manpower shortage issue:

- (a) **Outsourcing.** The mix of outsourcing and in-house development was adjusted in a way that more programming work would be done by outsourcing contractors. In the event, a modular and progressive approach was adopted in the implementation and rollout of Stage 1 court systems,

Progress in project implementation and problems encountered

and four outsourcing contractors were engaged to perform the programming and system development work of Stage 1 court systems (Note 21) by modules. According to the Judiciary Administration, the modular and progressive approach apparently also had an impact on the extra time and efforts required; and

- (b) *Engagement of Systems Analysts to perform programming and system integration work.* While the Judiciary Administration encountered difficulties in engaging T-contract staff at the rank of Analyst/Programmer, it was able to engage T-contract staff at a higher rank, namely Systems Analyst. Audit noted that according to the engagement plan for T-contract staff (see Table 6 in para. 2.11), 20 staff at the rank of Systems Analyst were planned to be engaged from 2014-15 to 2018-19. In the event, the number of T-contract staff at the rank of Systems Analyst engaged gradually increased from 15 in March 2014 to 33 in March 2017, and further increased to 43 in March 2018 before reducing to 33 in March 2019. According to the Judiciary Administration, since 2016, having consulted OGCIO, the Judiciary Administration had started to engage more junior Systems Analysts to perform both system design and programming work of Stage 1 court systems. Moreover, as iCMS modules were developed individually by four different outsourcing contractors, more in-house efforts, including experienced T-contract staff at the rank of Senior Systems Analyst, were engaged to handle the modules' version control and system integration work.

Regarding (a), Audit noted that the Judiciary Administration took a longer time than expected to complete the hiring of contractors. While the hiring process should be in parallel with the SA&D work so that the programming work could start immediately upon completion of SA&D, Audit noted that the hiring of the last outsourcing contractor was only completed in September 2016, which was four months after the completion of SA&D in May 2016 (see para. 2.19). Regarding (b), upon enquiry, the Judiciary Administration in September 2019 informed Audit that even with the engagement of those junior Systems Analysts, with part of their time spent on programming work, there had still been a significant shortage of manpower at the rank of Analyst/Programmer, ranging from 2 to 32 staff (i.e. an average of 14 staff

Note 21: *According to the Judiciary Administration's records, the ratio of outsourcing and in-house development for the programming work for Stage 1 court systems was about 50:50.*

Progress in project implementation and problems encountered

per annum) during the period from 2013-14 to 2018-19. In Audit's view, the Judiciary Administration needs to improve its planning on hiring outsourcing contractors to shorten the lengthy hiring process, and continue to explore ways to address the manpower shortage at the rank of Analyst/Programmer for supporting the implementation of the remaining projects under ITSP Phase 1, as well as the planned projects under Phase 2.

2.14 ***High T-contract staff turnover rate.*** According to OGCIO Circular No. 4/2010, too much reliance on contract staff, in particular with a high turnover rate of contract staff, will not be conducive to maintaining the stability, effectiveness and continuity of IT services, as well as retaining knowledge and experience they obtained in the course of their engagement. Audit examination of the Judiciary Administration's records on engagement of T-contract staff involved in the implementation of ITSP revealed that the turnover rates (Note 22) for the period from 2014-15 to 2018-19 were considerable (see Table 8). There is a need for the Judiciary Administration to explore ways to lower the turnover rate with a view to retaining the core IT skills built up in previous projects under ITSP Phase 1 for supporting the implementation of the remaining projects under ITSP Phase 1, as well as the planned projects under Phase 2.

Note 22: *Turnover rate refers to the proportion of T-contract staff involved in the implementation of ITSP who left the Judiciary Administration (excluding internal movements) during the year. The turnover rate is calculated as:*

[Number of staff who left during the year/(Number of staff as at 16 March of the year + Number of staff as at 15 March of the following year) ÷ 2] × 100%.

Table 8

**Turnover rate of T-contract staff involved
in the implementation of ITSP
(2014-15 to 2018-19)**

Year	Turnover rate
2014-15	6.8%
2015-16	33.7%
2016-17	16.3%
2017-18	24.0%
2018-19	24.2%

Source: Audit analysis of Judiciary Administration records

2.15 In connection with the observations on the shortage and high turnover rate of T-contract staff as mentioned in paragraphs 2.12 to 2.14, Audit also noted that the Judiciary Administration solely relied on T-contract staff to supplement its civil service IT team. Audit considers that the Judiciary Administration may consider engaging Non-Civil Service Contract (NCSC — Note 23) staff if T-contract staff at the appropriate rank was unavailable. In this connection, OGCIO also remarked at the meeting of the Steering Committee held in September 2013 that the Judiciary Administration might consider engaging NCSC staff in addition to T-contract staff to supplement the required resources and expertise.

Long lead time in procurement of IT infrastructure

2.16 ***Procurement of IT infrastructure.*** Under ITSP, the IT infrastructure would be incrementally upgraded for supporting the progressive implementation of application systems, including the core application system of iCMS. One of the major upgrades of the IT infrastructure was to upgrade the central IT facilities (i.e. IT

Note 23: *According to OGCIO Circular No. 4/2010, NCSC Staff Scheme is to provide B/Ds with the necessary flexibility in meeting their operational needs in different situations. Briefly, NCSC staff are mainly engaged for meeting service needs which are time-limited, seasonal in nature or which require staff to work less than conditioned hours or which require tapping the latest market expertise, etc.*

Progress in project implementation and problems encountered

network system, IT security system, and server and storage system). With an estimated contract value of about \$195 million, it was planned that the required hardware, software and services for upgrading the central IT facilities were to be procured through an open tender exercise. In accordance with the Stores and Procurement Regulations, other B/Ds such as the Government Logistics Department and DoJ would be involved in the tendering process (e.g. preparation of tender documents, issue of tender invitations, tender evaluation and award of contract).

2.17 ***Over-optimistic work schedule for tendering work involving other B/Ds.*** According to the Judiciary Administration, the tender invitation for procurement of IT infrastructure under Activity B of ITSP was targeted to be issued in April 2015. The contract was targeted to be awarded in October 2015 and the IT infrastructure would be completed by March 2017. However, the tender invitation was only issued in November 2015 (i.e. a delay of 7 months). The contract was only awarded in November 2016 (i.e. a delay of 13 months). The IT infrastructure was eventually completed in February 2018. Audit found that the delays were caused by the fact that the Judiciary Administration had formulated an over-optimistic work schedule for the necessary tendering work involving other B/Ds, as follows:

- (a) ***Clearance of tender documents.*** The Judiciary Administration sought advice from DoJ on the draft tender documents in mid-February 2015 (i.e. only about 40 days before the target tender issue date by mid-April 2015). DoJ considered that the timetable was rather aggressive given the large volume of the documents to be reviewed. After several rounds of clarifications from the Judiciary Administration and advices by DoJ on various drafts of the tender documents, DoJ cleared the tender documents in July 2015; and
- (b) ***Tendering activities.*** The Judiciary Administration contacted the Government Logistics Department in early June 2015 to discuss the tender arrangement and proposed to issue the tender invitation in July 2015 and award the contract in December 2015 (i.e. in 5-month time). In response, the Government Logistics Department commented that the proposed schedules to issue the tender invitation and arrange other major tendering activities (e.g. tender evaluation, vetting of tender recommendation and clearance of tender report) were not realistic because about 8 to 14 months were required from the issue of tender to the award of contract. After several rounds of vetting and clarifications, the tender invitation was issued in November 2015. After the tender was closed in January 2016, the

Progress in project implementation and problems encountered

Judiciary Administration and the Government Logistics Department took around 10 months for arranging the major tendering activities and awarded the contract in November 2016, which was in line with the estimation of 8 to 14 months by the Government Logistics Department.

In Audit's view, the Judiciary Administration needs to draw lessons from the incidents to improve the planning of tendering work involving other B/Ds in undertaking similar procurement activities in future, especially for those remaining projects under ITSP Phase 1 and planned projects under Phase 2.

Long time taken in developing Stage 1 court systems

2.18 The development of Stage 1 court systems under Activity B before rollout generally involved the following stages:

- (a) ***Collection of user requirements.*** In this stage, user requirements would be collected to formulate the user requirement documents. Screen prototypes would also be produced to seek users' comments;
- (b) ***SA&D.*** In this stage, the current system environment and the user requirements would be studied with a view to defining problem areas and/or improvement opportunities. Based on the information collected, design and specification documents would be produced and a final report, namely SA&D Report would be produced for users' comments before seeking the Steering Committee's endorsement; and
- (c) ***Implementation and user acceptance tests (UATs).*** In this stage, the system would be designed and programmes would be developed. Upon completion of system testing, the system would be passed to users for UATs. Upon successful completion of all necessary tests, endorsement from the Steering Committee would be sought to signify the end of this stage.

2.19 ***Additional time taken to collect user requirements and complete SA&D.*** According to the project schedule as of April 2014, the collection of user requirements and SA&D were targeted to be completed in September 2014 and June 2015 respectively. However, the work on collecting user requirements and SA&D was only completed in March 2015 and May 2016 respectively, representing an overall

Progress in project implementation and problems encountered

delay of 11 months. According to the Judiciary Administration, major reasons for the additional time incurred include:

- (a) the work on defining user requirements for the iCMS had incurred more time and efforts than planned. A total of 117 sets of user requirement documents were produced, 172% more than the estimated planned number of 43 sets;
- (b) the user requirements covered a much wider scope of business operations than that covered by the existing case management systems;
- (c) the clarifications on the process automation to be enabled in the workflow of iCMS and formulation of user requirement documents were resource-intensive and took longer than expected to complete. To pave way for a smooth start of SA&D, about 130 half-day clarification sessions among the end-user representatives and the Information Technology Office were scheduled; and
- (d) due to competing priorities, users had difficulties in meeting the deadlines for comments and required more time to firm up their requirements, which might have delayed SA&D work.

2.20 ***Prolonged extension of UATs.*** As noted at the meeting of the Steering Committee held in March 2016, it was anticipated that UATs for Stage 1 court systems would be completed by March 2017. According to the Judiciary Administration's records as of December 2017, there were about 1,400 change requests raised during the UATs. In the event, such UATs were only substantially completed (Note 24) in early 2019, representing a delay of about two years. Audit examined the Judiciary Administration's records and found that the primary cause of the delay was that a substantial number of change requests were raised during UATs (see Case 1 for an illustration).

Note 24: *According to the Judiciary Administration's records, another round of UATs was scheduled to be conducted from September to November 2020 for those legislative amendment dependent functions in iCMS because it was expected that programme enhancements would need to be made subsequent to the legislative amendments.*

Case 1

Prolonged extension of UATs of iCMS at the District Court

1. UATs of core functions of iCMS at the District Court commenced in January 2017 and were targeted to be completed in six rounds by September 2017. In September 2017, end-users of the District Court (e.g. court support staff) decided to, as part of UAT process, conduct an end-to-end test on all major workflows for different case types such as civil actions and criminal cases. This was done in parallel to the then planned last (i.e. the sixth) round of UATs.

2. The end-to-end tests were completed in February 2018 and a substantive number of requirement changes were raised as essential features to be included for production rollout. In response to the requirement changes, programme enhancements were made from February to June 2018. Another (i.e. the seventh) round of UATs (including another end-to-end test) commenced in July 2018. Eventually, UATs were completed in December 2018, representing a delay of 15 months.

Audit comments

3. While Audit noted that the requirement changes raised during UATs were for enhancing operational efficiency of the iCMS, it would be more desirable if such requirement changes could have been identified in earlier stages, given that additional time had been spent on collecting user requirements and SA&D (see para. 2.19). As a result of the revisions to user requirements and extension of UATs, the Judiciary Administration estimated that an additional sum of about \$23 million would have to be incurred.

