#### NOTE FOR FINANCE COMMITTEE

# **Annual Report on the Implementation of Government Computer Systems**

At the Finance Committee (FC) meeting held on 20 November 1992, the Government undertook to provide Members with an annual progress report on the implementation of approved computerisation projects. This is the twenty-ninth report and shows the position as at 31 March 2021.

2. This report covers the progress of major computer projects funded under the Capital Works Reserve Fund Head 710 Computerisation (costing over \$20 million)<sup>Note</sup> and Head 708 Capital Subventions and Major Systems and Equipment (costing over \$10 million). These projects include the implementation of –

#### Head 710

- (a) departmental Information Systems Strategy (ISS) plans;
- (b) major administrative computer systems; and

#### **Head 708**

- (c) non-administrative computer systems.
- 3. Projects completed prior to 1 April 2020 have been covered in previous reports. Administrative computer projects costing above \$200,000 and not exceeding \$20 million (under Head 710 Subhead A007GX)<sup>Note</sup> are the subject of a separate annual report for Members on Capital Works Reserve Fund Block Allocations.

/Departmental .....

Note FC approved on 22 January 2021 an increase in the financial ceiling on the delegation of authority for approving computerisation projects under Subhead A007GX of Capital Works Reserve Fund Head 710 from \$10 million to \$20 million.

#### **Departmental ISS Plans**

Encl. 1 4. Enclosure 1 provides details of two projects on implementation of ISS plans. They include projects to implement the first stage of the strategic plan to re-engineer and transform public services for the Department of Health, and to replenish the existing information technology systems in the Judiciary.

#### **Major Administrative Computer Systems**

- Encl. 2 5. Enclosure 2 provides details of twenty-six projects on implementation of major administrative computer systems. Of these, four projects were completed in 2020-21
  - (a) Development of the Second Generation of Communal Information System (CIS) (Hong Kong Police Force (HKPF)): This project is to replace the existing CIS to meet HKPF's evolving operational, legal, social and information technology requirements. (Subhead A104YU);
  - (b) Replacement of the Infrastructure Platform for the Police Operational Nominal Index Computer System and the Criminal Intelligence Computer System (HKPF): This project is to replace the existing infrastructure platform in order to maintain an effective daily operation of law enforcement agencies and analysis of criminal activities. (Subhead A137YU);
  - (c) "iAM Smart" Platform (formerly known as Electronic Identity) (Office of the Government Chief Information Officer (OGCIO)): This project is to set up an "iAM Smart" platform to provide one-stop personalised services for all Hong Kong residents and allow them to use a single digital identity and authentication to conduct government and commercial transactions online. (Subhead A087XV); and
  - (d) Digital Transformation for Agile Delivery of e-Government Services (OGCIO): This project is to implement the next generation government cloud infrastructure and big data analytics platform to support agile delivery of e-Government services. (Subhead A088XV).

/Non-administrative .....

#### **Non-administrative Computer Systems**

- Encl. 3 6. Enclosure 3 gives details of six projects on implementation of non-administrative computer systems. Of these, one project was completed in 2020-21
  - (a) Installation of Traffic Detectors (Transport Department): This project is to install traffic detectors along some of the strategic routes together with a centralised data processing system for detection of vehicles passing by and collection of real-time traffic data. (Subhead 8183ZN).

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Office of the Government Chief Information Officer November 2021

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Department of Health	A021ZS	Information Technology (IT) Enhancement	1 Jun 2018	1,057.134	262.098	Initiative 1: Dec 2024	Initiative 1: No change	Initiative 1 – Clinical Services     Improvement
(DH)		Project of the DH  To implement a department-wide IT				Initiative 2: Jun 2021	Initiative 2: Sep 2021	Implementation for the new Clinical Information Management System (CIMS2) was in progress.
		enhancement project to improve its service delivery of clinical and healthcare services and performance of				Initiative 3: Jun 2024	Initiative 3: No change	<ul> <li>CIMS2 was successfully rolled out for Port Health Division in January 2021 and Professional Development Quality Assurance Service in March 2021.</li> </ul>
		regulatory functions, streamline its workflows to increase efficiency and transform itself into a		Estimated non-recurrent	Actual non-recurrent staff cost	Initiative 4: Dec 2020	Initiative 4: Mar 2022	<ul> <li>Dental Software Replacement project was completed in December 2020.</li> </ul>
		data-driven public organisation.		staff cost (\$M at 2020-21 level)	as at 31 Mar 2021 (\$M at 2020-21			• Initiative 2 – Business Support and Enablement
				DH: 19.819*	level)  DH: 8.671*			<ul> <li>Rollout of Incident Reporting</li> <li>System was completed in</li> <li>March 2021.</li> </ul>
								<ul> <li>System analysis and design report for Departmental Enquiry/Complaint Management System was compiled in March 2021. Development work was in progress.</li> </ul>
								• Initiative 3 – IT Operations Enablement
								<ul> <li>Establishment of DH IT Helpdesk was completed in March 2021.</li> </ul>
								<ul> <li>Infrastructure System Analysis and Design was completed in December 2020.</li> </ul>
								<ul> <li>Preparation work on New Data</li> <li>Centres project and Infrastructure</li> <li>Upgrade project was commenced.</li> </ul>

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								<ul> <li>Initiative 4 – Study for Future Developments</li> <li>Feasibility Study on Shared Licensing and Monitoring System was completed in March 2021.</li> <li>Data Architecture Study was in progress.</li> </ul>
								• For 2020-21, the actual expenditure of \$152.431M was about 97.9% of the approved provision of \$155.700M.

<sup>\*</sup> Staff efforts met by internal redeployment.

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Judiciary (Jud)		Implementation of Projects under the Information Technology Strategy Plan (ITSP) of the Jud  To replenish the existing information technology	24 May 2013	682.430	404.033	Jun 2016 (Stage 1)	Subject to the legislative process and the prevailing public health situation, Jud aimed at implementing integrated court	Due to the prolonged COVID-19 epidemic, implementation of the ITSP projects were affected as a result of the reduced staff capacity arising from the work from home arrangements and deployment of resources to handle the court's urgent and emerging needs such as remote hearings.
		systems by the latest technologies to ensure sustainable operation in the long run and to enhance the provision of more effective and efficient services.		Estimated non-recurrent staff cost (\$M at 2020-21 level)	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)		case management system (iCMS) incrementally at District Court (DC) and Magistrates' Courts (MCs) starting from Q4 2021	<ul> <li>Subject to the prevailing general health situation and any related developments, the Jud would continue to take forward the implementation of the ITSP projects as soon as practicable.</li> <li>Stage 1 court systems of the project –         <ul> <li>Various components under Stage 1</li> </ul> </li> </ul>
				Jud: 105.942*#	Jud: 255.568*#	Dec 2019 (Stage 2)	Subject to the legislative process, Jud aimed at implementing iCMS incrementally at the Stage 2 courts by 2024/25 (Stage 2)	<ul> <li>were being progressively rolled out to the DC and the Summons Courts of the MCs.</li> <li>Among others, the core component of the iCMS was rolled out to all MCs on 27 October 2020.</li> <li>For the legislative work, the Court Proceedings (Electronic Technology) Ordinance, which enabled e-filing, was enacted on 17 July 2020. The related court procedural rules and practice directions for the Stage 1 courts</li> </ul>
								were being finalised for tabling at the Legislative Council by mid-2021.  The Jud aims at rolling out the iCMS for the selected types of DC civil proceedings in phases from

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								<ul> <li>Q4 2021. Pilot runs with the external stakeholders including law firms and government departments would be carried out in Q2 and Q3 of 2021.</li> <li>Stage 2 court systems of the project –</li> </ul>
								<ul> <li>Implementation of iCMS would be progressively extended to other courts, i.e. the Court of Final Appeal, the High Court, remaining parts of the MCs and Small Claims Tribunal.</li> </ul>
								<ul> <li>The Jud formulated a detailed implementation plan for Stage 2 courts having regard to all relevant factors, including legislative and policy formulation work, development of operational details, financial considerations, technical aspects and implementation of other technology projects in the Jud.</li> </ul>
								<ul> <li>Implementation of iCMS at the High Court and Small Claims Tribunal was generally progressing as planned.</li> </ul>
								<ul> <li>Discussions with key stakeholders about policy matters relating to the implementation of iCMS for charge cases of MCs started.</li> </ul>

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								• For 2020-21, the actual expenditure of \$19.406M was about 26.3% of the approved provision of \$73.673M. The underspending was mainly due to the impact of the prolonged COVID-19 epidemic on the planning and development work of the Stage 2 court systems.

