For discussion
on 12 November 2018

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Legislative Council Panel on
Information Technology and Broadcasting

Capital Works Reserve Fund Head 710 Computerisation
Subhead A007GX (Block Allocation) –
New Administrative Computer Systems

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Introduction

This paper seeks Members' support for the estimates of expenditure for 2019-20 under Capital Works Reserve Fund Head 710 Computerisation Subhead **A007GX** (Block Allocation) – New Administrative Computer Systems.

Background

2.   The Finance Committee ("FC") has approved the establishment of block allocation subheads under different Heads of Expenditure of the Capital Works Reserve Fund ("CWRF").   At present, there are a total of 26 block allocation subheads under CWRF, covering different types of expenditure on public works, land acquisition, capital subvention and computerisation projects.   The financial ceiling of each project under Head 710 Computerisation Subhead **A007GX** (Block Allocation) - New Administrative Computer Systems is $10 million.   The Financial Secretary has delegated to the Government Chief Information Officer the power to approve projects and authorise expenditure under the Block Allocation. Projects with expenditure exceeding the above ceiling should be submitted to FC for funding approval individually.

3.   Computerisation projects with expenditure up to $200,000 are approved by the relevant bureaux / departments ("B/Ds") and met from the operating expenses of the respective Controlling Officer's Reports under the General Revenue Account.

Computerisation Block Allocation

4. Each year, the Office of the Government Chief Information Officer ("OGCIO") estimates the funding requirements for Subhead **A007GX** Block Allocation in the following financial year having regard to the cash flow requirements of approved block vote projects, new project proposals submitted by B/Ds, anticipated new projects for various e-Government initiatives to be submitted, as well as the spending position of the Block Allocation.

5. In proposing new computerisation projects, B/Ds are required to observe the following guiding principles -

    (a) support the implementation of e-Government strategies in managing and using information and communications technology and adopt e-Government service as a major mode of service provision;

    (b) integrate e-Government services into their overall business plans and introduce service transformation and business process re-engineering in all organisational / business reviews to enhance business benefits;

    (c) embrace a citizen-centric culture in the delivery of public services and encourage the public to adopt the most efficient, user-friendly and cost-effective channels;

    (d) proactively identify opportunities for implementation of interdepartmental joint-up services , take ownership of these services and account for their performance / benefits;

    (e) support the development of Hong Kong into a world-class smart city; and

    (f) adopt the new pro-innovation procurement policy to be implemented in April 2019.

6. To ensure optimal utilisation of the Block Allocation, OGCIO will require B/Ds to review half-yearly or quarterly their project timetable based on the latest project progress and calculate realistic cash flow requirements. This arrangement will not only avoid unnecessarily locking up funds for

individual projects, but enable OGCIO to deploy the relevant provisions to meet the requirements of other urgent or high priority projects.

Estimates of Expenditure for 2019-20

7.   Taking into account the proposals submitted by B/Ds and forecast of other projects to be initiated in the coming financial year, we estimate that a Block Allocation of **$1,120 million** will be required under Subhead **A007GX** for 2019-20.   This is $60 million (or 5.7%) higher than the provision of $1,060 million for 2018-19.   A breakdown of the expenditure items for 2018-19 and 2019-20 is at **Annex A**.   The proposed annual estimates of the Block Allocation will enable the Government to make effective use of information technology ("IT") to improve services and operational efficiency, as well as to strengthen system security.

8.   The estimated cash flow requirements of projects implemented / to be implemented in or before 2018-19, as well as new projects to be implemented in 2019-20, are at **Annex B**.   The new projects proposed for implementation under the Block Allocation can be broadly classified into the following categories –

(a) e-Government

The Government is committed to speeding up the use of IT and increasing its adoption rate to enhance the delivery of public services and transform internal operation, in order to meet the public expectation for better services, and bring more convenience and a better quality of life to the community.   To enable members of the public to access various e-Government services and submit government forms in a simple, convenient and secure manner, the Government will fully adopt the Electronic Identity (eID).   Examples of new projects include -

(i)   Enhancement of MyGovHK Portal Functions by Adopting eID for User Authentication (OGCIO);

(ii)   Enhancement of eTAX System to Enable Instant

Processing of Applications for Duplicate Copy of Business Registration Certificates (Inland Revenue Department); and

(iii) e-Portal for Life Planning Education and Career Information (Education Bureau).