Source: Audit analysis of Judiciary Administration records

2.21 Audit noted that the Judiciary Administration would, with reference to the experiences gained and problems encountered in implementing the Stage 1 court systems, introduce improvement measures (such as setting up a project team on the user side and using templates in the form of end-to-end operational steps to facilitate users in stating detailed business requirements) to facilitate the future implementation of projects under ITSP. While noting that proactive actions have been taken by the Judiciary Administration to improve the process in collecting user requirements, Audit considers that the Judiciary Administration should also review and improve the process of making key requirement changes during UATs (e.g. setting a definite time for sign-off of UATs and processing change requests as enhancements after system rollout as appropriate).

Engagement of prosecuting departments and agencies to prepare for the rollout of iCMS

2.22 ***Migration to iCMS for summons applications.*** Under ITSP, iCMS would be introduced by phases across all court levels so that court users, including the prosecuting departments and agencies, would be given an option to handle court documents and payments with the court electronically. At Stage 1 of ITSP Phase 1, iCMS would be implemented in the Summons Courts of the Magistrates' Courts. Departmental summons and fixed penalty cases (Note 25) would be the key types of court cases to be affected. Instead of using CASEMAN (see para. 1.13(c)), the Judiciary's existing electronic platform for submitting cases handled by the Summons Courts, the relevant prosecuting departments and agencies for all these cases are expected to migrate to iCMS (i.e. by either inputting applications via the web portal of iCMS or setting up a system interface with iCMS for transmission of applications) within a period of three years after the rolling out of iCMS in all the Magistrates' Courts. CASEMAN is then expected to cease handling these cases.

2.23 ***Judiciary Administration's coordination work with the prosecuting departments and agencies.*** In 2015, the Judiciary Administration started studying the interfaces of iCMS with the systems of the prosecuting departments and agencies and initiated early discussions with key prosecuting departments and agencies such as the Hong Kong Police Force. From June 2016 to August 2017, the Judiciary Administration held engagement briefings and meetings with about 40 prosecuting departments and agencies, among others, to introduce the changes arising from the introduction of iCMS. In September 2017, the Judiciary Administration issued to the prosecuting departments and agencies the technical and operational details about the implementation of iCMS at the Summons Courts of the Magistrates' Courts to facilitate their planning for migration to iCMS. In September 2018 and February 2019, the Judiciary Administration started two consultations with the external stakeholders (including the prosecuting departments and agencies and legal

Note 25: *Examples of departmental summons and fixed penalty cases include traffic-related offence cases initiated by the Hong Kong Police Force and the Transport Department, offence cases related to public cleanliness initiated by the Food and Environmental Hygiene Department and tax-related offence cases initiated by the Inland Revenue Department.*

Progress in project implementation and problems encountered

professional bodies — Note 26) on the proposed administrative arrangements and legislation respectively.

2.24 *Areas for improvement and challenges ahead.* Audit examined the Judiciary Administration's efforts in coordinating with the prosecuting departments and agencies to prepare for the rollout of iCMS and noted the following areas for improvement and challenges ahead:

- (a) *Notes of some meetings not prepared.* From June 2016 to August 2017, the Judiciary Administration held 19 engagement meetings with the prosecuting departments and agencies on the rollout of iCMS. However, Audit found that internal notes of meeting were only prepared for 4 meetings. In response to Audit's enquiry, the Judiciary Administration in August 2019 said that:
- (i) the engagement meetings were held mainly for briefing the prosecuting departments and agencies on the overall timeline and proposed arrangements so that they might make any necessary corresponding preparations;
 - (ii) the issues raised at the meetings were mostly operational and/or technical in nature and it was considered not necessary to prepare any formal notes of meetings; and
 - (iii) if any specific issues raised at the meetings required follow-up actions, the relevant follow-up e-mails would be filed.

While noting the Judiciary Administration's explanations, Audit found that the contents discussed at the four meetings with internal notes of meetings prepared were similar to those discussed at the other 15 meetings without complete notes of meetings. Besides, while internal notes of meetings were prepared for the four meetings attended by some 30 prosecuting departments and agencies which were involved in a smaller caseload of summons, complete notes of meetings were not prepared for the other

Note 26: *The consultations covered the proposed administrative arrangements (commenced in September 2018) and the proposed legislation and Practice Directions (commenced in February 2019).*

Progress in project implementation and problems encountered

15 meetings which were attended by 10 key prosecuting departments and agencies with the highest caseload of summons. In Audit's view, to enhance accountability, the Judiciary Administration needs to keep proper and complete meeting records as far as practicable;

- (b) ***Briefings on the design and use of web portal not yet organised.*** According to the notes of the meetings with some 30 prosecuting departments and agencies held in early 2017, another briefing to some 40 prosecuting departments and agencies would be held on the design and usage of the web portal in mid-2017. Audit examination of the Judiciary Administration's records however revealed that such briefings (i.e. involving the demonstration of the workflow using the web portal) were only provided to two key prosecuting departments in January and August 2018 respectively. To ensure that the prosecuting departments and agencies are familiar with the design and use of web portal, the Judiciary Administration needs to organise briefings to all the prosecuting departments and agencies as soon as practicable; and
- (c) ***Unresolved issues between government departments over system interface with iCMS.*** Audit noted that in the course of coordinating the prosecuting departments and agencies in preparing for the system interface with iCMS, there were a few unresolved issues between government departments on the setting up of system interface with iCMS. For example, there have been on-going discussions between the Hong Kong Police Force and the Transport Department since 2016 on the system interface of summons applications relating to traffic-related offences (Note 27). While some progress was made in 2018 with the facilitation of DoJ, there were still some unresolved issues (e.g. system workflow for plead-not-guilty cases) up to July 2019. The Judiciary Administration needs to closely liaise with the prosecuting departments and agencies and take appropriate actions (e.g. escalating to the high-level officers in the executive authorities) in case the inter-departmental issues remain unresolved.

Note 27: *In gist, the discussions are related to how the data related to summons of traffic-related offences from the Hong Kong Police Force and the Transport Department would be merged before submitting the summons applications to iCMS.*

Audit recommendations

- 2.25 **Audit has recommended that the Judiciary Administrator should:**
- (a) **step up monitoring of the implementation of all projects under ITSP Phase 1 and expedite actions where possible to complete the outstanding projects as early as practicable;**
 - (b) **taking into account lessons drawn from the problems encountered during project implementation, enhance the planning and implementation of future IT projects, including:**
 - (i) **improving the planning on hiring outsourcing contractors to shorten the lengthy hiring process;**
 - (ii) **exploring ways to address manpower shortage issues, including shortage of manpower at the rank of Analyst/Programmer and high turnover rate of T-contract staff (e.g. considering engaging NCSC staff to supplement the required resources and expertise);**
 - (iii) **improving the planning of tendering work involving other B/Ds in undertaking similar procurement activities in future, especially for those remaining projects under ITSP Phase 1 and planned projects under Phase 2; and**
 - (iv) **reviewing and improving the process of making key requirement changes during UATs; and**
 - (c) **improve the engagement work with the prosecuting departments and agencies in preparing for the rollout of iCMS, including:**
 - (i) **keeping proper and complete meeting records as far as practicable;**
 - (ii) **organising briefings to all prosecuting departments and agencies on the design and usage of web portal as soon as practicable; and**

Progress in project implementation and problems encountered

- (iii) **closely liaising with the prosecuting departments and agencies and taking appropriate actions in response to any unresolved issues among them over the system interface with iCMS.**

Response from the Judiciary and the Government

2.26 The Judiciary Administrator agrees with the audit recommendations. She has said that:

- (a) the Judiciary Administration is in the process of consolidating and refining the governance structure for not only Phase 1 Stage 1 projects, but also Phase 1 Stage 2 projects in order to meet the challenges ahead. With the refined governance structure, the Judiciary Administration should be able to better monitor ITSP implementation and expedite actions where possible to complete the outstanding projects as early as practicable;
- (b) the Judiciary Administration will adopt the measures stipulated in the recent guidelines/circular memorandum issued by OGCIO and the Financial Services and the Treasury Bureau in February 2016 and December 2017 respectively in planning and arranging future procurement exercises so as to shorten the related tendering process;
- (c) to address the manpower shortage issues, the Judiciary Administration will continue to closely monitor the manpower situation and explore all possible means, including considering the engagement of NCSC staff, to recruit and retain technical staff with suitable skill sets;
- (d) the Judiciary Administration will review and refine the control procedures for handling key change requests in accordance with the Programme Management Plan (PMP — see para. 3.2) so as to better manage key users' requirement changes at UAT stage and ensure timely submissions to the relevant authorities for consideration and approval where appropriate;
- (e) with regard to briefings to all prosecuting departments and agencies on the design and usage of iCMS web portal, the Judiciary Administration has planned to conduct such briefings at a suitable juncture; and

Progress in project implementation and problems encountered

- (f) the Judiciary Administration has been taking all necessary actions with the relevant parties to resolve the outstanding issues among the prosecuting departments and agencies relating to the system interface with iCMS. The Judiciary Administration will continue to explore and take additional appropriate actions as necessary.

2.27 The Secretary for Justice has said that DoJ notes the audit recommendations in paragraph 2.25 and will continue to work closely with the Judiciary to facilitate the implementation of ITSP.

2.28 The Commissioner for Transport has said that while noting that there are unresolved issues between government departments on the setting up of system interface with iCMS, the Transport Department will continue to liaise closely with the Judiciary and other prosecuting departments with a view to resolving differences in views and ensuring smooth interfaces between the Transport Department's system and other prosecuting departments' systems and with iCMS.

PART 3: PROJECT GOVERNANCE

3.1 This PART examines issues relating to project governance under ITSP, focusing on:

- (a) change of governance structure (paras. 3.3 to 3.6);
- (b) project monitoring (paras. 3.7 to 3.13); and
- (c) reporting of project progress (paras. 3.14 to 3.18).

Governance structure of ITSP

3.2 ***Project governance.*** According to OGCIO's guidelines on project management, a proper project organisation is essential for the effective management of a project. The Judiciary has established a governance structure for the implementation of projects under ITSP with reference to OGCIO's guidelines. The governance structure is headed by CIT and supported by the Steering Committee (see para. 1.10(a)(i) and (b)(i), and Appendix C). The terms of reference of CIT and the key roles and responsibilities of the Steering Committee, as defined in PMP (Note 28) of ITSP, are as follows:

- (a) ***CIT.*** CIT is tasked to: (i) oversee the ongoing development of ITSP; (ii) explore the feasibility and benefits of and consider proposals on potential applications of IT to the practice, procedure and operation of the courts at all levels, and to make recommendations as to any applications which should be adopted; and (iii) oversee the implementation of ITSP and other adopted IT applications; and

Note 28: *PMP is a key management deliverable of ITSP. The purpose of PMP is to describe the overall management approach for work to be performed for ITSP throughout its implementation life cycle. The PMP: (a) provides an overview of ITSP's motivation, objectives, success criteria, major deliverables, assumptions and constraints; and (b) highlights the management structure, activities, processes and/or procedures to be followed by all project stakeholders in the management of ITSP.*

- (b) *Steering Committee.* The Steering Committee is accountable to CIT and responsible for, among other duties: (i) committing project resources; (ii) endorsing the project budget; (iii) endorsing major deliverables of projects that meet acceptance criteria at each project phase; (iv) reviewing performance, providing overall direction to implementation of ITSP, and addressing areas of improvement on a regular basis; (v) recommending future actions on the project if any project tolerance is exceeded (e.g. significant cost overrun or project slippage), and escalating to CIT where appropriate; and (vi) endorsing progress update reports and project closure.