<sup>\*</sup> Staff efforts met by internal redeployment and established mechanism for resources acquisition.

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When funding was first sought for this project, the resources required were estimated on the basis that most of the required services for system design and implementation would be acquired through outsourcing and that the "total solution" for implementing the core application, i.e. the iCMS, would be adopted and acquired through open tenders. In late 2013, after a critical review in consultation with Office of the Government Chief Information Officer in the light of the then latest circumstances, the Jud decided to change the mode of delivery to a hybrid one, i.e. outsourcing plus in-house efforts. This has resulted in the need for, among others, more civil service posts to (a) undertake the additional work; (b) manage a larger number of procurement exercises and service contractors; and (c) do the system integration. A more accurate figure on actual non-recurrent staff costs is provided in this return.

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Buildings Department (BD)	A005ZC	Electronic Submission Hub (ESH)  To develop an ESH for centralised processing of electronic building plans and documents, as well as other applications under the Buildings Ordinance (Cap.123) as an alternative to the present paper-based system.	1 Feb 2019	Estimated non-recurrent staff cost (\$M at 2020-21 level)  BD: 48.098*	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level) BD: 12.743*	Mar 2022 (Stage 1) Dec 2023 (Stage 2) Jun 2025 (Stage 3)	Nil	<ul> <li>The contract for the Supply of ESH was awarded on 27 May 2020. The high-level system analysis and design was completed. System design and development for the Stage 1 of ESH was in progress.</li> <li>For 2020-21, the actual expenditure of \$4.209M was about 27.2% of the approved provision of \$15.500M. The underspending was mainly due to the longer-than-expected time for recruitment of contract staff and deferred schedule for procurement of hardware and software items to suit the actual system design and implementation.</li> </ul>

<sup>\*</sup> Staff efforts met by internal redeployment.

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Census and Statistics Department (C&SD)	A032XG	Information Technology (IT) Equipment and Services for the 2021 Population Census  To acquire IT equipment and services for enhancement to the 2016 Population By-census computer system for meeting the changing requirements of the 2021 Population Census, in particular for supporting sizable-scale operation and provision of better multi-modal data collection services, and to develop a dedicated Telephone Interview sub-system to enable more efficient telephone interviews to be conducted.	1 Mar 2019	Estimated non-recurrent staff cost (\$M at 2020-21 level)  C&SD: 16.809	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)  C&SD: 7.315	Jun 2020 (Progressive roll-out for Pilot Survey)  Sep 2021 (Progressive roll-out for census operation and data dissemination stage 1)  Sep 2022 (Progressive roll-out for data dissemination stage 2)	Nil	<ul> <li>Pilot Survey</li> <li>The sub-systems were progressively rolled out by June 2020 as scheduled. The Pilot Survey was successfully completed in August 2020.</li> <li>Census Operation and Data Dissemination  Stage 1</li> <li>The contracts for the supply of computer equipment, and mobile tablets and related solutions and services were awarded in December 2020. All equipment and services procurement were completed in March 2021.</li> <li>The sub-system supporting the recruitment, training and deployment of temporary field workers was rolled out in November 2020.</li> <li>Refinement and user acceptance test of the sub-systems supporting data collection and processing as well as assignment and fieldwork management were in progress.</li> <li>System design of the sub-systems supporting dissemination of summary results was in progress.</li> <li>Data Dissemination Stage 2</li> <li>System design of e-service for interactive data dissemination was in progress.</li> <li>For 2020-21, the actual expenditure of \$48.107M was about 75.8% of the approved provision of \$63.467M. The underspending was mainly due to (i) the</li> </ul>

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								lower-than-expected cashflow requirements in 2020-21 for the awarded contracts amidst the outbreak of COVID-19 pandemic which affected the delivery of some computer equipment and services, causing some payments to be postponed to 2021-22; and (ii) the lower-than-expected charge for system hosting in the Government Cloud Infrastructure Services in 2020-21.

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Commerce and Economic Development Bureau (CEDB)		Implementation of Phase 2 of the Trade Single Window (TSW) System  To implement Phase 2 of the TSW System to facilitate the trading community to lodge trade documents to the Government.	17 Jul 2020	133.770	0.200	Progressive rollout from Mar 2023	Nil	<ul> <li>Tender for the implementation of the system was issued in November 2020 and closed in December 2020. Tender evaluation was in progress.</li> <li>For 2020-21, the actual expenditure of \$0.200M was about 2.8% of the approved provision of \$7.094M. The underspending was mainly due to the longer-than-expected time taken for the preparatory work for obtaining funding approval and recruitment of contract</li> </ul>
				Estimated non-recurrent staff cost (\$M at 2020-21 level)	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)			staff.
				CEDB: 39.664  CEDB: 3.425* User Department: 12.370*	CEDB: 5.991  CEDB: 0.640* User Department: Nil*			

<sup>\*</sup> Staff efforts met by internal redeployment.

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Correctional Services Department (CSD)	A036XL	Replacement of Core Information Technology (IT) Systems with the Integrated Custodial and Rehabilitation Management System (iCRMS)  To replace the existing eight core operational systems reaching the end of their serviceable life span, overcome constraints on data sharing among the existing systems, streamline operations with new functions and enhance the capacity of IT infrastructure (ITI).	6 May 2016	Estimated non-recurrent staff cost (\$M at 2020-21 level)  CSD: 100.384*	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)  CSD: 38.167*	Phase I: Jun 2021 (Completion of integration of the eight core systems with enhancements)  Phase II: Feb 2022 (Delivery of new functions in relation to the use of mobile devices)	Phase I: Jan 2022 (Completion of integrating five core systems with enhancements and new mobile functions)  Phase II: Jan 2023 (Completion of integrating the remaining three core systems with all enhancements and new mobile functions for completing the whole project)	<ul> <li>The revision to the scheduled implementation date, due to the longer-than-expected time required for the tendering process and the temporary suspension of site works and related network installation activities arising from COVID-19, had been reported in the last return.</li> <li>As endorsed by Project Steering Committee, the system functions under the two phases of system rollout were expanded in order to bring more value-added services to users earlier.</li> <li>The System Analysis and Design of the ITI and iCRMS application was completed. Implementation of the ITI and iCRMS application was in progress.</li> <li>Two pilot projects under iCRMS, namely "Keys and Equipment Management" and "Kiosks for Canteen Purchase" were launched in September and October 2019 respectively.</li> <li>The Institution User Acceptance Test for Lai King Correctional Institution and Escort and Support Group commenced in May 2021 and June 2021 respectively.</li> <li>iCRMS was launched in form of a pilot in Tai Tam Gap Correctional Institution on 28 May 2021.</li> </ul>

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								• For 2020-21, the actual expenditure of \$26.786M was about 39.0% of the approved provision of \$68.703M. The underspending was mainly due to the deferral of relevant payment for the tender services resulting from the longer-than-expected time required for the rollout of ITI and the conduct of User Acceptance Test for iCRMS.