(b) <u>Opening up government data, big data and artificial intelligence</u>

We have formulated the open data policy and measures in September 2018, requiring all departments to publish their annual open data plans by end-2018, with the aim of providing the ingredients needed for technology research. Moreover, we will install about 400 new lampposts with smart devices in four selected urban locations under the "Multi-functional Smart Lampposts" pilot scheme to collect various types of real-time city data for relevant departments to enhance city and traffic management. The Government will strengthen the use of big data analytics, artificial intelligence and chatbot technology to enhance city management, improve people's quality of living and promote the development of smart city. Examples of new projects include -

(i) Implementation of Chatbot for Service Call System (Architectural Services Department);

(ii) Enhancement of DATA.GOV.HK Portal to Support Real-time Data Visualisation and Provide Self-Service Geo-coding Tools (OGCIO); and

(iii) Meteorological Data Processing System of Smart Lampposts (Hong Kong Observatory).

(c) <u>Enhancing internal operational efficiency</u>

Apart from the provision of public services, B/Ds also develop and implement various IT systems to enhance internal operational efficiency and productivity, create a greener

environment, and address growth in business demands. Examples of new projects include -

(i)   Mobile Solution for Inspection of New Plumbing Works (Water Supplies Department);

(ii)   Proof of Concept of Computerised Training System for Incident Command System (Fire Services Department); and

(iii)   Revamp of Vehicle Emission Control and Information System (Environmental Protection Department).

(d) System technology refresh

System technology refresh is an on-going process to address the problems with obsolete system hardware and software, as well as to leverage the new features / functionality of advanced technology.   Mission-critical IT systems will need to be timely replaced or upgraded to ensure sustainability of service delivery. The Government will adopt cloud computing to enhance agility and efficiency in meeting the growing demand of B/Ds on IT resources.   Examples of new projects include -

(i)   Replacement of Hardware Infrastructure for Property Information Online (Rating and Valuation Department);

(ii)   Replacement of Hardware for Motor Vehicles First Registration Tax System (Customs and Excise Department); and

(iii)   Replacement of Computers and Network Equipment for District Councils (Home Affairs Department).

(e) Strengthening IT security

In view of the increasing number and complexity of cyber security threats, B/Ds attach great importance to the security of

their IT systems and data as well as cyber security risk. B/Ds will enhance data protection and conduct regular security risk assessments and audits on IT systems for compliance with IT security policies and implementation of effective preventive measures against security threats and cyber attacks on Government IT systems. Examples of new projects include -

(i) Upgrade of Firewall System (Architectural Services Department);

(ii) Enhancement of IT Security Monitoring and Control (Development Bureau); and

(iii) Enhancement of IT Security (Buildings Department).

A list of the 230 new projects to be implemented in 2019-20 is at **Annex C.**

Submission of Funding Proposal to FC

9.   If supported by the Panel, the Government will submit the estimates of expenditure of all block allocations under CWRF (including Subhead **A007GX** (Block Allocation)) for 2019-20 to the Public Works Subcommittee ("PWSC") (tentatively in December 2018) for consideration and seek funding approval from FC (tentatively in January 2019).

Advice Sought

10.   Members are invited to support the submission of 2019-20 estimates for CWRF Head 710 Subhead **A007GX** (Block Allocation) – New Administrative Computer Systems to PWSC.