Change of governance structure

Change of governance structure not endorsed by appropriate authority

3.3 *Original governance structure.* In April 2013, CIT endorsed the proposed governance structure of ITSP. According to the endorsed governance structure, in view of the multitude of activities, studies and projects involved in ITSP:

- (a) the Steering Committee would be supported by three project steering committees responsible for different projects (i.e. (i) iCMS and associated projects; (ii) data-related projects; and (iii) infrastructure projects);
- (b) while the Steering Committee would monitor the implementation of ITSP at a strategic level, project management responsibilities such as committing project resources, and endorsing acceptance of project plans and deliverables were delegated to the project steering committees;
- (c) regarding membership of the three project steering committees, while the committee on iCMS and associated projects was chaired by the Judiciary Administrator and comprised senior staff as members, the other two committees were chaired by a Chief Systems Manager and comprised mainly technical and mid-level management staff as members. The three project steering committees were supported by three project assurance teams on quality assurance work of the projects such as approving change requests; and
- (d) the three Working Groups under CIT (see para. 1.10(a)(ii)) would be supported by nine advisory committees led by JJOs set up to deliberate on

Project governance

issues in greater details in various specific areas (e.g. the provision of e-services at different court levels). A Project Studies Steering Group would be formed under the Steering Committee to oversee project study teams which largely mirrored the work of the nine advisory committees (Note 29).

3.4 ***Grouping of project steering committees under ITSP Delivery and Assurance Team.*** In February 2014, PMP was submitted to the Steering Committee for endorsement. According to the endorsed PMP, the three project steering committees and their respective project assurance teams were grouped collectively under ITSP Delivery and Assurance Team (see para. 1.10(b)(ii)). According to the Judiciary Administration, the roles and responsibilities of the three project steering committees and their respective project assurance teams were taken up by ITSP Delivery and Assurance Team. However, Audit examination of the Judiciary Administration's records found the following issues:

- (a) ***Lack of endorsement by CIT.*** No record was available showing that the grouping of the three project steering committees and their respective project assurance teams under ITSP Delivery and Assurance Team had been endorsed by CIT, which approved the original governance structure in April 2013 (see para. 3.3);
- (b) ***Change of membership.*** While the original project steering committee on iCMS and associated projects was planned to be chaired by the Judiciary Administrator and comprised senior staff as members, the membership of ITSP Delivery and Assurance Team had been revised with a Chief Systems Manager as the Chairman and mid-level management staff as members; and
- (c) ***Responsibilities of the Steering Committee not delegated.*** According to PMP, certain project management responsibilities rested on the Steering Committee, but not ITSP Delivery and Assurance Team. For example, it was stated in PMP that the responsibilities of the Steering Committee

Note 29: *According to the Judiciary Administration, the Project Studies Steering Group was led by the senior management of the Judiciary Administration to deliberate on relevant issues in greater details and provide steer and advice to project study teams, ensure that the objectives of the project studies align with ITSP, align priorities and proposals among project studies, monitor the progress of the respective project studies and report their progress and performance to the Steering Committee.*

included convening meetings to approve risk mitigation plans, project changes, issue resolutions and resource allocation, and endorse major project deliverables. As the project management responsibilities had not been delegated to ITSP Delivery and Assurance Team as planned due to the change in membership (see (b)), the Steering Committee might need to arrange more frequent meetings (see paras. 3.8 and 3.9) to discharge its project management responsibilities as defined in PMP.

3.5 ***Need to review the governance structure of ITSP.*** Upon enquiry, the Judiciary Administration informed Audit in September 2019 that:

- (a) with reference to OGCIO's guidelines, the Steering Committee was the authority to endorse the governance structure within its purview as defined in PMP. Therefore, seeking CIT's approval of the grouping of the three project steering committees and their respective project assurance teams under ITSP Delivery and Assurance Team for the purpose of streamlining the governance structure was considered unnecessary; and
- (b) the grouping resulted in no change in substance to the responsibilities of the Steering Committee as a whole on the project management and accountability level necessitating CIT's fresh approval of the Steering Committee's structure.

While noting the Judiciary Administration's explanations, Audit considers that there is still merit in reviewing the current governance structure of ITSP as defined in PMP (e.g. reviewing the need for delegating some of the project management responsibilities to ITSP Delivery and Assurance Team to avoid overloading the Steering Committee) and seek the endorsement of the appropriate authority for any revisions where appropriate.

3.6 ***Consolidation of project study teams and advisory committees.*** According to the Judiciary Administration, as the implementation of ITSP progressed, the ways and mechanism in overseeing its implementation might need to be adjusted to cater for its operational needs, particularly in light of experience and having regard to the nature of work required at different stages of the projects. In this regard, the relevant project study teams under the Project Studies Steering Group and the relevant advisory committees (see para. 3.3(d)) for the implementation of Stage 1 court systems have been replaced by the Policy and Legislative Group and the two Operational Groups

Project governance

for the District Court and the Summons Courts of the Magistrates' Courts since May 2017 (see Note 7 to para. 1.10(a)(iii)). Audit however found that such changes had not been reflected in the latest version of PMP endorsed by the Steering Committee in July 2018. In Audit's view, there is a need to ensure that any revisions to the governance structure of ITSP are properly endorsed by the appropriate authority.

Project monitoring

Monitoring mechanism

3.7 ***Meetings and project deliverables.*** According to PMP, a formal communication framework should be put in place to monitor the progress of projects under ITSP, which includes the following:

- (a) ***Meetings of the Steering Committee.*** They should be held during project kick-off, at end of stage and on a need basis (Note 30). The objectives of holding meetings are to present project status, gather members' comments, and seek approval on risk mitigation plans, project changes, issue resolutions and resource allocation;
- (b) ***Progress update to CIT.*** Unlike the meetings of the Steering Committee, PMP does not specify any requirement on holding CIT meetings. However, it is stated in PMP that members of the Steering Committee are responsible for briefing and advising CIT on critical matters concerning ITSP implementation. For example, if there is an issue having a significant impact on the scope, schedule, cost and quality of the projects under ITSP (e.g. overall project slippage of over 20% or more than six months), such issue should be escalated to CIT for advice; and
- (c) ***Overall programme highlight.*** The Programme Management Office (see para. 1.10(b)(iii)) should submit a monthly highlight report in a prescribed format via e-mail to the Steering Committee and ITSP Delivery and Assurance Team providing updated information of the overall progress of

Note 30: *According to the minutes of meeting of the Steering Committee held in June 2013, the Committee's meetings had been scheduled to be held on a monthly basis but if there were no substantive issues for discussion, the meeting could be cancelled.*

ITSP and key milestones ahead. The monthly highlight report should also include any risks and issues identified, and information on change requests raised in the previous month.

Areas for improvement

3.8 ***Less frequent meetings of the Steering Committee.*** Since the commencement of project implementation under ITSP Phase 1 in May 2013 and up to June 2019, 15 Steering Committee meetings had been held. Audit analysed the meeting dates and noted that fewer meetings had been held since 2016 and the intervals between meetings had become longer (see Table 9).

Table 9

**Analysis of Steering Committee meeting dates
(May 2013 to June 2019)**

Year	Number of meetings	Average number of days between meetings
2013 (From May)	3	53
2014	3	120
2015	3	142
2016	2	196
2017	1	182
2018	2	255
2019 (Up to June)	1	198

Source: Audit analysis of Judiciary Administration records

3.9 As highlighted in paragraphs 3.2(b) and 3.7(a), the Steering Committee is responsible for making decisions in respect of the implementation of projects under ITSP, such as endorsing major project deliverables, and granting approvals on project changes and resource allocation. Therefore, it is important for the Steering

Project governance

Committee to arrange timely meetings to discuss project issues and make decisions. In this connection, Audit noted that in the case of conducting UATs of iCMS at the District Court (see Case 1 in para. 2.20), while the completion date of UATs was substantially deferred by 15 months from September 2017 to December 2018, only two Steering Committee meetings were held during the period (i.e. in January and November 2018), at which the Steering Committee was informed of the longer time taken in conducting UATs. In Audit's view, more frequent meetings should have been held during the period to enable the Steering Committee to closely monitor UAT work progress and provide timely advice (especially the expert view of the Government Chief Information Officer who was a member of the Steering Committee — see para. 1.10(b)(i)) on resolving the issue. Upon enquiry, the Judiciary Administration informed Audit in September 2019 that:

- (a) to complement the Steering Committee's meetings, 53 Internal Monitoring Meetings and 14 ITSP Core Group meetings (see Note 10 to para. 1.10) which were chaired by the Judiciary Administrator and comprised all directorate officers involved in ITSP were held during the period from April 2013 to June 2019; and
- (b) practically speaking, high-level internal meetings were held roughly on a monthly basis.

While noting the Judiciary Administration's explanations on convening meetings under its internal monitoring mechanism, given that the roles and responsibilities of the Steering Committee have been clearly defined in the formal communication framework of PMP (see para. 3.7(a)) and taking into consideration that the expert advice of the Government Chief Information Officer could be sought during the Steering Committee's meetings, Audit considers that there is a need to convene meetings of the Steering Committee in a timely manner for discussing and resolving project issues at a strategic level, and making project decisions in accordance with PMP.

3.10 ***Fewer progress updates to CIT.*** According to its terms of reference, CIT oversees the ongoing development and implementation of ITSP at a strategic level and provides steer on ITSP as and when appropriate (see para. 3.2(a)). While CIT meetings were less frequent than those of the Steering Committee, the Judiciary Administration would provide CIT members with ITSP progress updates between meetings through circulation of papers. Audit's analysis revealed a decreasing trend

on the numbers of CIT meetings held and ITSP-related papers issued to CIT members from April 2013 to June 2019 (see Table 10).

Table 10

Analysis of CIT meetings and ITSP-related papers issued to CIT members (April 2013 to June 2019)

Year	Number of meetings	Number of ITSP-related papers issued to CIT members
2013 (From April)	2	13
2014	2	12
2015	2	7
2016	1	6
2017	1	4
2018	0	0
2019 (Up to June)	0	0

Source: Audit analysis of Judiciary Administration records

3.11 Upon enquiry, the Judiciary Administration informed Audit in September 2019 that:

- (a) during the period between May 2017 and June 2019, intensive work (54 meetings were held) had been done under the Policy and Legislative Group for the District Court and the Summons Courts of the Magistrates' Courts, which was set up under the Working Group on iCMS under CIT (see para. 1.10(a)(iii));
- (b) practically speaking, nearly two meetings were held on a monthly basis; and

Project governance

- (c) discussions with the Chairman of the Working Group on iCMS and other relevant senior JJOs outside the Policy and Legislative Group had been held for key policy and legislative issues.

While noting the Judiciary Administration's explanations, Audit considers it imperative that CIT should be provided with more timely updates on the implementation of projects under ITSP because the Policy and Legislative Group is only one of the advisory groups under CIT focusing on providing detailed steer and monitoring in relation to the implementation of Stage 1 court systems, while CIT is tasked to oversee the implementation of ITSP at a strategic level. Moreover, it has been stated in PMP that CIT should be briefed and advised on critical matters concerning ITSP implementation and any issues that have a significant impact on the scope, schedule, cost and quality of the projects under ITSP should be escalated to CIT for advice.