<sup>\*</sup> Staff efforts met by internal redeployment.

of Justice and searchable electronic database of Hong Kong legislation  To provide the public with a website facilitating free and convenient access to accurate and up-to-date Hong Kong legislation with legal status and to support the operations of the Law Drafting Division of DoJ in the following processes: legislation capture, legislation compilation, online publication, full chapter reprint and audit and checking.  To provide the public with a website facilitating free and convenient access to accurate and up-to-date Hong Kong legislation with legal status and to support the operations of the Law Drafting Division of DoJ in the following processes: legislation capture, legislation compilation, online publication, full chapter reprint and audit and checking.  To provide the public publicate format progress system is progress system in the progress system is progressed to publicate progress system in the progress system is progressed to publicate publication from the progress system is progressed to publicate progressed associat publicate progressed in publication from the progressed system is progressed as a state of the Law Drafting in the progressed in the progressed system is progressed as a staff cost as as at a staff cost as at a staff cost as as at	elopment work (e.g. continued ag of the converted data and the ciated program refinement for lication of verified and Rich Text mat copies of legislation) was in gress to finalise and complete the em functionality.  2020-21, the actual expenditure of 707M was about 65.2% of the roved provision of \$2.311M. The erspending was mainly due to ioritisation and rescheduling of med works under the special work angement in the light of the VID-19 pandemic during the year.  actual non-recurrent staff cost as at March 2021 was higher than the mated cost due to the retendering roise, the reprioritisation of works the development of the verification ks. The additional civil servant of efforts were met by internal eployment.

Staff efforts met by internal redeployment.

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Food and Health Bureau (FHB)	A074XV	Development of a territory-wide Electronic Health Record (eHR) Sharing System (eHRSS)  To develop a territory-wide patient-oriented eHR sharing platform ready for connection with all public and private healthcare providers, and to have electronic medical/patient record systems deployed by individual healthcare providers or other health information systems in the market for connection to the eHRSS.	10 Jul 2009 (Stage 1 - \$702.000M) 25 Mar 2017 (Stage 2 - \$422.192M)	Estimated non-recurrent staff cost (\$M at 2020-21 level)  Nil	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level) Nil	Stage 1: Mar 2014 Stage 2: Mar 2022	Stage 1: Mar 2016 Stage 2: No change	<ul> <li>Development of eHRSS is a two-stage programme with an estimated total capital cost of about \$1,124M. Capital funding of \$702M for Stage 1 was approved by Finance Committee (FC) on 10 July 2009. Stage 1 eHRSS commenced operation on 13 March 2016.</li> <li>An increase in commitment of \$422.192M was approved on 25 March 2017 by FC to implement Stage 2 eHRSS, the development of which commenced in July 2017.</li> <li>Some Stage 2 components including Patient Portal and capability for sharing radiological images were rolled-out in Q1 2021. Development of other Stage 2 components was in progress: sharing restriction features, capability for sharing Chinese Medicine information, and enhancements for security/privacy protection and system functions.</li> <li>For 2020-21, the actual expenditure of \$127.500M was 100% of the approved provision.</li> </ul>

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Hong Kong Police Force (HKPF)	A104YU	Development of the Second Generation of Communal Information	14 May 2010	411.272	218.294	Phase 1 (existing CIS functions): Jun 2014	Phase 1 (existing CIS functions): Dec 2017	This system was fully implemented with all Phase 3 modules rolled out by June 2020.
		System (CIS2)  To replace the existing				Phase 2 (e-Report centre): Jun 2015	Phase 2 (e-Report centre): Jun 2018	The project has achieved the following benefits –
		Communal Information System (CIS) to meet evolving operational, legal, social and information				Phase 3 (new functions): Nov 2015	Phase 3 (new functions): Jun 2020	<ul> <li>enhanced operational efficiency;</li> <li>enhanced crime analysis and action planning;</li> </ul>
		technology (IT) requirements for the HKPF.		Estimated	Actual non-recurrent	1107 2013	3411 2020	<ul> <li>assured service consistency and quality;</li> <li>enhanced security control and data</li> </ul>
		The proposed new CIS2 will take advantage of the latest technology and ride on a new system architecture and		non-recurrent staff cost (\$M at 2020-21	staff cost as at 31 Mar 2021			protection; and  - expanded service channels for
		design to address the limitations of the existing CIS and provide new features to further improve the operational efficiency of HKPF. It will consolidate seven in-house satellite IT systems, and will provide		level) HKPF: 200.615*	(\$M at 2020-21 level)  HKPF: 264.084*			public.  • For 2020-21, the actual expenditure of \$0.789M was about 0.6% of the approved provision of \$124.360M. The underspending was mainly due to the deferred payment milestones arising from the longer-than-expected time required for overall implementation.
		more sophisticated interface with systems of other government departments and public entities, such as information exchange with the Social Welfare Department on domestic						• The actual non-recurrent staff cost as at 31 March 2021 was higher than the estimated cost due to the extension of overall project schedule. All non-recurrent staff cost was absorbed by internal re-deployment.
		incidents and with the Judiciary on warrant of arrest and subsequent actions.						<ul> <li>This item had been completed and will be deleted from the next annual progress report.</li> </ul>

<sup>\*</sup> Staff efforts met by internal redeployment.

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Hong Kong Police Force (HKPF)		Replacement of the Infrastructure Platform for the Police Operational Nominal Index Computer System (PONICS) and the Criminal Intelligence Computer System (CICS)  To replace the existing infrastructure platform in order to maintain an effective daily operation of law enforcement agencies and analysis of criminal activities.		Estimated non-recurrent staff cost (\$M at 2020-21 level)  Nil	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level) Nil	Apr 2019	Sep 2019	<ul> <li>The project was successfully rolled out in September 2019.</li> <li>All outstanding technical issues were fixed and all payment was settled by March 2021.</li> <li>The project has achieved the following benefits –  – sustained the operation and functionalities of CICS and PONCIS in support of policing work;  – improved system stability and reliability for better service availability; and  – enhanced system processing speed to improve work efficiency.</li> <li>For 2020-21, the actual expenditure of \$11.506M was about 40.6% of the approved provision of \$28.313M. The underspending was mainly due to the advanced completion of payment milestones in 2019-20, during which \$16.035M of the approved provision for 2020-21 was settled earlier in 2019-20.</li> <li>This item had been completed and will be deleted from the next annual progress report.</li> </ul>

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Hong Kong Police Force (HKPF)	A139YU	Replacement and Upgrade of the Information Technology Infrastructure and Applications of the HKPF  To replace and upgrade a total of 17 different infrastructure and applications to the next generation in order to ensure business continuity, meet future operational needs and enhance efficiency of Police operations and services to the public.	6 May 2016	Estimated non-recurrent staff cost (\$M at 2020-21 level)  HKPF: 32.706*	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)  HKPF: 27.027*	Oct 2022		<ul> <li>All 17 sub-projects were kicked off.</li> <li>One sub-project was in the implementation stage;</li> <li>One sub-project was in the User Acceptance Test stage;</li> <li>Two sub-projects had completed phase rollout;</li> <li>Twelve sub-projects had completed full rollout; and</li> <li>One sub-project was pending implementation as the construction of the new government data center complex was in progress.</li> <li>For 2020-21, the actual expenditure of \$57.920M was about 52.8% of the approved provision of \$109.674M. The underspending was mainly due to the delayed handover of the new government data centre, the revised payment milestone for one sub-project, and prolonged time required for recruitment of contract staff.</li> </ul>

<sup>\*</sup> Staff efforts met by internal redeployment.