Office of the Government Chief Information Officer
November 2018

**Breakdown of the expenditure items in the 2018-19 and 2019-20
Block Allocations**

Category of Expenditure	2018-19 Provision ($M)	2019-20 Estimates ($M)	Difference ($M)	Percentage of Difference (%)
1. Hardware	238	255	+17	+7.1
2. Software	166	176	+10	+6.0
3. Implementation Services	373	388	+15	+4.0
4. Contract Staff	166	178	+12	+7.2
5. Contingency	67	71	+4	+6.0
6. Others	50	52	+2	+4.0
Total:	**1,060**	**1,120**	**+60**	**+5.7**

**Tentative cash flow requirements of
the projects to be funded
under the proposed Block Allocation in 2019-20**

	No. of projects	Tentative cash flow requirements in 2019-20 ($M)
Projects implemented / to be implemented in 2018-19	598	922
New projects to be implemented in 2019-20	230	198
Total :	**828**	**1,120**

<u>Annex C</u>

New projects to be implmented in 2019-20

Project name	Project estimate ($M)	Planned start date[Note]	Planned end date
<u>Agriculture, Fisheries and Conservation Department</u>			
1 Upgrade of Habitat Management System	3.1	Q1	Q2/2020-21
2 Upgrade of Server Operating Software	6.4	Q1	Q3/2020-21
3 Development of Web-based Biodiversity Information Hub	5.0	Q1	Q4/2020-21
4 Upgrade of Fisheries Patrol and Enforcement System	4.2	Q1	Q4/2020-21
5 Replacement of Network Equipment and Uninterrupted Power Supply System	7.5	Q2	Q3/2020-21
6 Enhancement of Prosecution Management System	8.0	Q2	Q3/2021-22
7 Redevelopment of Plant and Pesticides Licensing System	7.6	Q2	Q3/2021-22
<u>Architectural Services Department</u>			
8 Replacement of Computers and Upgrade of Office Automation Software	4.5	Q1	Q3/2020-21
9 Implementation of Chatbot for Service Call System	2.8	Q1	Q1/2021-22
10 Upgrade of Extranet System with Pilot Migration to Cloud Platform	9.8	Q2	Q2/2021-22
11 Development of Mobile Platform for Site Audit and Inspection Record System	7.0	Q2	Q3/2021-22
12 Upgrade of Firewall System	1.5	Q3	Q4/2020-21
13 Upgrade of Internet Mail Gateway System	1.9	Q3	Q4/2020-21
<u>Audit Commission</u>			
14 Upgrade of Computer Operating System and Replacement of Computer	2.4	Q2	Q4/2019-20

[Note] Q1, Q2, Q3 and Q4 refer to the four quarters of a financial year, i.e., April - June, July - September, October - December and January - March respectively.

	Project name	Project estimate ($M)	Planned start date[Note]	Planned end date
	Auxiliary Medical Service			
15	IT Security Risk Assessment and Audit	0.8	Q3	Q4/2020-21
	Buildings Department			
16	Enhancement of IT Security	2.1	Q1	Q2/2019-20
17	Upgrade of Operating System (New Buildings Division, Internal Audit Unit and Information Technology Unit)	9.8	Q1	Q4/2019-20
18	Revamp of Departmental Thematic Website (Public Education and Publicity Unit)	6.6	Q2	Q2/2020-21
19	Business Continuity Planning for Network Infrastructures	1.4	Q3	Q1/2020-21
20	IT Security Risk Assessment and Audit	2.0	Q3	Q1/2020-21
	Census and Statistics Department			
21	Upgrade of Data Processing and Analysis Platform	8.7	Q1	Q1/2020-21
22	Corporate Data Architecture Study	8.9	Q1	Q2/2020-21
23	Upgrade of Network Infrastructure	8.3	Q1	Q4/2020-21
24	Revamp of Common Computing Infrastructure	9.8	Q1	Q1/2021-22
25	Enhancement of Departmental Statistics Production System and Development of Common Data Model for Data Dissemination	9.8	Q1	Q2/2021-22
26	Implementation of Electronic Data Collection in Monthly Survey of Retail Sales and Monthly Survey of Business Status of Small and Medium-sized Enterprises	9.8	Q2	Q1/2021-22
	Chief Executive's Office			
27	IT Security Risk Assessment and Audit	0.3	Q1	Q3/2019-20
28	Upgrade of Network Infrastructure and Wireless Network Equipment	8.4	Q1	Q1/2020-21
	Civil Aid Service			
29	IT Security Risk Assessment and Audit	0.8	Q4	Q1/2021-22