3.12 ***Inadequacies of monthly highlight reports.*** The monthly highlight reports prepared by the Programme Management Office provide the Steering Committee and ITSP Delivery and Assurance Team with information on the overall progress of ITSP and any project risks, issues and change requests on a monthly basis (see para. 3.7(c)). Audit examination of the 65 monthly highlight reports from March 2014 (i.e. the first month after the endorsement of PMP by the Steering Committee in February 2014 — see para. 3.4) to July 2019 found the following issues:

- (a) ***Monthly highlight reports not timely submitted.*** Of the 65 monthly highlight reports, 46 (71%) were not timely submitted in the following month, contrary to the requirement of PMP (see para. 3.7(c)). In particular, 17 monthly highlight reports for February 2018 to June 2019 were only submitted in one go in August 2019;
- (b) ***Over-optimistic project status ratings.*** The overall project progress was presented in the monthly highlight reports using a three-colour rating system (i.e. red, yellow and green — Note 31) to provide an easy-to-read

Note 31: *A three-colour rating system is adopted to indicate the project status. The project status is red if milestones are missed and significant risks or issues are foreseen. The project status is yellow if milestones are hit but significant risks or issues are foreseen, or milestones are missed but there is no serious risk of delay to achieving significant later milestones. The project status is green if milestones are hit and no major risks or issues are foreseen.*

assessment on the status of the projects quickly. In the 65 monthly highlight reports, the overall project progress was rated as green 50 times and as yellow 15 times. Given that there were slippages in all the four activities under ITSP Phase 1 (see para. 2.4), the ratings seemed to be over-optimistic. For example, in the monthly highlight report for October 2017, in view of the delays in completing the end-to-end test for the implementation of Stage 1 court systems in the District Court and that the impact on the original rollout date had yet to be ascertained (see Case 1 in para. 2.20), the overall project status was still rated as green, and hence the Steering Committee or ITSP Delivery and Assurance Team might be misled accordingly; and

- (c) ***Status of project issues and change requests not reported.*** According to OGCIIO's guidelines on project management, it is a good practice to report the status of project risks and issues regularly via the monthly highlight reports. Audit however found that, although there had been significant project slippages and a substantial number of change requests received (see para. 2.20), such project issues and change requests were not reported in all the 65 monthly highlight reports.

There is a need for the Judiciary Administration to improve the timeliness of submission and quality of the monthly highlight reports to facilitate the effective monitoring of the project progress by the Steering Committee and ITSP Delivery and Assurance Team.

3.13 ***Need to maintain proper records on the Steering Committee's approvals of revisions of completion dates of project activities.*** According to PMP, one of the objectives of the Steering Committee's meetings is to seek approval on project changes. Revision of completion dates of project activities is one type of project changes that should be approved at the Steering Committee's meetings. After approvals of the Steering Committee have been sought, such revised completion dates should be reported in the monthly progress reports to OGCIIO for monitoring purpose (see para. 1.12). However, Audit examination of the papers and minutes of all the 15 Steering Committee meetings from May 2013 to June 2019 (see para. 3.8) found that:

- (a) approvals for revision of completion dates of project activities were not explicitly sought during the Steering Committee's meetings;

Project governance

- (b) in practice, information papers on ITSP progress update (which contained narratives describing progress of different projects under ITSP, issues and difficulties arising from their implementation and revised detailed work plans as and when required) were issued to members of the Steering Committee before meetings; and
- (c) members of the Steering Committee were invited to take note of the progress of the implementation during the meetings.

Upon enquiry, the Judiciary Administration informed Audit in September 2019 that any revisions to the project schedule would be reflected in PMP after discussion at the Steering Committees' meetings, and any updated PMP would be circulated to members of the Steering Committee for comments with the fair and confirmed version issued to members for retention. Audit examination of the PMPs however found that not all the revised/actual completion dates of the four activities under ITSP Phase 1 had been reflected in PMPs. In Audit's view, as the completion dates of project activities are a key measurement on the timeliness of project delivery, the Judiciary Administration needs to maintain proper records on approving revisions of completion dates of project activities by the Steering Committee.

Reporting of project progress

Reporting requirements

3.14 ***Annual progress reports to FC.*** According to Financial Circular No. 2/2017 on Guides for Controlling Officers on management of non-works projects funded by the Government, Controlling Officers should consider whether it is necessary to regularly brief LegCo about the progress of the projects, in order to enhance transparency and public accountability. In this connection, the Government has undertaken to provide FC Members with an annual progress report on the implementation of major computer projects (see para. 1.12).

3.15 ***Progress reports to OGCIO.*** According to OGCIO Circular No. 2/2011 on strengthening the governance of IT projects, project owners are required to submit progress reports on status updates to OGCIO on a monthly basis for Tier 1 projects (see para. 1.11) to enable OGCIO to monitor the health status of all projects and provide timely advice when necessary. In practice, OGCIO has put in place a computer system to automatically call for periodic reports to update project progress.

There are two types of progress reports, namely the Project Progress Update Form (submitted on a monthly basis) and the Quarterly Project Progress Review Form. Both types of progress reports are in a prescribed format and OGCIO has issued a set of guidance notes to assist project owners in completing the progress reports.

Areas for improvement

3.16 *Annual progress reports to FC.* Since 2014 and up to 2018, the Government had submitted to FC five annual progress reports comprising progress updates on implementation of projects under ITSP of the Judiciary. Audit examined all the five reports and noted the following areas for improvement in respect of reporting the implementation progress of projects under ITSP of the Judiciary:

- (a) *Scheduled/revised completion dates not reported by stages.* As mentioned in paragraph 1.7, the implementation of ITSP Phase 1 was divided into two stages. In other words, there were two scheduled completion dates for ITSP Phase 1 Stages 1 and 2. However, in all the five annual progress reports, only the overall project completion date of ITSP projects (i.e. completion date of Stage 2 court systems) and narrative updates on the latest project status and achievements of key milestones were reported. In Audit's view, for large-scale IT projects such as implementation of ITSP of the Judiciary, in order to present a complete picture of the project progress, it is more desirable to report the scheduled/revised completion dates by stages. In this connection, Audit noted that for some IT projects of other project owners (e.g. IT projects of the Immigration Department and the Inland Revenue Department), in addition to the overall project completion dates, the scheduled/revised completion dates by stages were also reported in the same annual progress reports; and
- (b) *Target completion date not up-to-date.* According to the information papers on ITSP progress update issued to members of the Steering Committee (see para. 3.13(b)), the overall completion date (i.e. the completion date of Stage 2 court systems) was deferred from December 2019 to November 2020 in June 2017, and further to June 2021 in January 2018. However, the overall completion date had not been updated in the annual progress report submitted to FC in October 2018 showing the position as of March 2018. Audit noted that the failure to update the completion date in the annual progress report could possibly be due to the delays in reporting the revised completion dates in the monthly

Project governance

progress reports by the Judiciary Administration to OGCI0 (see para. 3.18(a)(iii)).

3.17 ***Progress reports to OGCI0.*** The following requirements are set out in OGCI0 guidance notes on completing the progress reports:

- (a) for both the Project Progress Update Form and Quarterly Project Progress Review Form, in reporting a revision to the completion date of a project milestone, the project owner is required to:
 - (i) seek prior approval from appropriate authority (i.e. the Steering Committee in the case of the Judiciary’s implementation of ITSP — see also para. 3.13); and
 - (ii) indicate on the progress report that approval for such change has been obtained; and
- (b) for the Quarterly Project Progress Review Form, if the project experiences slippage, the project owner must complete the analysis on project slippage by providing the problem/cause/responsible party and the milestones affected.

3.18 ***Inadequacies in preparing progress reports.*** Audit examined the progress reports submitted by the Judiciary Administration to OGCI0 from June 2013 to June 2019 (comprising 55 Project Progress Update Forms and 25 Quarterly Project Progress Review Forms) and noted the following inadequacies:

- (a) ***Omissions and delays in reporting revised/actual completion dates.*** There were cases of omissions and delays in reporting revised/actual completion dates in the progress reports. Details are as follows:
 - (i) Activity A “Technical studies” was completed in April 2015. The actual completion date was neither reported in the Project Progress Update Form for April 2015 nor the Quarterly Project Progress Review Form for the quarter ended June 2015. In the event, the actual completion date was only reported in the Quarterly Project

Progress Review Report for the quarter ended March 2018 (i.e. a delay of around three years);

- (ii) regarding Activity B “Implementation of IT infrastructure and Stage 1 court systems”, the completion date was deferred three times after the Steering Committee’s meetings held in December 2016, January 2018 and May 2019. However, for the first two deferrals, the relevant revised completion dates were only reported in March 2017 and April 2018 (i.e. a delay of three months each); and
 - (iii) regarding Activity D “Implementation of Stage 2 court systems”, the completion date was deferred after the Steering Committee’s meeting held in June 2017. However, the revised completion date had not been reported in any progress reports submitted to OGCIO. Subsequently, the completion date was further deferred three times after the Steering Committee’s meetings held in January 2018, November 2018 and May 2019. For the first two deferrals, the relevant revised completion dates were only reported in July 2018 and January 2019 (i.e. a delay of six and two months respectively);
- (b) ***Approval for changes not included in progress reports.*** In three of the seven progress reports with revised completion dates reported, the Judiciary Administration did not mention that approvals for revising the completion dates had been obtained, contrary to the requirement in OGCIO’s guidance note (see para. 3.17(a)(ii));
- (c) ***Analysis on project slippage not documented.*** There were occasions where the analysis on project slippage in Quarterly Project Progress Review Forms (see para. 3.17(b)) had not been completed. For example, while the Judiciary Administration had reported in the progress reports for March 2017, April 2018 and May 2019 that the completion date for Activity B “Implementation of IT infrastructure and Stage 1 court systems” would be deferred (see (a)(ii) above) from December 2016 to February 2018 (i.e. a slippage of 14 months) and further to January 2019 (i.e. a slippage of 11 months) and March 2021 (i.e. a slippage of 26 months), the Judiciary Administration had not documented the analysis on project slippage in the corresponding Quarterly Project Progress Review Forms (i.e. March 2017, June 2018 and June 2019) submitted to OGCIO; and

Project governance

- (d) ***Inaccurate completion date reported.*** On two occasions, the reported revised completion dates were inaccurate:
- (i) the Judiciary Administration reported in April 2018 that the completion date for Activity B “Implementation of IT infrastructure and Stage 1 court systems” would be deferred from February 2018 to January 2019 after the Steering Committee’s meeting held in January 2018 (see (c) above). Audit examination of the information paper on ITSP progress update issued to members of the Steering Committee in January 2018 however revealed that only the core functions of the Stage 1 court systems would be rolled out to the District Court and the Kowloon City Magistrates’ Courts by January 2019 and extended to the remaining six Magistrates’ Courts by April 2019; and
 - (ii) the Judiciary Administration reported in May 2019 that the completion date for Activity C “Implementation of non-court systems” would be deferred from June 2019 to December 2019 after the Steering Committee’s meeting held in May 2019. However, Audit found that 3 of the 9 non-court systems would not be ready for rollout by December 2019 (see Table 5 in para. 2.6(b)).

In Audit’s view, it may be misleading to indicate January 2019 as the revised completion date in (d)(i) above and December 2019 in (d)(ii) above considering that some of the functions and systems would be unlikely to be put into live run by that time. In light of the audit findings in paragraphs 3.16 to 3.18, the Judiciary Administration needs to improve the reporting of ITSP project progress with a view to enhancing the monitoring, transparency and accountability of ITSP project implementation.