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Immigration	A058YF	New Information	9 Dec 2011	862.202	438.905	Jan - Jun 2013	Dec 2013 -	Roll-out of new ITI
Department (ImmD)		Technology Infrastructure (ITI) of the				(Additional DC services)	May 2014 (Additional DC	• The new ITI was rolled out as scheduled in June 2015.
		ImmD  To implement a new ITI and acquire data centre (DC) services for ImmD and subsequent migration of the new ITI and other application systems to permanent DC.		Estimated non-recurrent staff cost (\$M at 2020-21 level)  ImmD: 96.474*	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level) ImmD: 101.078*	Jun 2014 (Roll-out of new ITI)  Jun 2019 (Migration of ImmD's new ITI and other application systems to the permanent DC for ImmD)	Jun 2015 (Roll-out of new ITI)  Oct 2023 (Migration of ImmD's new ITI and other application systems in "DC for System Development and Resilience" to the Government DC Complex).  Jan 2025 (Acquisition of "DC services for System Production" until completion of relocation to New ImmD Headquarters)	<ul> <li>Migration of ImmD's new ITI and other application systems to the permanent DC for ImmD</li> <li>ImmD has joined Office of the Government Chief Information Officer (OGCIO)'s Government DC Complex initiative to meet the need for a permanent DC. The implementation schedule was revised since the tentative handover date of the Government DC Complex was re-scheduled to July 2022 as advised by OGCIO. It was expected that bureau and departments might commence the move-in exercise from January 2023 onwards. The migration exercise of ImmD's new ITI and other application systems in "DC for System Development and Resilience" would be completed by October 2023.</li> <li>The New ImmD Headquarters would be equipped with a permanent "DC for System Production" which would be ready for move-in in early 2024. The migration exercise would be completed by end of 2024 tentatively.</li> <li>For 2020-21, the actual expenditure of \$30.520M was about 98.6% of the approved provision of \$30.951M.</li> <li>The actual non-recurrent staff cost as at 31 March 2021 was higher than the original estimate due to the extension services of the two leased DCs.</li> </ul>

<sup>\*</sup> Staff efforts met by internal redeployment.

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Immigration Department (ImmD)	A062YF	New Immigration Control System of the ImmD  To develop a new control point system to enhance operational efficiency and effectiveness at immigration control points for meeting rising service demands.	8 Feb 2013	Estimated non-recurrent staff cost (\$M at 2020-21 level)  ImmD: 108.893*	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level) ImmD: 108.893*	Feb 2014 (Procurement of Hardware, Software and Services)  Aug 2014 - Dec 2015 (System Development and Implementation)  Jun 2016 (Production Roll-out (by phases))	Nov 2014 (Procurement of Hardware, Software and Services)  Mar 2015 - May 2017 (System Development and Implementation (by phases))  2017-2018 (Production Roll-out (by phases))  2019-2020 (Production Roll-out at new control points)  2024-2025 (Production Roll-out at the new Terminal 2 (T2) of the Hong Kong International Airport (HKIA)	<ul> <li>Production roll-out of the Heung Yuen Wai Boundary Control Point was completed in August 2020.</li> <li>The implementation schedule was revised due to the need for installation of New Immigration Control System at T2 of HKIA in 2024.</li> <li>For 2020-21, the actual expenditure of \$40.210M was about 88.5% of the approved provision of \$45.451M. The underspending was mainly due to postponement of milestone payment from 2020-21 to 2021-22 as a result of the revised schedule of production roll-out of the Heung Yuen Wai Boundary Control Point.</li> </ul>

<sup>\*</sup> Staff efforts met by internal redeployment.

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Immigration Department	A069YF	Computer Systems at Control Points	28 Jun 2016	168.548	110.630	Dec 2017 (Stage 1)	Jun 2018 (Stage 1)	• Stage 1 implementation was finally completed in October 2018.
(ImmD)		To install computer systems for ImmD at the Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities.				Dec 2019 (Stage 2)	(Stage 2)	<ul> <li>Stage 2 implementation was finally completed in January 2020.</li> <li>For 2020-21, the actual expenditure of \$11.578M was about 99.6% of the approved provision of \$11.622M.</li> </ul>
				Estimated non-recurrent staff cost (\$M at 2020-21 level)	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)			
				ImmD: 13.320*	ImmD: 13.320*			

<sup>\*</sup> Staff efforts met by internal redeployment.

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Immigration Department (ImmD)	A076YF	Implementation of the Next Generation Smart Identity Card System (SMARTICS-2)  To implement the SMARTICS-2 and launch a one-off territory-wide identity card replacement exercise.	15 May 2015	Estimated non-recurrent staff cost (\$M at 2020-21 level)  ImmD: 1,190.074	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)  ImmD: 673.385	Mar 2018	Nov 2018	<ul> <li>The system was rolled out in November 2018 and the territory-wide identity card replacement exercise was launched in December 2018.</li> <li>Other supplementary services including – On-site identity card replacement service at licensed residential care homes/nursing homes was rolled out on 3 May 2019.</li> <li>For 2020-21, the actual expenditure of \$118.658M was about 68.3% of the approved provision of \$173.839M. The underspending was mainly due to the lower-than-expected cashflow requirements in 2020-21 for the lower actual monthly rent and delayed payment of services items under the outbreak of COVID-19 pandemic.</li> <li>Project expenditure was used for the procurement of SMARTICS-2 related items for Immigration Department Tuen Mun Regional Office at the Tuen Mun Siu Lun Government Complex and will be continued in 2021-22 and after for the territory-wide identity card replacement exercise and follow up activities of SMARTICS-2 including installation of the Uninterruptible Power Supply (UPS) system for SMARTICS-2 at the new ImmD Headquarters. The expected end date for project expenditure will be after the payment for UPS installation and subject to the actual installation schedule which will fall within FY2023-24 tentatively.</li> </ul>

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Immigration Department (ImmD)	A077YF	Implementation of the Next Generation Electronic Passport (e-Passport-2) System  To develop a new computer system, namely the e-Passport-2 System, to replace the existing ageing computer system for enhancing the operational efficiency and effectiveness in meeting rising service demands.	6 May 2016	Estimated non-recurrent staff cost (\$M at 2020-21 level)  ImmD: 58.159	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)  ImmD: 58.159*	Feb 2019 (Phase 1) Jun 2019 (Phase 2)	May 2019 (Phase 1) Jan 2020 (Phase 2)	<ul> <li>Phase 1 was launched in May 2019.</li> <li>Phase 2 was launched in January 2020.</li> <li>For 2020-21, the actual expenditure of \$94.159M was about 90.9% of the approved provision of \$103.594M.</li> <li>Project expenditure will be continued in 2021-22 and after for follow-up activities of e-Passport-2 System including installation of the Uninterruptible Power Supply (UPS) system for e-Passport-2 System at the new ImmD Headquarters. The expected end date for project expenditure will be after the payment for UPS installation and subject to the actual installation schedule which will fall within FY2023-24 tentatively.</li> </ul>

<sup>\*</sup> Staff efforts met by internal redeployment.