	Project name	Project estimate ($M)	Planned start date[Note]	Planned end date
	Civil Aviation Department			
30	Replacement of Aviation Personnel Licensing Information System	9.8	Q1	Q1/2021-22
31	Replacement of Hong Kong Aviation Safety Database	4.7	Q2	Q2/2021-22
	Civil Engineering and Development Department			
32	Revamp of Laboratory Information Management System	9.1	Q1	Q4/2020-21
	Civil Service Bureau			
33	Enhancement of Applications for Implementation of Centrally Managed Messaging Platform	5.6	Q1	Q3/2020-21
34	Upgrade of Interdiction Database Management Information System	1.7	Q1	Q3/2020-21
35	Upgrade of Virtualised Testing Platform	2.4	Q2	Q2/2020-21
36	Redevelopment of Electronic Program of Glossary Terms Commonly Used in Government Departments	5.5	Q2	Q1/2021-22
	Commerce and Economic Development Bureau			
37	Replacement of e-Leave System	0.7	Q1	Q3/2019-20
38	Replacement of Servers for Electronic Cargo Manifest System	8.8	Q1	Q3/2019-20
39	Upgrade of Server and Virtualised Platform	1.8	Q4	Q2/2020-21
	Constitutional and Mainland Affairs Bureau			
40	Upgrade of Operating System, Office Automation Software and IT Facilities for Hong Kong Economic and Trade Office in Guangdong	2.9	Q1	Q4/2019-20
	Correctional Services Department			
41	Upgrade of Local Area Network Infrastructure of Correctional Institutions	9.3	Q1	Q2/2021-22
42	IT Security Risk Assessment and Audit	1.6	Q3	Q4/2020-21

	Project name	Project estimate ($M)	Planned start date[Note]	Planned end date
	Customs and Excise Department			
43	Feasibility Study on Postal Clearance System	4.0	Q1	Q4/2019-20
44	Replacement of Hardware for Motor Vehicles First Registration Tax System	9.8	Q1	Q2/2020-21
45	Development of Electronic Platform for Exchange of Authorised Economic Operators Information with other Customs Administrations	8.2	Q1	Q1/2021-22
46	IT Security Risk Assessment and Audit	1.5	Q2	Q2/2021-22
47	Replacement of Servers for Central Information Repository System	9.8	Q2	Q2/2021-22
	Department of Health			
48	Technology Refresh for Healthcare Professionals Registration Information System	3.8	Q2	Q4/2020-21
49	Development of Electronic System for Online Application and Issuance of Certificate for Clinical Trial / Medicinal Test	9.7	Q2	Q1/2022-23
	Department of Justice			
50	Upgrade of Database and Servers for Work Management System	9.8	Q1	Q2/2020-21
51	Replacement of e-Leave System	0.7	Q3	Q1/2020-21
	Development Bureau			
52	IT Security Risk Assessment and Audit (Works Branch)	0.6	Q1	Q4/2019-20
53	Technology Refresh for Registry Filing System of Legal Advisory Division (Works)	3.0	Q1	Q4/2019-20
54	Enhancement of IT Security Monitoring and Control (Planning and Lands Branch)	2.5	Q1	Q2/2020-21
55	Revamp of Site Tracking Information System	6.2	Q1	Q1/2021-22
	Education Bureau			
56	Upgrade of Mid-range Computer System Platform	4.5	Q1	Q3/2019-20
57	e-Portal for Life Planning Education and Career Information	5.0	Q1	Q1/2020-21