Audit recommendations

3.19 **Audit has recommended that the Judiciary Administrator should:**

- (a) **consider reviewing the current governance structure of ITSP and ensure that any revisions to the governance structure of ITSP are properly endorsed by the appropriate authority where appropriate;**

- (b) take measures to improve the project governance under ITSP, including:**
 - (i) convening timely meetings for the Steering Committee to discuss and resolve project issues at a strategic level, and to make project decisions in accordance with PMP;**
 - (ii) providing more timely project progress updates to CIT;**
 - (iii) improving the timeliness of submission and quality of the monthly highlight reports to facilitate the effective monitoring of the project progress by the Steering Committee and ITSP Delivery and Assurance Team; and**
 - (iv) maintaining proper records on approving revisions of completion dates of project activities by the Steering Committee; and**

- (c) improve the reporting of ITSP project progress with a view to enhancing the monitoring, transparency and accountability of ITSP project implementation, including:**
 - (i) reporting the progress and scheduled/revised completion dates of the projects under ITSP by stages in future annual progress reports submitted to FC;**
 - (ii) ensuring that any revisions to the completion dates are timely updated in the annual progress reports submitted to FC; and**
 - (iii) ensuring the timely and accurate reporting of revised/actual completion dates of project activities with proper documentation of explanations on project slippages and approvals of revised completion dates in the periodic progress reports submitted by the Judiciary Administration to OGCIO.**

Response from the Judiciary

3.20 The Judiciary Administrator agrees with the audit recommendations. She has said that:

- (a) on the basis of the changes in the overall governance structure described in paragraphs 3.9 and 3.11 over the past few years, the Judiciary Administration is in the process of further consolidating and refining the governance structure for monitoring the implementation of the projects under ITSP Phase 1 Stages 1 and 2, and will submit the revised structure to CIT for endorsement;
- (b) the Judiciary Administration has started to take actions to improve the project governance under ITSP as suggested by Audit in paragraph 3.19(b); and
- (c) the Judiciary Administration has started to take actions to enhance the monitoring, transparency and accountability of ITSP project implementation as suggested by Audit in paragraph 3.19(c).

PART 4: OTHER RELATED ISSUES

4.1 This PART examines other issues relating to the implementation of ITSP, focusing on:

- (a) provision of e-services (paras. 4.2 to 4.14);
- (b) enhancement of audio-visual presentation equipment in courtrooms (paras. 4.15 to 4.25); and
- (c) promotion of the use of e-bundles (paras. 4.26 to 4.35).

Provision of e-services

4.2 *Judiciary's website.* The Judiciary's website is one of the most frequently used channels through which the Judiciary communicates with the community. The website provides access to a wealth of information about the Judiciary, its services for court users, and its latest news and developments. In 2018, the Judiciary's website recorded around 80 million page views. Among the webpages, the online Legal Reference System and the e-services (e.g. e-hearing date enquiry services) had the highest patronage.

4.3 *Website revamp project under ITSP.* Under ITSP, the Judiciary's website would undergo a two-stage revamp to enhance its user-friendliness, enrich the dissemination of information, and help website visitors access the future e-services to be introduced progressively (see para. 2.3(d)). The first-stage revamp, which mainly covered a website facelift exercise, was completed in October 2018. The second-stage revamp, which had a larger scale in terms of both user interfaces and content organisation (Note 32), was still in progress (position up to June 2019). The Judiciary Administration planned to roll out more new functions and e-services in the

Note 32: *For example, in addition to the Judiciary's homepage, web contents disseminated through satellite sites, such as the Civil Justice Reform website and the Mediation website, would also be reorganised.*

Other related issues

Judiciary's website and the external web portal (Note 33) along with the full rollout of the Stage 1 court systems for external users in early 2021 (see para. 2.6(a)).

4.4 ***Accessibility requirements and best practices of website design.*** OGCI has developed a set of guidelines on accessibility requirements and best practices for the design of government websites and e-services (Note 34). The guidelines stipulate that, B/Ds' websites should provide relevant and up-to-date information in an efficient and effective manner, and in a format that encourages access by the local and international communities. According to the Judiciary Administration, as the Judiciary's website is not a Government website, it may make reference to, but not adopt on a mandatory basis, these guidelines.

Need to improve dissemination of information on court hearings

4.5 Members of the public and court users could obtain information about schedules of court hearings (e.g. date, parties, judge and court of hearings) and related matters mainly via the following channels:

- (a) ***Daily Cause Lists and e-hearing date enquiry services.*** Daily Cause Lists provide the public with information on the court hearings scheduled on the next working day and are posted on the Judiciary's website by 6:30 p.m. on the working day preceding the hearing day. A search function is also provided for enquiry of the Daily Cause Lists by case number or by party name. For searching of court cases further away, court users (normally parties to court proceedings) may use the e-hearing date enquiry services to enquire the hearing date by case number (Note 35); and

Note 33: *The external web portal, accessible through the Judiciary's website, will be developed to act as a platform to disseminate information to the public, and serve as the gateway for users to conduct e-services (e.g. e-filing and e-payment).*

Note 34: *OGCI's guidelines on accessibility requirements and best practices include Guidelines on Dissemination of Information through Government Websites, Technical Notes on Website Development and Maintenance, and Common Look and Feel Guidelines and Design Specifications.*

Note 35: *According to the Judiciary Administration, the Daily Cause Lists are released by the courts for the purpose of facilitating people intending to observe court proceedings (such as media and members of the public) whereas the use of e-hearing date enquiry services is enabled by the courts for the purpose of assisting parties to court proceedings in keeping track of the progress of hearing dates.*

- (b) ***Pending Lists and Warned Lists.*** Pursuant to the Practice Directions of the Judiciary, civil actions with an estimated length of trial of three days or less are generally assigned to the Running List (Note 36). On the last day of each month, the Judiciary publishes a Pending List (i.e. a list of cases on the Running List which are expected to be tried during the next succeeding month) on the notice boards in the Court of First Instance and the District Court. Each Wednesday, those cases on the Pending List which are expected to be tried during the next succeeding week are put on another list, i.e. the Warned List (Note 37), which is published on the Judiciary's website.

4.6 ***Areas for improvement.*** Audit examination has revealed the following areas for improvement which should be taken into account, where appropriate, in implementing the second stage of the website revamp project under ITSP (see para. 4.3):

- (a) ***Need to consider improving the dissemination of future hearing information.*** While the Daily Cause Lists provide a more user-friendly enquiry function (i.e. a search could be conducted by party name in addition to case number) than the e-hearing date enquiry services, the information provided is for hearings on the next working day only. Users who wish to enquire information about future hearings could only conduct a search via the e-hearing date enquiry services provided that the case number is known. In this connection, Audit notes that in some other jurisdictions (e.g. New Zealand and Singapore), a monthly or bi-weekly list of upcoming hearings is published in addition to the daily lists (Note 38);

Note 36: *In general, civil actions to be tried in the Court of First Instance and the District Court are assigned either to the Running List (for cases with an estimated length of trial of 3 days or less) or the Fixture List of the respective courts. For cases in the Fixture List, parties shall attend before the Listing Officer on a scheduled date for fixing the trial date.*

Note 37: *Two Warned Lists are published each for the Court of First Instance of the High Court as well as the District Court: one for the current week which is updated daily, and another for the next week which is updated weekly.*

Note 38: *In the Courts of New Zealand's website, in addition to daily lists, the Court of Appeal and the Supreme Court publish a monthly list of upcoming hearings whereas the Supreme Court publishes all upcoming hearings. In Singapore, the websites of the Supreme Court and State Court publish bi-weekly lists of upcoming hearings.*

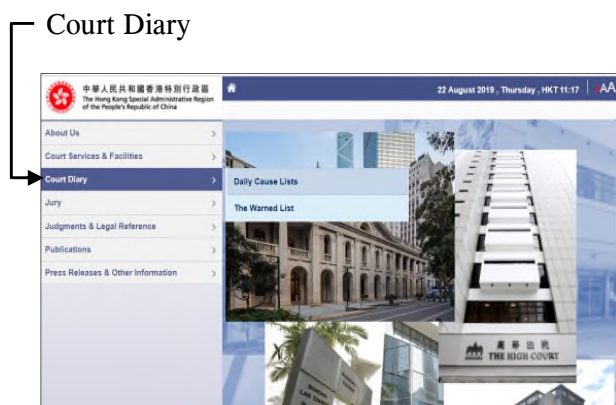
Other related issues

- (b) *Need to facilitate access of information on court hearings under same webpage.* While the types of information provided under the Daily Cause Lists and the e-hearing date enquiry services are basically the same, the two are placed under different headers on the Judiciary’s website, i.e. the Daily Cause Lists are placed under “Court Diary” whereas the e-hearing date enquiry services are found in the “e-services” section under the header “Court Services & Facilities” (see Figures 2(a) and (b)). With reference to OGCIO’s guidelines, contents of government webpages should be categorised in such a way that users can generally locate the required information with ease (see para. 4.4). The Judiciary Administration should consider making reference to the OGCIO’s guidelines as there is merit in consolidating the two e-services, e.g. by placing them under the same header or showing the two sets of information on the same webpage;

Figures 2(a) and (b)

Locations for retrieving court hearings information on Judiciary’s website

(a) Daily Cause Lists



(b) E-hearing date enquiry services



Source: Judiciary website as at 22 August 2019

- (c) *Need to facilitate multiple selection of Daily Cause Lists.* A total of 29 types of Daily Cause Lists (mainly by level and location of courts) can be viewed on the Judiciary’s website. To view the hearing schedules in the Daily Cause Lists, a person needs to select the court (or court list) in which the hearing concerned is listed. The website, however, does not allow selection of multiple courts or court lists. Hence, a person may find it

difficult to obtain the information he needs if he does not know what level of court the case is heard or which court list the case belongs to; and

- (d) ***Pending Lists not available online.*** Unlike the Daily Cause Lists and the Warned Lists which can be found on the Judiciary's website, the Pending Lists (see para. 4.5(b)) can only be viewed at the notice boards at the High Court and the District Court. As shown in the Judiciary's website, it is the responsibility of the parties concerned to check the Pending Lists on the last day of each month to see whether their cases have been included. To provide information in a format that facilitates access by users of the information, the Judiciary Administration should consider the merits of publishing the Pending Lists on the Judiciary's website.

Need to improve provision of information on judgments and legal reference

4.7 ***Legal Reference System.*** The online Legal Reference System is the most visited webpage within the Judiciary's website, accounting for about 73% of the total number of visits. It contains information such as judgments of various levels of courts and the Judiciary's Practice Directions. The list of judgments is sorted by court level, case type and then by the year in which the case was filed. Two search functions, namely quick search (by case number or Neutral Citation Number) and advanced search (by up to four search parameters), are available for users to look up the judgments concerned.

4.8 ***Need to consider enhancing search functions of Legal Reference System.*** Audit visited websites providing similar information in Hong Kong (e.g. the website of the Hong Kong Legal Information Institute) and in other jurisdictions (e.g. the websites of Federal Court of Australia and Courts of New Zealand) and noted that their search functions were more user-friendly. In particular, they allowed more search parameters to be used in a conjunctive manner (up to 16 parameters as against four in the Judiciary's website) and longer date range for search by date of judgment (no limit as against one particular day in the Judiciary's website), and offered more options for sorting the list of judgments (e.g. sorting by case title and citation frequency).

Other related issues

4.9 ***Integration with iCMS.*** Audit noted that integration of the Legal Reference System with iCMS would be implemented in Stage 2 of the six-year action plan under Phase 1 of ITSP (see para. 1.7) which was expected to commence in early 2020. In view of the high usage rate of the online Legal Reference System, Audit considers that it is an opportune time (upon completion of most of the application modules of the Stage 1 court systems by end of 2019 — see Table 4 in para. 2.6(a)) for the Judiciary Administration to explore possible enhancements to the Legal Reference System by making reference to similar websites as appropriate with a view to facilitating retrieval of relevant information by the public.

Need to ensure accuracy of information uploaded onto the Judiciary's website

4.10 ***Inaccurate information on the Judiciary's website.*** With reference to OGCIO's guidelines, it is the responsibility of B/Ds to ensure that information uploaded onto the Internet is up-to-date (see para. 4.4). In conducting a review on the Judiciary's website as of August 2019, Audit noted a few discrepancies. For example, in the online Legal Reference System, a judgment which was handed down in 2019 was incorrectly recorded as handed down in 2016. As a result, the judgment could not be located using the search function by judgment date in the Legal Reference System. In another example, while it was stated in the Daily Cause Lists webpage that the information in the Daily Cause Lists would be updated by 6:30 p.m. daily (see para. 4.5(a)), it was incorrectly stated in the webpage of e-hearing date enquiry services that the update time of the Daily Cause Lists was by 6:00 p.m. Audit considers that the Judiciary Administration should refine its internal guidelines to remind its staff to ensure the accuracy and consistency of information before uploading onto the website. In the long run, the Judiciary Administration should explore ways to monitor the updating of information and regularly assess the overall effectiveness of the website with reference to OGCIO's guidelines (see para. 4.4).