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Immigration Department (ImmD)	A080YF Next Generation Application and Investigation Easy Systems (APPLIES-2)  To develop a new computer system, namely the APPLIES-2, to	(F V AE	Dec 2021 (Rollout of VISAS and ABROADS)	(Rollout of VISAS and ABROADS)  (Phase 1 – Rollout of existing functions of VISAS, ABROADS and ENCAPS)  (Phase 1 – Rollout of existing functions of VISAS, ABROADS and ENCAPS)  (Phase 1 – Rollout of existing functions of VISAS); Assist Hong Kong Residents, Births and Marriage, Right of Abod Support (ABROADS); and ECase Processing (ENCAPS).  (Phase 1 – Rollout of existing functions of VISAS); Assist Hong Kong Residents, Births and Marriage, Right of Abod Support (ABROADS); and ECase Processing (ENCAPS).	<ul> <li>APPLIES-2 includes three computer systems, namely Systems related to Visa Automation (VISAS); Assistance to Hong Kong Residents, Births, Deaths and Marriage, Right of Abode Decision Support (ABROADS); and Enforcement Case Processing (ENCAPS).</li> <li>Because of the longer-than-expected time required for the tendering process,</li> </ul>			
		replace the existing ageing computer system for enhancing the operational efficiency	ageing computer system for enhancing the operational efficiency and providing better user experience and bringing greater convenience to	ageing computer system for enhancing the operational efficiency and providing better user experience and bringing greater convenience to users.  Actua non-recurrent staff cos staff cost (\$M at 2020-21 level) (\$M at 2020-21 (\$M at 2020-21)	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)	(Rollout of ENCAPS)	(Phase 2 – Rollout of new functions of VISAS, ABROADS and ENCAPS)	which was about one year more than the original schedule, the Project Steering Committee endorsed on 6 April 2020 to take a by-phase approach, to ensure a smooth transition from the existing APPLIES to APPLIES-2. The implementation schedule was therefore revised.
				ImmD: 178.420	ImmD: 110.582*			<ul> <li>System analysis and design of Phase 1 was completed whereas system development and testing were in progress.</li> </ul>
								Tender documents for the implementation of new 1868 system, to replace the existing Hotline for Assistance to Hong Kong Residents Unit, were being finalised.
								• For 2020-21, the actual expenditure of \$34.121M was about 82.6% of the approved provision of \$41.313M. The underspending was mainly due to the revised implementation schedule of the APPLIES-2 project and lower-than-expected actual price of contract awarded.

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
								Project expenditure will be continued in 2021-22 and after for procurement of services, hardware and software, etc., including installation of the Uninterruptible Power Supply system for APPLIES-2 System at the new ImmD Headquarters.

<sup>\*</sup> Staff efforts met by internal redeployment.

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Inland Revenue Department (IRD)		Enhancement and Relocation of Information Technology (IT) Systems and Facilities  To re-provision IT systems and facilities for the new office tower of IRD in the Kai Tak Development Area to tie in with office relocation by late 2022/early 2023; and to upgrade IRD's IT infrastructure to enhance processing capacity and strengthen the provision of electronic services to the public.	2 Jul 2020	Estimated non-recurrent staff cost (\$M at 2020-21 level)  IRD: 244.309*	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)  IRD: 43.771*	Initiative 1: Mar 2021 (Phase 1)  Mar 2025 (Phase 2)  Initiative 2: Mar 2022 (Phase 1)  Mar 2025 (Phase 2)  Initiative 3: Mar 2025  Initiative 4: Jun 2023  Initiative 5: Mar 2025  Initiative 6: Jun 2023	Initiative 1: Mar 2021 (Phase 1a)  Mar 2023 (Phase 1b)  No change (Phase 2)  Intiative 2: Aug 2022 (Phase 1)  No change (Phase 2)  Intiatives 3 - 6: No change	<ul> <li>Originally, Initiative 1 includes Phase 1 (to enhance financial data collection) and Phase 2 (to develop Business Tax Portal). As endorsed by the Project Steering Committee, Phase 1 has now been further divided into Phase 1a and Phase 1b to accommodate the need to develop extra input tools, which would facilitate the business sector in compiling and submitting financial data in required electronic format to the IRD. Phase 1a was completed in March 2021; whereas Phase 1b was in progress as scheduled.</li> <li>Initiative 2 includes Phase 1 (to enhance functionalities of eTAX) and Phase 2 (to develop a new Individual Tax Portal). As endorsed by the Project Steering Committee, the implementation of Phase 1 has now been revised from March 2022 to August 2022 due to —         <ol> <li>the delay in commencement from August 2020 to September 2020, resulted from the special work arrangements implemented intermittently in 2020 in the light of the COVID-19 pandemic; and</li> <li>the avoidance of rolling out new functionalities to eTAX to ensure system stability during the 'peak' season of electronic filing of individual tax returns, which normally takes place between April and July each year.</li> </ol> </li> </ul>

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
								<ul> <li>Other initiatives have commenced or would commence as scheduled.</li> <li>For 2020-21, the actual expenditure of \$34.069M was 100% of the approved provision.</li> </ul>

<sup>\*</sup> Staff efforts met by internal redeployment.

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Leisure and Cultural Services Department (LCSD)		A084VA Development of New Intelligent Sports and Recreation Services Booking and Information System  To develop a new intelligent sports and recreation services booking and information system, namely the SmartPLAY, to replace the existing Leisure Link System so as to provide a more user-friendly, operationally efficient and effective system to meet public expectations, thereby encouraging members of the public to exercise regularly and lead a healthy lifestyle.	26 Jan 2018	Estimated	Actual non-recurrent	Phase 1: Nov 2021 Phase 2: May 2023	Phase 1: Jan 2023 Phase 2: May 2024	<ul> <li>Tendering for implementation of the new system had been completed and the contract was awarded on 19 March 2020. The System Analysis and Design of Phase 1 was in progress and expected to be completed in mid-2021. System development of Phase 1 was commenced in January 2021.</li> <li>The implementation schedule was revised mainly because of the longer-than-expected time required for the tendering process due to complication of the tender. In addition, extra time was required for contractor team formation and project commencement under the outbreak of COVID-19.</li> </ul>
			more user-friendly, operationally efficient and effective system to meet public expectations, thereby encouraging members of the public to exercise regularly and  Itoni-recurrent staff cost (\$M at 2020-21 level)  (\$M at 2020-21 level)  LCSD: 81.358  LCSD: 44.728	staff cost (\$M at 2020-21 level)	as at 31 Mar 2021 (\$M at 2020-21 level)			
					• For 2020-21, the actual expenditure of \$5.763M was about 39.1% of the approved provision of \$14.747M. The underspending was mainly due to the longer-than-expected time required for project commencement under the outbreak of COVID-19.			

library systems so as to enhance the quality, enhance the facilities and services of the Hong Kong Public Libraries in promoting city-wide reading culture and  Estimated non-recurrent staff cost remaining library functions: Dec 2024  Actual non-recurrent staff cost as at the content of the enhance the quality, functions: Dec 2024  Actual non-recurrent staff cost as at the content of the maining library functions: Promaining library functions: Apr 2025  Actual non-recurrent staff cost as at the content of the maining library functions: Promaining library functions: Apr 2025  Actual non-recurrent staff cost as at the content of the maining library functions: Promaining library functions: Apr 2025  Actual non-recurrent staff cost as at the content of the maining library functions: Promaining library functions: Apr 2025  Actual non-recurrent staff cost as at the content of the maining library functions: Promaining library functions: Apr 2025  Actual non-recurrent staff cost as at the content of the maining library functions: Promaining library functions: Apr 2025  Actual non-recurrent staff cost as at the content of t	Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
	Cultural Services Department	A085VA	Library System  To develop a new Smart Library System to replace the existing library systems so as to enhance the quality, cost-effectiveness and customer friendliness of the facilities and services of the Hong Kong Public Libraries in promoting city-wide reading culture and supporting Hong Kong's development as a	15 Feb 2019	Estimated non-recurrent staff cost (\$M at 2020-21 level)	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)	library functions: Jun 2023  Launch of remaining library functions:	Launch of core library functions: Oct 2023  Launch of remaining library functions:	<ul> <li>The implementation schedule was revised because of the longer-than-expected time required for the tendering process under the outbreak of COVID-19 pandemic.</li> <li>For 2020-21, the actual expenditure of \$4.702M was about 88.6% of the approved provision of \$5.306M. The underspending was mainly due to the longer-than-expected time required during the outbreak of COVID-19 pandemic for conducting market sounding and procurement of consultancy services for user experience design, which led to postponement of</li> </ul>