Need to improve utilisation and user-friendliness of e-services

4.11 ***Low utilisation of online evaluation questionnaires on voluntary mediation.*** Apart from the dissemination of information on court hearings and legal reference, the Judiciary also provides a number of e-services through its website, such

as appointment services at the Labour Tribunal and the Probate Registry (Note 39), and submission of online evaluation questionnaires on voluntary mediation. In this connection, Audit noted that no online evaluation questionnaire on voluntary mediation (Note 40) had been submitted from 2014 to 2018. In light of the low utilisation, a review on the use of such online service to solicit users' views on the effectiveness of voluntary mediation might be warranted.

4.12 ***Mobile-friendliness of some e-services.*** With reference to OGCIO's guidelines, in view of a major trend for public users to access government websites through mobile devices (such as tablets and smartphones), it is imperative to implement a "mobile-friendly design" (Note 41) to provide a good user experience for website access by various electronic devices. While the Judiciary's website had undergone a revamp in October 2018 (see para. 4.3) to adopt a mobile-friendly design in general, Audit found that some e-services (e.g. evaluation questionnaires for voluntary mediation, appointment service of the Probate Registry and apostille verification service) had not been enhanced. There is a need to revamp the relevant e-services by adopting a mobile-friendly design to facilitate public access through mobile devices as soon as practicable.

Audit recommendations

4.13 **Audit has recommended that the Judiciary Administrator should:**

Note 39: *The Probate Registry of the High Court helps process applications for the issue of grant (a court order authorising one or more persons to administer the deceased's estate). The e-services of the Probate Registry allow applicants to book, enquire or cancel an appointment with the Probate Registry as well as to update their contact information.*

Note 40: *In accordance with the Judiciary's Practice Directions, for the purpose of evaluating the effectiveness of mediation for construction cases and cases involving disputes between shareholders, the parties or their representatives are requested to report to the relevant Clerk to the Judge the results of the use of mediation.*

Note 41: *Mobile-friendly design refers to website contents that are automatically adjusted to fit into different screen sizes, resolutions and orientation, so that users will be provided with optimal viewing and interaction experiences, enhanced readability and navigation of contents with best viewing effects. In particular, horizontal scrolling will not be required when viewing website contents, and size and spacing of contents (e.g. text, graphics) can also be automatically adjusted to fit into the screen for best viewing experience.*

Other related issues

- (a) **consider improving the dissemination of court hearing information through the Judiciary’s website, taking into account areas for improvement mentioned in paragraph 4.6;**
- (b) **explore possible enhancements to the online Legal Reference System by making reference to similar websites in Hong Kong and other jurisdictions as appropriate;**
- (c) **refine the internal guidelines to remind the Judiciary Administration’s staff to ensure the accuracy and consistency of information before uploading onto the Judiciary’s website;**
- (d) **consider ways to monitor the updating of information and regularly assess the overall effectiveness of the Judiciary’s website with reference to OGCIO’s guidelines;**
- (e) **consider the need to review the use of online evaluation questionnaires on voluntary mediation; and**
- (f) **enhance the e-services mentioned in paragraph 4.12 by adopting a “mobile-friendly design” to facilitate public access through mobile devices as soon as practicable.**

Response from the Judiciary

4.14 The Judiciary Administrator agrees with the audit recommendations. She has said that:

- (a) the Judiciary Administration will consider and explore practicable measures to enhance the user-friendliness in disseminating court hearing information through the Judiciary’s website, having regard to the intended purposes of the respective functions. If necessary, the Judiciary Administration will seek steer from the relevant committees and/or working groups chaired by JJOs;
- (b) the Judiciary Administration will explore possible enhancements to the online Legal Reference System;

- (c) to ensure the accuracy and consistency of information published through the Judiciary’s website, the Judiciary Administration will review and enhance the relevant internal guidelines for webpage owners as suggested by Audit in paragraph 4.13(c) and (d);
- (d) the Judiciary Administration will consult the relevant JJOs on the need to review the use of online evaluation questionnaires on voluntary mediation; and
- (e) the Judiciary Administration has planned to enhance the e-services mentioned in paragraph 4.12 by adopting a “mobile-friendly design” as soon as practicable.

Enhancement of audio-visual presentation equipment in courtrooms

4.15 *Courtroom audio-visual (A/V) presentation equipment.* Apart from IT systems which cover computers and their peripherals, various types of A/V equipment have been installed in courtrooms. According to the Judiciary Administration, there are ten major types of courtroom A/V systems (Note 42). As of January 2019, among others, there were audio-visual presentation systems (AVPS) installed in 102 (49%) of 208 courtrooms for the playback of evidence in different formats through computers and media players, and the broadcasting of electronic documents of the e-bundles (see para. 4.28) to the public during hearings.

4.16 *Implementation of courtroom technologies under ITSP.* Courtroom technologies would be implemented under ITSP to facilitate JJOs and clerks in accessing online case information in iCMS during hearings, and facilitate JJOs in viewing e-bundles and conducting simple trial-related actions. Video conferencing (where appropriate), projectors, and other visual equipment upgrades such as

Note 42: *The ten types of courtroom A/V systems are: (a) digital audio recording and transcription services system; (b) audio-visual presentation system; (c) public address and sound reinforcement; (d) induction loop system; (e) information display system; (f) courtroom extension and broadcasting system; (g) vulnerable witness system; (h) video conferencing system; (i) simultaneous interpretation system; and (j) real-time court reporting and transcription facilities.*

Other related issues

additional and larger monitors will also be included (Note 43). In the course of implementing ITSP, in June 2015, after consultation with external stakeholders, the Judiciary Administration came up with a checklist of service/facilities available in the court premises (the 2015 Checklist) which would be introduced in a progressive manner (Note 44). According to the consultation paper/2015 Checklist:

- (a) facilities for purposive use, such as multi-media presentations with A/V facilities and display facilities for electronic documents might be installed and fixed in some courtrooms whilst others might have the equipment-on-rack delivered to that courtroom for use when such need arises;
- (b) installation of such facilities should tie in with the fitting-out/renovation plans of the court premises to avoid causing disruption to the court proceedings; and
- (c) as some A/V facilities were installed some time ago, the Judiciary Administration would review the current settings of the A/V facilities inside courtrooms and replace the aged equipment to cope with the actual need by phases.

Need to expedite the replacement of outdated/obsolete A/V equipment

4.17 **Review of courtroom A/V systems.** In 2016, the Judiciary Administration conducted a review on the A/V systems in courtrooms of the Judiciary and found that:

Note 43: *According to the Judiciary Administration, the scale of upgrade of A/V facilities to be implemented under ITSP was rather limited, which included: (a) enabling the use of iCMS in courtrooms as far as IT infrastructure was concerned; (b) making ready the infrastructure to facilitate the provision of video conferencing support in court hearings; and (c) providing a certain number of fixed and mobile video conferencing equipment in the courtrooms.*

Note 44: *According to the Judiciary Administration, after a subsequent strategic and comprehensive review on courtroom technologies as a whole (see para. 4.17), more A/V facilities would be upgraded or made available. Thus, some facilities included in the 2015 Checklist would be implemented under ITSP and some outside ITSP.*

- (a) about 47% of AVPS had been installed for over 10 years with outdated/obsolete devices. For example, AVPS in 12 courtrooms of the District Court were equipped with small size monitors (ranging from 6.4 to 12 inches — see Photographs 1(a) and (b)) and connected through analog signal cables;

Photographs 1(a) and (b)

Small size monitors of an AVPS in the District Court

(a) Monitor on parties' bench



(b) Monitor for Judge



Source: Judiciary Administration records

- (b) the outdated/obsolete AVPS did not support signals inputted from notebook computers or portable equipment brought in by court users and their display resolution was far behind the current A/V technology. During court proceedings, relevant court exhibits might have to be reformatted or downgraded to lower resolution for display using the outdated/obsolete AVPS. In this connection, Audit noted that the Judiciary Administration had received complaints from JJOs and court users in 2015 and 2016 about the poor display quality of the A/V facilities which affected the viewing of some video footages as evidence during trials. There was a need to replace the outdated/obsolete AVPS in the courtrooms as far as practicable; and
- (c) opportunities should be sought to see whether fitting-out works for the courtrooms identified for replacement of outdated/obsolete A/V equipment could be carried out together with any upcoming projects with renovation requirements (e.g. fitting-out works for the implementation of iCMS in the District Court and the Summons Courts of the Magistrates' Courts) in one

Other related issues

go with a view to minimising disturbance to the court services and speeding up the enhancement process.

4.18 ***Outdated/obsolete AVPS not yet replaced.*** While the courtroom improvement works for the implementation of iCMS in the District Court and the Summons Courts of the Magistrates' Courts commenced in July 2016 and completed in December 2017, Audit found that opportunities had not been taken to replace all the outdated/obsolete AVPS in one go. For example, according to the Judiciary Administration's A/V equipment list as of March 2019, 11 of the 12 courtrooms of the District Court (see para. 4.17(a)) were still using outdated/obsolete AVPS. In June 2019, Audit conducted a site visit to one of the 11 courtrooms in the District Court and found that the outdated/obsolete AVPS had not been replaced.

Required display facilities not installed in the District Court

4.19 ***Required display facilities not installed.*** According to the 2015 Checklist, display facilities for electronic documents may be installed and fixed in some courtrooms (see para. 4.16(a)). According to the Judiciary Administration, the courtroom systems specifications for the respective level of court would be drawn up with reference to the 2015 Checklist in conjunction with the implementation of iCMS in that level of court. Audit examined the courtroom systems specifications prepared for the District Court and found that the following display facilities would be installed:

- (a) large display units for some courtrooms (namely the Plea Court and Masters' Courts); and
- (b) display units on the counsel's bench for viewing e-bundles.

Audit examination of the Judiciary Administration's A/V equipment list as of March 2019 however found that 16 (41%) of 39 courtrooms in the District Court were not equipped with AVPS. For the remaining 23 (59%) courtrooms, the outdated/obsolete AVPS in 11 courtrooms had not been replaced or enhanced (see para. 4.18) during the fitting-out works for the implementation of iCMS between 2016 and 2017. In short, the display facilities specified in (a) and (b) above were not installed/upgraded in 27 courtrooms. For the remaining 12 (i.e. 39 - 16 - 11) courtrooms, Audit noted that a projection screen was installed in each of the 12 courtrooms, but no display unit was installed on the counsel's bench in accordance with the courtroom systems specifications.

4.20 Upon enquiry on the issues in paragraphs 4.17 to 4.19, the Judiciary Administration in September 2019 informed Audit that:

- (a) in taking forward the replacement work mentioned in paragraph 4.17(c), the Judiciary Administration considered that:
 - (i) technically, simply replacing the display units alone might not be able to resolve the display quality issues encountered. As an ultimate solution, replacement/upgrading of the whole AVPS would be required in order to improve the overall A/V support in courtrooms (e.g. it would be necessary to switch the related A/V equipment from an analogue-based one to a digital-based one);
 - (ii) replacing/upgrading individual A/V systems might not be a viable approach in view of the fast technology advancement in consideration of the interoperability, compatibility and sustainability of the different A/V systems; and
 - (iii) a more holistic enhancement approach was essential to address the needs and requirements of the courtroom operations in the longer run;
- (b) in 2018-19, the Judiciary Administration conducted a more detailed technical review on the use of A/V and IT in the courts. According to the review:
 - (i) a new building level and courtroom level architecture for enabling future A/V and IT implementation and integration had been endorsed;
 - (ii) a list of projects had been identified, based on which revamping of the existing AVPS in the District Court had commenced. The Judiciary Administration was making necessary arrangements to take forward the other projects progressively; and
 - (iii) the outdated/obsolete AVPS in the District Court mentioned in paragraph 4.18 would be replaced progressively from 2020 to 2022; and

Other related issues

- (c) arising from the more comprehensive review of the A/V and IT facilities in courtrooms in recent years and the decision not to undertake replacement of outdated/obsolete A/V equipment in a piecemeal manner (see (a) and (b) above), the Judiciary Administration had acquired portable e-presentation systems (see para. 4.22) as an interim measure to meet the day-to-day operational needs of the District Court and Magistrates' Courts.

4.21 *Need to ensure enhanced/up-to-date A/V facilities are provided.* While noting the Judiciary Administration's efforts in recent years in improving the A/V facilities in courtrooms, as well as the decision not to replace outdated/obsolete A/V equipment in a piecemeal manner, in light of the common use of mobile phones as video recorders nowadays, it is anticipated that the presentation of video footages in courts will become more frequent. In Audit's view, the Judiciary Administration needs to take measures to ensure that enhanced/up-to-date AVPS and display facilities required for viewing e-bundles (see para. 4.28) are provided in courtrooms to support court proceedings (e.g. expediting the replacement of outdated/obsolete AVPS in the District Court and provision of more portable e-presentation systems, where appropriate).

Need to monitor utilisation of e-presentation systems

4.22 *E-presentation systems.* Audit noted that according to the 2016 review, in view of the unsatisfactory display quality of the outdated/obsolete AVPS (see para. 4.17(b)), the Judiciary Administration, as a short-term initiative, sourced a portable solution, i.e. to use notebook computers for displaying evidence in courtrooms (namely e-presentation systems — see Photograph 2). Given that the e-presentation systems provide better display quality, since December 2016, the Judiciary Administration has progressively acquired 20 sets of e-presentation systems as A/V presentation facilities in the courtrooms for shared use in the Magistrates' Courts, the District Court and the High Court.

Photograph 2

Use of e-presentation systems in a courtroom



Source: *Judiciary Administration records*

4.23 ***Actual utilisation not fully monitored.*** In January 2018, the Steering Committee was informed of the introduction of the e-presentation systems and that the usage of the e-presentation systems would be monitored. In response to Audit's request for the utilisation statistics, the Judiciary Administration provided Audit with the number of requests for technical support forwarded to the Information Technology Office for setting up the e-presentation systems in courtrooms as an indicator for utilisation. According to the Judiciary Administration, such figures were kept and were considered to largely represent the statistics relating to the use of the e-presentation systems as court support staff would normally request technical support from the Information Technology Office prior to the actual use of the e-presentation systems. In this connection, Audit noted that the number of occasions where court support staff set up the e-presentation systems without seeking technical support from the Information Technology Office was not recorded. In Audit's view, the Judiciary Administration needs to improve its existing mechanism for keeping utilisation records of the e-presentation systems and monitor their utilisation, with a view to collecting statistics for management review and future planning, and provision of such facilities for court use.

Audit recommendations

- 4.24 **Audit has recommended that the Judiciary Administrator should:**
- (a) **take measures to ensure that enhanced/up-to-date AVPS and required display facilities for viewing e-bundles are provided in courtrooms to support court proceedings; and**
 - (b) **improve the existing mechanism for keeping utilisation records of the e-presentation systems and monitor their utilisation, with a view to collecting statistics for management review and future planning and provision of such facilities for court use.**

Response from the Judiciary

4.25 The Judiciary Administrator agrees with the audit recommendations. She has said that:

- (a) the Judiciary Administration will continue to make available appropriate A/V and IT facilities in courtrooms to support court proceedings, having regard to the strategies adopted after the more comprehensive review of the A/V and IT facilities mentioned in paragraph 4.20(b); and
- (b) the Judiciary Administration is taking measures to improve the existing mechanism for keeping utilisation records of the e-presentation systems.

Promotion of the use of e-bundles

4.26 ***Use of paper bundles.*** As a legislative requirement, court users and parties to a litigation are required to submit case bundles (documents to be placed before the trial Judge) in paper form to the Judiciary. Hence, paper is predominantly being used in court operations.

4.27 ***Need to reduce the use of paper.*** In May 2017, a LegCo Member commented that as paper was predominantly used in various aspects of court procedures and litigation landscape, it was environmentally unfriendly given the large

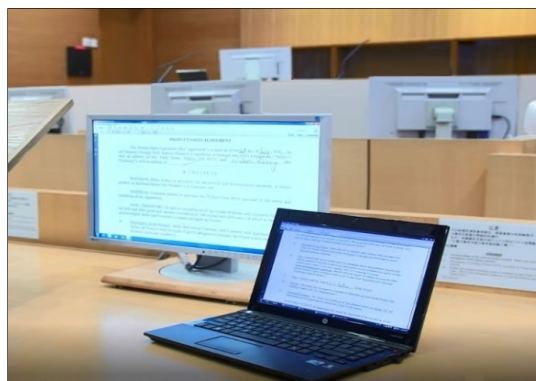
quantity of paper consumed annually and that there was a need for the Judiciary to reduce the use of paper. The Judiciary Administration responded in October 2018 that the use of e-bundles and the pilot scheme on e-submissions in the District Court (see para. 4.28) were among the Judiciary's various initiatives to reduce the use of paper.

Use of e-bundles

4.28 ***Electronic bundles in portable document format (EBPDF).*** To facilitate court proceedings, in 2011, the Judiciary made available the use of EBPDF at the High Court to replace the Electronic Bundle System (Note 45) where paper bundles were scanned into portable document format for uploading to IT devices for JJOs and counsels to view and make notes during pre-hearing readings and court hearings, and to conduct hearings with the use of EBPDF (see Photograph 3 for an illustration). Since 2016, as part of a pilot scheme in the District Court, users of the District Court have been able to submit hearing bundles via an e-submission platform (see para. 4.27). In 2017, a revised Practice Direction on the procedures of handling civil appeals at the Court of Appeal of the High Court was issued, requiring legally represented parties to submit an electronic copy of bundles on top of the hard copy, unless the court orders otherwise.

Photograph 3

Demonstration on the use of EBPDF



Source: Judiciary Administration records

Note 45: *The Electronic Bundle System had been used in the High Court since 2006 as a document retrieval system, enabling storing and indexing of large volume of documents, and retrieving and displaying of the bundle documents on multiple computer monitors and projector screens during the course of trial. Owing to various reasons (e.g. the Electronic Bundle System was designed for complex trial cases), the use of the system was infrequent (i.e. only 4 cases from 2006 to 2011).*

Other related issues

4.29 ***Benefits of using EBPfD.*** According to the Judiciary Administration, the use of EBPfD is anticipated to bring about benefits to ensure economical and efficient disposal of cases, including:

- (a) reduction in the use of court time for retrieval and referral of bundle documents; and
- (b) ensuring environmental friendliness and achieving savings in legal and administrative costs for producing copies of paper bundle documents.

Need to expedite legislative amendments and consider promoting wider use of EBPfD

4.30 ***Use of e-bundles in other jurisdictions.*** In 2015, the Judiciary Administration conducted a research and found that a number of jurisdictions had adopted e-bundles in hearings (see Table 11). As shown by the research result, the use of e-bundles has become mandatory in a number of jurisdictions.

Table 11

Use of e-bundles in other jurisdictions (2015)

Jurisdiction	Use of e-bundles
Singapore	E-bundles are mandatory in the Supreme Court.
United Kingdom	For appeals in the Supreme Court, parties are required to file e-bundles in addition to filing hard copies.
United States	Most Federal Courts require legal profession to file documents electronically unless counsel is granted an exemption.
New Zealand	Parties are encouraged to use e-bundles.

Source: Audit analysis of Judiciary Administration records

4.31 *Low usage of EBPDF.* Despite that the use of EBPDF has been made available for more than eight years, Audit found that the utilisation of EBPDF in the High Court and the District Court remained very low (see Table 12).

Table 12

**Utilisation of EBPDF in the High Court and the District Court
(2011 to 2018)**

Year	High Court			District Court		
	No. of cases filed (Note 1)	No. of cases using EBPDF		No. of cases filed (Note 1)	No. of cases using EBPDF	
		Pre-hearing reading	Hearing		Pre-hearing reading	Hearing
2011	34,611	1	—	46,779	Not applicable (Note 2)	
2012	35,835	16	—	45,728		
2013	37,980	8	1	45,218		
2014	39,674	43	1	44,134		
2015	41,415	17	—	43,298		
2016	40,085	12	—	45,414	2	—
2017	40,861	1	—	45,340	3	—
2018	42,837	85	2	45,986	4	—

Source: Judiciary Administration records

Note 1: According to the Judiciary Administration, only a small percentage of cases filed to the court will eventually reach the stage of hearings.

Note 2: Use of EBPDF in the District Court started in 2016 (see para. 4.28).

4.32 Upon enquiry, the Judiciary Administration in September 2019 informed Audit that:

Other related issues

- (a) the adoption of the use of e-bundles at hearings had been voluntary. Whether a JJO considered it appropriate to use e-bundles for a particular case depended on a wide range of factors, including the volume of papers involved, complexity of cases, readiness of the parties, and the related costs and benefits for the court and parties concerned;
- (b) given the existing legal restrictions, parties submitting e-bundles were also required to submit the paper bundles to the court. Hence, the adoption of e-bundles might incur additional costs, time and efforts both on the court and the parties concerned. Such hindrance would be removed after the enactment of the legislative amendments, when it would generally be more cost-effective to use e-bundles. However, since the use of e-bundles might be more suitable for certain types of cases, it was expected that the actual adoption of e-bundles at court hearings would still depend on the various factors mentioned above; and
- (c) the Judiciary Administration recently considered that upon the enactment of the legislative amendments and with the likely synergy between e-filing and the use of e-bundles, it might be an opportune time for the Judiciary to consider promoting the wider use of EBPDF in the coming few years. In particular, the Judiciary might first accumulate more experience in the actual use of EBPDF and consider whether and, if so, how best to encourage greater use of EBPDF at various court levels having regard to all relevant factors such as the overall priorities and possible resource constraints of the Judiciary.

4.33 *Interim and long-term actions for promoting the wider use of EBPDF.* In Audit's view, for improving operational efficiency and achieving environmental friendliness, there is merit in encouraging wider use of EBPDF at all levels of courts in the long run. In the interim, the Judiciary Administration needs to expedite actions to complete the legislative amendments to remove the existing legal restrictions on paper bundles (see para. 4.32(b)). The Judiciary Administration also needs to consider the best ways to accumulate the necessary experience (e.g. encouraging early switch from paper bundles to EBPDF in certain court levels by those legal practitioners and prosecuting departments and agencies which may be more willing and ready to use EBPDF). The Judiciary Administration should then, in consultation with the relevant external stakeholders (such as the legal professional bodies), consider whether and, if so, how best to promote the wider use of EBPDF at various court levels.