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Office of the Government Chief Information Officer (OGCIO)	A084XV	Wi-Fi Connected City  To implement the Wi-Fi Connected City programme by providing free public Wi-Fi services in selected government venues through a combination of public-private collaboration (PPC) and government-funded arrangements.	13 May 2016	Estimated non-recurrent staff cost (\$M at 2020-21 level)  OGCIO: 22.634*	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level) OGCIO: 22.634*	Pilot project under the PPC model: Mar 2017  Government- funded Wi-Fi services at government venues: Jan 2018  Progressive roll-out of Wi-Fi services through PPC on a wider scale: Dec 2019	Progressive roll-out of Wi-Fi services through PPC on a wider scale: Jun 2022	<ul> <li>PPC</li> <li>Pilot PPC arrangement was implemented in February 2017 and completed in June 2019, covering 29 venues with 271 hotspots.</li> <li>For the progressive roll-out of Wi-Fi services through PPC on a wider scale, more than 40 venues were allocated to service providers. Wi-Fi services at 32 venues have come into operation. Target completion date for the remaining venues was revised from Nov 2020 to June 2022 due to (a) the longer-than-expected time in construction of some government venues where Wi-Fi services are to be provided; (b) the longer-than-expected time to address concerns from residents where the Wi-Fi services were proposed to be provided; and (c) site visits and implementation work were affected due to impacts of social unrest in 2019 and epidemic situation in 2020 and 2021.</li> <li>Government-funded Wi-Fi services at government venues</li> <li>New contract was awarded and implementation commenced in November 2017.</li> <li>The migration of Wi-Fi services at government venues to the new contract was completed in October 2018.</li> <li>Wi-Fi services at (i) 225 additional government venues, (ii) small parks and sitting-out areas of 185 public rental housing estates and (iii) 27 public</li> </ul>

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
								hospitals were provided as at end December 2019. Another 77 additional government venues were provided with Wi-Fi services by end March 2021.  Expenditure  For 2020-21, the actual expenditure of \$68.634M was about 95.7% of the approved provision of \$71.700M.

<sup>\*</sup> Staff efforts met by internal redeployment.

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Office of the Government Chief Information Officer (OGCIO)	A086XV	Centrally Managed Messaging Platform  To develop and implement a new platform to replace the Government's current decentralised email systems in order to enhance the ability in tackling the increasing cyber security risks, utilise computing resources optimally and increase operational efficiency of the Government.	24 Nov 2017	` ′		Jun 2020	Date Aug 2021	<ul> <li>Rollout commenced in November 2019 and was being implemented in phases.</li> <li>The implementation schedule was revised due to the special work arrangement implemented by the Government in response to the COVID-19 epidemic and the need to cater for an enhanced feature (i.e. support of inline attachment) being implemented in the system.</li> <li>For 2020-21, the actual expenditure of \$17.091M was about 23.0% of the approved provision of \$74.425M. The underspending was due to revision of implementation schedule.</li> <li>The actual non-recurrent staff cost as at 31 March 2021 was higher than the</li> </ul>
				OGCIO: 20.494*	OGCIO: 51.130*			estimated cost due to the unexpected project complexity. The additional civil servant staff efforts were met by internal redeployment.

<sup>\*</sup> Staff efforts met by internal redeployment.

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status	
Office of the Government Chief Information Officer (OGCIO)		A087XV "iAM Smart" Platform (formerly known as Electronic Identity)  To set up an "iAM Smart" platform to provide one-stop personalised services for all Hong Kong residents and allow them to use a single digital identity and authentication to conduct government and commercial transactions online.	11 May 2018	112.000	60.678	mid-2020	Dec 2020	<ul> <li>The "iAM Smart" Platform was launched in end-December 2020.         As of end-May 2021, more than 380 000 Hong Kong residents had registered as "iAM Smart" users.     </li> <li>As of end-May 2021, 49 commonly used government online services and six public utilities and private organisations have adopted "iAM Smart". It is expected that the public</li> </ul>	
			ingle digital identity and uthentication to conduct overnment and ommercial transactions		Estimated non-recurrent staff cost (\$M at 2020-21 level)	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)			may access more than 110 online services of the Government, public and private organisations through "iAM Smart" by end-July 2021.  • For 2020-21, the actual expenditure of \$41.540M was about 95.5% of the approved provision of \$43.491M.
				OGCIO: Nil	OGCIO: Nil			<ul> <li>The project has achieved the following benefits –</li> <li>Facilitated Hong Kong residents to use online services to deal with daily routines;</li> <li>Saved cost and time for government departments and commercial organisations in handling user authentication and development of new online services;</li> <li>The registration and use of "iAM Smart" can be conveniently and expeditiously done through mobile application; and</li> </ul>	

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
								<ul> <li>Promoted the development of cross-departmental or institutional e-services and streamlined business processes through the unified identity verification.</li> <li>This item had been completed and will be deleted from the next annual progress report.</li> </ul>

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Office of the Government	A088XV	Digital Transformation for Agile Delivery of	11 May 2018	533.303	157.540	Sep 2020	Nil	Next generation government cloud infrastructure
Chief Information Officer (OGCIO)		e-Government Services  To implement the next generation government						The next generation government cloud infrastructure was launched in September 2020.
(odelo)	generation government cloud infrastructure and big data analytics platform to support agile delivery of e-Government services.						Agile development technologies under the new application architecture are available for use by government bureaux and departments (B/Ds) with effect from May 2021.	
			Estimated non-recurrent	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)			Big data analytics platform     The big data analytics platform was launched in September 2020.	
			staff cost (\$M at 2020-21 level)				• The "Digital Highway" for facilitating exchange and sharing of real-time data among government B/Ds was launched in June 2019.	
				OGCIO: 35.911*	OGCIO: 30.815*			<u>Expenditure</u>
								• For 2020-21, the actual expenditure of \$121.583M was about 97.1% of the approved provision of \$125.201M.
								• The project has achieved the following benefits –
								<ul> <li>enabled B/Ds to support different types of digital government services and developed big data analytics applications more cost-effectively with the economies of scale of the new government cloud infrastructure and big data analytics platform;</li> </ul>
								curtailed the maintenance and upgrade costs of individual systems and brought about greater economies

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
								of scale with existing clouds migrated to the new government cloud infrastructure;  - provided enhanced system hosting capacity and rendered 24-hour monitoring and support services to enable B/Ds to develop digital government services more timely and efficiently, supporting the development of smart government;  - the "Digital Highway" in the big data analytics platform facilitated B/Ds in opening up real-time data on
								the "data.gov.hk" portal; and  - adopted the outsourcing approach for project implementation to foster collaboration in the local industry and benefit various information technology professional and service areas.  • This item had been completed and will be deleted from the next annual progress report.

<sup>\*</sup> Staff efforts met by internal redeployment.

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (SM)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Office of the Government Chief Information Officer (OGCIO)	A090XV	Full Implementation of Electronic Recordkeeping System in the Government  To implement a platform to enhance efficiency in preserving and managing government records in government B/Ds.	6 Jul 2020	Estimated non-recurrent staff cost (SM at 2020-21 level)  OGCIO: 41.896	Actual non-recurrent staff cost as at 31 Mar 2021 (SM at 2020-21 level)  OGCIO: 4.473	Phase 1 Q4 2022  Phase 2 Q1 2023  Phase 3 Q1 2024  Phase 4 Q1 2025  Phase 5 Q4 2025	Nil	<ul> <li>Tender preparation was in progress. The tendering schedule has been revised to allow more time to incorporate various enhanced features and security requirements in the tender to meet user requirements.</li> <li>For 2020-21, the actual expenditure of \$0.262M was about 1.2% of the approved provision of \$22.459M. The underspending was mainly due to the revised tendering schedule and hence postponement of payments from 2020-21 (as originally planned) to 2021-22.</li> </ul>

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Official Receiver's Office (ORO)	Receiver's Office	Implementation of an Electronic Submission System  To provide a one-stop portal to receive and time-stamp electronic submissions of documents and forms submitted by various stakeholders.	7 Jul 2020	37.986	Nil	Feb 2023 (Phase 1) Aug 2024 (Phase 2)	Nil	<ul> <li>Tender for the Supply of an Electronic Submission System to the Official Receiver's Office was issued on 23 April 2021 and closed on 4 June 2021.</li> <li>For 2020-21, there is no actual expenditure out of the approved provision of \$0.107M. The underspending was mainly due to the fact that ORO had resorted in</li> </ul>
				Estimated non-recurrent staff cost (\$M at 2020-21 level)	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)			redeploying internal resources for the tender preparation work, instead of engaging contract staff as originally planned, having regard to the tight schedule and the difficulty in recruiting suitable personnel.
				ORO: 5.247*	ORO: 0.300*			

<sup>\*</sup> Staff efforts met by internal redeployment.

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval		Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Social Welfare Department (SWD)	A014ZG	Redevelopment of Client Information System (CIS)  To redevelop the CIS with the aid of advanced technology to increase operation efficiency of case management and meet with the changes driven by the significant expansion of social services as well as the adoption of new service delivery modes in recent years.	1 Feb 2019	Estimated non-recurrent staff cost (\$M at 2020-21 level)	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)  SWD: 8.673*	Sep 2022 (Phase 1) Jun 2023 (Phase 2)	Nil	<ul> <li>The System Analysis and Design (SA&amp;D) Stage was completed as scheduled and the SA&amp;D Report was endorsed by the Project Steering Committee on 4 January 2021.</li> <li>The Implementation Stage commenced on 5 January 2021. Program development on core system functions, End User Computing Systems and reports generation, and system installation and configuration of System Integration Test and User Acceptance Test environments were in progress.</li> <li>For 2020-21, the actual expenditure of \$47.648M was about 99.3% of the approved provision of \$47.995M.</li> </ul>

<sup>\*</sup> Staff efforts partly met by internal redeployment, and partly met by time-limited additional manpower resources.

Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Social Welfare Department (SWD)	A015ZG Redevelopment of Service Performance Management Information System (SPMIS)  To redevelop the SPMIS with the aid of advanced technology to increase operational efficiency for performance management of subvented non-governmental organisations and service	1 Feb 2019	65.424  Estimated	Actual non-recurrent	Sep 2021 (Phase 1) Sep 2022 (Phase 2)	Phase 1)  (Phase 1)  (Phase 1)  (Phase 1)  (Phase 1)  (Phase 2)  (Phase 3)  (Phase 4)  (Phase 4)  (Phase 4)  (Phase 5)  (Phase 2)  (Phase 5)  (Phase 6)  (Phase 6)  (Phase 7)  (Phase 7)  (Phase 7)  (Phase 7)  (Phase 1)  (Phase 1)  (Phase 1)  (Phase 1)  (Phase 1)  (Arrangement under COV  from late January 2020 to  mid-February 2021, (ii) or  project scope and (iii) untechnical details of the Green Cloud Infrastructure Serve the System Analysis and (SA&D Stage), the Project Committee endorsed the Report (PIR001) on 20 Committee endorsed the PIR001 on 2		
		units of the SWD, as well as to meet the changes driven by the significant expansion of social services as well as the adoption of new service		non-recurrent staff cost (\$M at 2020-21 level)	staff cost as at 31 Mar 2021 (\$M at 2020-21 level)			completion date of SA&D Stage from September 2020 to November 2020, and  (ii) extension of Phase 1 implementation date from September 2021 to
	delivery modes in recent years.					December 2021.  The target completion date for Phase 2 implementation remains unchanged.  The SA&D Stage of the project was completed in November 2020 according to the revised schedule.  The Implementation Stage commenced on 1 April 2020. Program development on core system functions, e-Forms and reports implementation, as well as setting up of User		
								Acceptance Test environment, were in progress. System installation and configuration for System Integration Test environment was completed.

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								<ul> <li>For 2020-21, the actual expenditure of \$17.565M was about 96.0% of the approved provision of \$18.296M.</li> <li>The actual non-recurrent staff cost as at 31 March 2021 was higher than the estimated cost due to the increase in manpower required to support the implementation of project with an expanded scope. The additional resources were met through internal redeployment within SWD.</li> </ul>

<sup>\*</sup> Staff efforts partly met by internal redeployment, and partly met by time-limited additional manpower resources.

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Bureau/ Department	Subhead (Code)	Project Name and Description	Date of Approval	Approved Project Estimate (\$M)	Actual Expenditure up to 31 Mar 2021 (\$M)	Scheduled Implementation Date	Any Revision to Scheduled Implementation Date	Achievement/Status
Fire Services Department (FSD)	8054XR	Replacement of the Mobilising and Communications System of the FSD  To replace the existing mobilising and communications system for receiving emergency calls and supporting the Fire Services	23 Jun 2017	1,713.700	157.948	Apr 2022	Aug 2023	<ul> <li>The re-tender for this project was awarded to ST Electronics (Info-Software Systems) Pte. Ltd. on 19 August 2019.</li> <li>The Stage 2 - System Analysis and Design (SA&amp;D) stage of the project has been completed with one-month delay from 26 February 2021 to 1 April 2021 due to absence of contractor personnel and poor project management of the contractor. In view of the situation, FSD</li> </ul>
		Communications Centre in deploying an optimal set of fire and ambulance resources to scene of incidents for firefighting and rescue operations.		Estimated non-recurrent staff cost (\$M at 2020-21 level)  FSD: 35.318*	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)			issued several warning letters to the contractor and kept Government Logistic Department informed of the performance of the contractor and project progress. On the other hand, the Stage 4 - System Installation and Stage 3 - System Development had been commenced in August 2020 and February 2021
					rsD: 86.734			<ul> <li>For 2020-21, the actual expenditure of \$82.499M was about 51.9% of the approved provision of \$159.002M. Owing to the progress of the project and its site preparation works, the approved provision was adjusted to \$83.803M in which actual expenditure was about 98.4% of the adjusted provision.</li> <li>The downward adjustment amounting \$75.199M was mainly due to the</li> </ul>
								following reasons –  - The postponement of first payment milestone of Fourth Generation Mobilising System (4GMS) project

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								The first payment of \$63.123M to the 4GMS contractor has to be deferred from 2020-21 to 2021-22 due to the delay in completion of the SA&D stage from end February to 1 April 2021.  - The deferred payment requirement of Architectural Services Department (ArchSD)  Due to the completion of some site preparation works by ArchSD in late 2020-21, an underspending amounting \$11.899M was made.  - The actual non-recurrent staff cost as at 31 March 2021 was higher than the estimated cost because when funding was first sought for this project, the estimated non-recurrent staff cost was calculated basing on an initial setup of five disciplined and technical staff from 2017-18 till 2021-22. Subsequently, 22 additional staff, including uniformed and technical, were redeployed to the project team. As a result, the project team comprised a total of 27 staff as at 31 March 2021.