Audit recommendations

- 4.34 **Audit has *recommended* that the Judiciary Administrator should:**
- (a) **expedite actions to complete the legislative amendments for using the electronic mode of handling court-related documents and consider the best ways to accumulate the necessary experience in the use of EBPDF; and**
 - (b) **in consultation with the relevant external stakeholders (such as the legal professional bodies), consider whether and, if so, how best to promote the wider use of EBPDF at various court levels in the long run.**

Response from the Judiciary

4.35 The Judiciary Administrator agrees with the audit recommendations. She has said that:

- (a) the relevant legislative amendments needed to enable the submission of electronic bundles without the need for hard copy have been incorporated into the legislative amendment exercise stated in paragraph 1.14. Subject to the legislative process, the Judiciary hopes to bring the amendments into effect by end 2020; and
- (b) the Judiciary Administration will engage the relevant stakeholders at suitable junctures on the promotion of the wider use of EBPDF in the longer run.

Courts and tribunals in Hong Kong (30 June 2019)

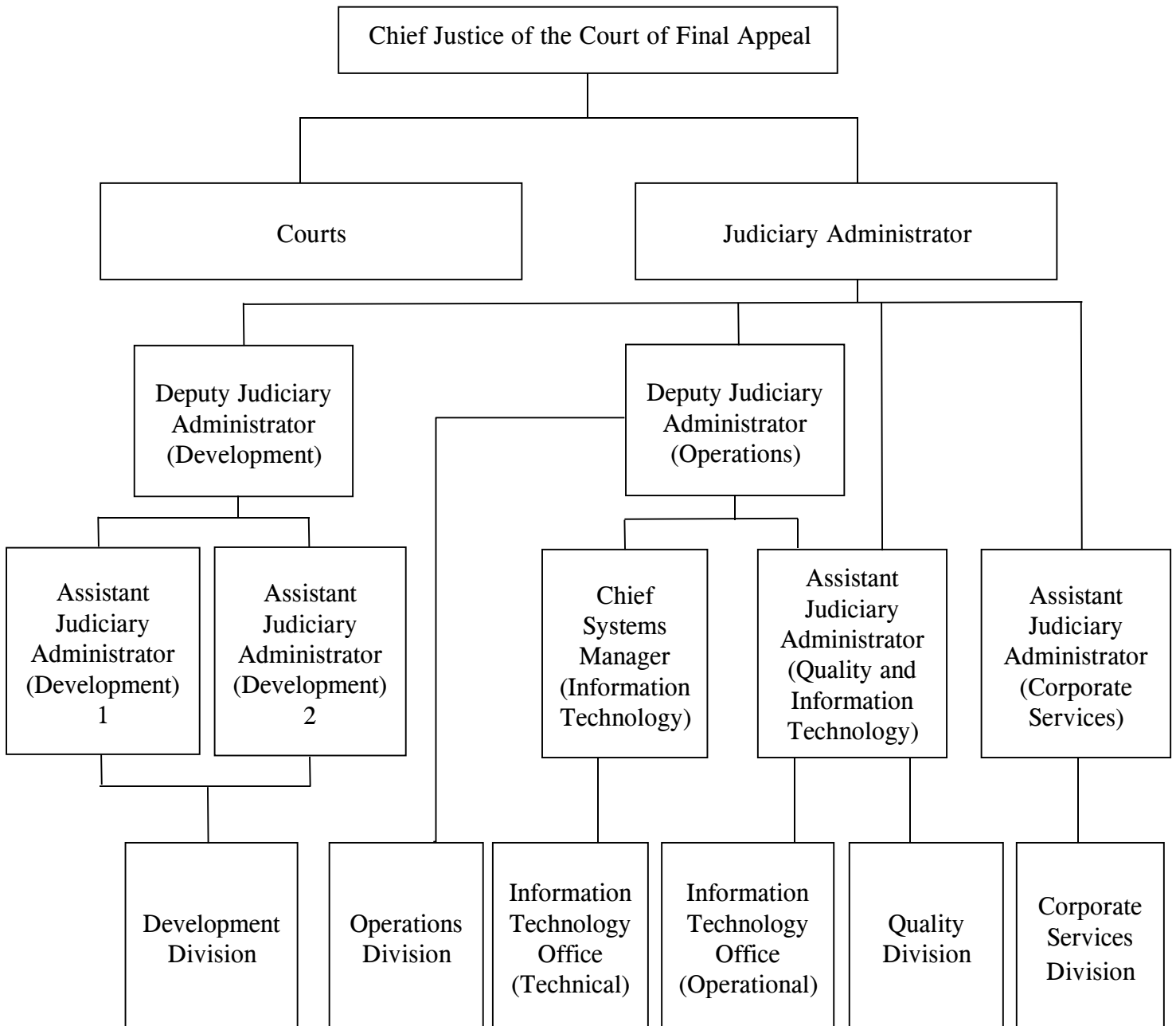
Court/tribunal	Jurisdiction
Court of Final Appeal	It is the highest appellate court in Hong Kong. It hears appeals on civil and criminal matters from the Court of Appeal and the Court of First Instance of the High Court.
Court of Appeal of the High Court	It hears appeals on civil and criminal matters from the Court of First Instance of the High Court and the District Court, as well as appeals from the Competition Tribunal and the Lands Tribunal.
Court of First Instance of the High Court	It has unlimited jurisdiction in both civil and criminal matters. It also hears appeals from the Magistrates' Courts and the Labour Tribunal, the Small Claims Tribunal and the Obscene Articles Tribunal.
Competition Tribunal	It has primary jurisdiction to hear and adjudicate competition-related cases.
District Court	It has civil jurisdiction to hear monetary claims of over \$75,000 up to \$3 million or, where the claims are for recovery of land, the annual rent or rateable value does not exceed \$320,000. In its criminal jurisdiction, it may hear more serious offences, except murder, manslaughter and rape. The maximum term of imprisonment that it may impose is seven years.
Family Court	It hears applications pertaining to divorce and separation as well as other related family and/or matrimonial matters.
Lands Tribunal	It deals with rating, valuation and tenancy disputes, and cases relating to building management and compensations for land resumption.
Magistrates' Courts	They exercise criminal jurisdiction over a wide range of offences, and are empowered to impose sentences up to three years' imprisonment and fines of up to \$5 million.
Juvenile Court	It has jurisdiction to hear charges against children (aged under 14) and young persons (aged between 14 and 16) for any offence other than homicide. It also deals with care and protection cases involving young people up to the age of 18.

Appendix A
(Cont'd)
(para. 1.2 refers)

Court/tribunal	Jurisdiction
Coroner's Court	It investigates sudden, unnatural or suspicious deaths occurring in Hong Kong. It holds inquests into deaths if necessary.
Labour Tribunal	It deals with claims arising from a breach of a contract of employment and the relevant provisions of the Employment Ordinance (Cap. 57), Minimum Wage Ordinance (Cap. 608) or the Apprenticeship Ordinance (Cap. 47). Hearings are informal and legal representation is not allowed.
Small Claims Tribunal	It deals with monetary claims arising from contract or tort, involving amounts not exceeding \$75,000. Legal representation is not allowed.
Obscene Articles Tribunal	It is responsible for the classification of articles and has exclusive jurisdiction to determine the question of obscenity or indecency when this issue arises in any civil or criminal proceedings in any court.

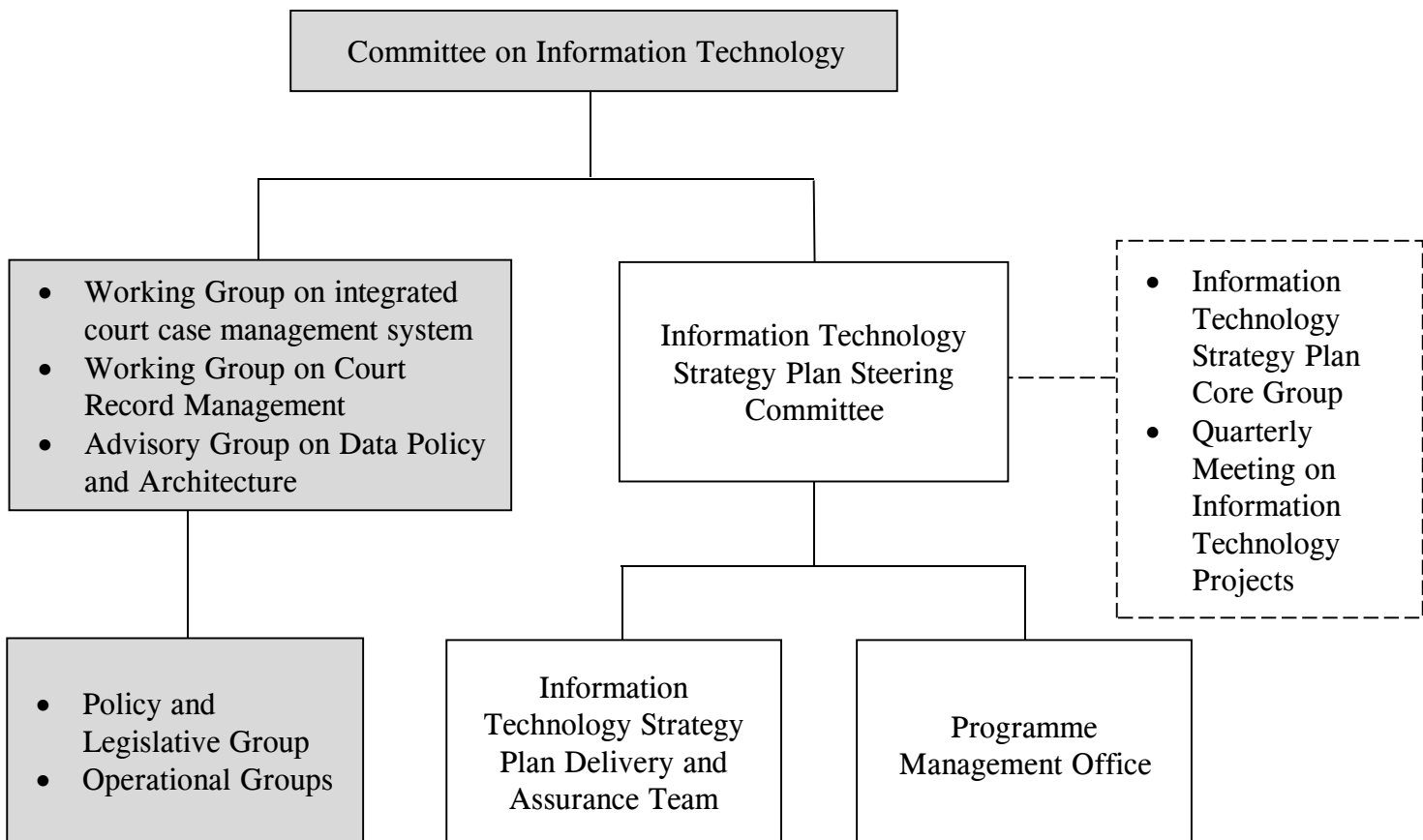
Source: Judiciary Administration records

**Judiciary:
 Organisation chart (extract)
 (30 June 2019)**



Source: *Judiciary Administration records*

**Governance structure for implementation
 of Information Technology Strategy Plan
 (30 June 2019)**



- Legend:
- Group led by judges and judicial officers
 - Group led by the Judiciary Administrator
 - Internal monitoring mechanism established under the Judiciary Administration

Source: *Judiciary Administration records*

Acronyms and abbreviations

Audit	Audit Commission
A/V	Audio-visual
AVPS	Audio-visual presentation systems
B/Ds	Bureaux and departments
CASEMAN	Case and Summons Management System
CIT	Committee on Information Technology
DoJ	Department of Justice
EBPDF	Electronic bundles in portable document format
FC	Finance Committee
iCMS	Integrated court case management system
ISSS	Information System Strategy Study
IT	Information technology
ITSP	Information Technology Strategy Plan
JJOs	Judges and judicial officers
LegCo	Legislative Council
NCSC	Non-Civil Service Contract
OGCIO	Office of the Government Chief Information Officer
PMP	Programme Management Plan
SA&D	System analysis and design
UAT	User acceptance test