<sup>\*</sup> Staff efforts met by internal redeployment, and partly met by time-limited additional manpower resources.

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Hong Kong Observatory (HKO)	8038ZF	Procurement of a High Performance Computer (HPC) System	24 Apr 2020	90.000	0.212	Jul 2022	Jul 2023	The implementation schedule was revised to tie in with the site preparation work at the new government data centre.
		To procure a HPC System to enable HKO to sustain quality weather services to the Hong Kong community and enhance its						<ul> <li>Tender documents were being finalised.</li> <li>Contract staff was recruited and development of application systems to be operated on the HPC commenced.</li> <li>For 2020-21, the actual expenditure of</li> </ul>
		capability for forecasting high-impact weather affecting Hong Kong.		Estimated non-recurrent staff cost (\$M at 2020-21 level)	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)			\$0.212M was about 28.9% of the approved provision of \$0.733M. The underspending was mainly due to the revised implementation schedule.
				HKO: 5.411*	HKO: 1.082*			

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Hong Kong Police Force (HKPF)	8130YU	Replacement of Digital Radar Security System for the Marine Region	24 May 2013	39.785	4.349	Dec 2016	Sep 2022	The acceptance test on the original contract scope was conducted in October 2020.
		To maintain the capability of crime prevention and detection at sea and to maintain maritime security.						• The reliability test also commenced in October 2020 with system patches applied in December 2020 to fine tune the system. After verifications and trouble-shooting on issues identified, the reliability test was completed in March 2021.
				Estimated non-recurrent staff cost (\$M at 2020-21 level)	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)			<ul> <li>The contract variation of additional system software which are considered essential features and procurement of report generation tool development services were issued in January 2021 and targeted for completion in Q4 2021.</li> <li>The implementation schedule was</li> </ul>
				Nil	Nil			<ul> <li>The implementation schedule was revised due to the extended reliability test and contract variation.</li> <li>For 2020-21, the actual expenditure of \$0.212M was about 0.6% of the approved provision of \$34.251M. The underspending was mainly due to the change in payment schedule arising</li> </ul>
								from the extended reliability test. Relevant payment would be settled in 2021-22.

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Hong Kong	8138YU	Replacement of the	6 May 2016	855.436	163.133	Sep 2021	Sep 2022	The project progress was as follows –				
Police Force (HKPF)		Command and Control Communications System						<u>ETS</u>				
		of the HKPF  To maintain 999  emergency services, this						<ul> <li>System development of Caller Location</li> <li>System was completed in May 2020.</li> <li>System fine-tuning was in progress.</li> </ul>				
		emergency services, this project would replace the obsolete hardware and software of the communications infrastructure for Emergency Telephone System (ETS), Digital Transport Network (DTN) and Radio Terminals (RTs).	project would replace the obsolete hardware and software of the communications infrastructure for Emergency Telephone System (ETS), Digital Transport Network (DTN) and Radio	project would replace the obsolete hardware and software of the communications infrastructure for Emergency Telephone System (ETS), Digital Transport Network (DTN) and Radio	would replace the hardware and of the					<ul> <li>Enhancement to the existing ETS to improve call monitoring and handling was implemented in October 2020.</li> </ul>		
					infrastructure for Emergency Telephone System (ETS), Digital Transport Network (DTN) and Radio	infrastructure for Emergency Telephone System (ETS), Digital Transport Network (DTN) and Radio	infrastructure for Emergency Telephone System (ETS), Digital Transport Network (DTN) and Radio	infrastructure for Emergency Telephone System (ETS), Digital Transport Network (DTN) and Radio	infrastructure for Emergency Telephone System (ETS), Digital Transport Network (DTN) and Radio	structure for rgency Telephone rm (ETS), Digital sport Network N) and Radio	Estimated non-recurrent staff cost (\$M at 2020-21 level)	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)
				Nil	Nil			- The DTN was ready-to-use at hill-top sites and all four Regional Command and Control Centres in February 2021. Service migration was planned for Q2 and Q3 2021.  RTs				
								<ul><li>R1s</li><li>Roll-out of new radios has been completed in Q1 2021.</li></ul>				
								Fourth Generation of Computer Assisted Command and Control System (CACCS4)				
								<ul> <li>Implementation of CACCS4 Core was in progress.</li> </ul>				
								<ul> <li>Production roll-out of CACCS4 sub-systems was launched in April 2020.</li> </ul>				

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								<ul> <li>The implementation schedule was revised due to the refinement of user requirements arising from the social unrest since June 2019 to ensure that the latest operational needs could be accommodated and incorporated into the Major Incident/Major Event module of CACCS4.</li> <li>For 2020-21, the actual expenditure of \$104.844M was about 31.7% of the approved provision of \$330.406M. The underspending was mainly due to the revised implementation and payment schedule of CACCS4.</li> </ul>

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Hong Kong Police Force (HKPF)	8140YU	Implementation of Marine Situational Awareness System (MARSAS)  To install MARSAS in police vessels and at command centres on land to enable the transmission or sharing of real-time information, in order to meet the operational needs of the HKPF in safeguarding maritime safety and conducting maritime rescue operations.	1 Dec 2017	Estimated non-recurrent staff cost (\$M at 2020-21 level)  Nil	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level) Nil	Phase 1: Sep 2020 Phase 2: Mar 2022 Phase 3: Oct 2022	Phase 1: Dec 2023 Phase 2: Jun 2025 Phase 3: Jun 2026	<ul> <li>Initial comments from Department of Justice on the draft tender document for MARSAS were received in December 2020. Tender documents were being revised and targeted to be issued by Q3 2021.</li> <li>Architectural Services Department conducted site survey of the equipment room and provided the estimated costs of site preparation. Minor building works would be commenced in Q3 2021 with target completion in September 2022.</li> <li>The implementation schedule was revised due to the longer-than-expected time required for tender preparation. In addition, replacement schedule of police vessels under separate ship construction contracts were also deferred due to COVID-19 pandemic.</li> <li>For 2020-21, the actual expenditure of \$2.146M was about 17.2% of the approved provision of \$12.500M. The underspending was mainly due to the revised schedule for the site preparation works.</li> </ul>

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Transport Department (TD)		Installation of Traffic Detectors  To install about 550 sets of traffic detectors along some of the strategic routes to detect vehicles passing by and collect real-time traffic data such as traffic volume and speed, together with a centralised data processing system.	17 Jun 2016	194.000	137.579	Commissioning of all detectors: Dec 2020		<ul> <li>All installed detectors were commissioned in November 2020.</li> <li>The project has achieved the following benefits –         <ul> <li>more efficient response to traffic incidents on strategic routes;</li> <li>provision of more real-time traffic information to the public; and</li> </ul> </li> </ul>
				Estimated non-recurrent staff cost (\$M at 2020-21 level)  TD: 6.571* (Early Stage) \$4.833* (Remaining Stage)	Actual non-recurrent staff cost as at 31 Mar 2021 (\$M at 2020-21 level)  TD: 6.525* (Early Stage) \$3.957* (Remaining Stage)			<ul> <li>building up Big Data for transport in Hong Kong.</li> <li>For 2020-21, the actual expenditure of \$58.915M was about 89.1% of the approved provision of \$66.134M for the year. The underspending was mainly due to unspent project contingency (\$7M) reserved in the funding allocation.</li> <li>This item had been completed and will be deleted from the next annual progress report.</li> </ul>

<sup>\*</sup> Staff efforts met by internal redeployment.

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