	Project name	Project estimate ($M)	Planned start date[Note]	Planned end date
58	Redevelopment of Electronic Advance Application System for Post-secondary Programmes	9.8	Q1	Q4/2020-21
59	Upgrade of Salaries Grant System	3.3	Q2	Q3/2020-21
	Efficiency Office			
60	Revamp of Web Portal and Upgrade of System Platform for 1823 Human Resources Management System	1.8	Q1	Q4/2019-20
61	Upgrade of Operating System and Office Automation Software for 1823	7.2	Q1	Q4/2019-20
62	Technology Refresh for 1823 IT Infrastructure	7.7	Q1	Q1/2020-21
	Electrical & Mechanical Services Department			
63	Electronic Audit and Record System for Railway Design Plans for the Safety and Security Coordinating Committee and the Trackside Safety and Security Coordinating Committee	1.9	Q1	Q1/2020-21
	Environmental Protection Department			
64	Development of Construction Waste Disposal Charging Management Information System	1.9	Q1	Q1/2020-21
65	Revamp of Vehicle Emission Control and Information System	9.1	Q1	Q1/2022-23
	Financial Services and the Treasury Bureau			
66	Replacement of e-Leave System (Financial Services Branch)	0.5	Q1	Q3/2019-20
67	Upgrade of Network Equipment and e-Leave System (The Treasury Branch)	2.1	Q1	Q2/2020-21
68	Upgrade of Network Infrastructure (Financial Services Branch)	3.0	Q2	Q2/2020-21
	Fire Services Department			
69	Enhancement of Paramedic Services Quality Assurance System	5.1	Q1	Q4/2019-20
70	Electronic System for Patient Tagging in Major Incidents	6.8	Q1	Q2/2020-21

	Project name	Project estimate ($M)	Planned start date[Note]	Planned end date
71	Proof of Concept of Computerised Training System for Incident Command System	4.1	Q1	Q2/2020-21
72	Technology Refresh for Administrative Systems and Strengthening Information Systems Governance	7.1	Q2	Q4/2019-20
	Food and Environmental Hygiene Department			
73	Implementation of Food Coding System for Centre for Food Safety	9.8	Q1	Q1/2020-21
74	Revamp of Liquor Licence Processing System	8.8	Q2	Q3/2020-21
75	Development of Transport Management Information System II	9.6	Q2	Q4/2020-21
76	Replacement of Servers	8.5	Q2	Q4/2020-21
77	Revamp of Licensing Management Information System (Phase 1)	9.6	Q2	Q4/2020-21
78	System Analysis and Design and Implementation of Food Import and Export Control System (Phase 1)	9.8	Q2	Q4/2020-21
	Food and Health Bureau			
79	Implementation of Web Content Management System	1.6	Q1	Q4/2019-20
80	Upgrade of Production Database Platform of Electronic Health Record Sharing System	6.7	Q1	Q1/2020-21
81	Revamp of Thematic Website for Implementation of Electronic Health Record Sharing System (Stage 2)	2.5	Q1	Q4/2020-21
82	Replacement of Cyber Threat Protection Infrastructure Components for Electronic Health Record Sharing System	7.9	Q1	Q4/2021-22
83	Replacement of e-Leave System	0.4	Q2	Q3/2019-20
84	Replacement of IT Equipment for eHealth System (Subsidies) and Primary Care Directory	4.6	Q2	Q4/2019-20
85	Relocation of Data Centers of Electronic Health Record Sharing System	9.1	Q2	Q2/2020-21
86	IT Security Risk Assessment and Audit for Electronic Health Record Sharing System	4.2	Q2	Q4/2021-22
87	IT Security Risk Assessment and Audit	0.5	Q3	Q2/2020-21

	Project name	Project estimate ($M)	Planned start date[Note]	Planned end date
	Government Flying Service			
88	Computer Systems and Facilities for Kai Tak Division	6.7	Q2	Q3/2020-21
	Government Laboratory			
89	Enhancement of Server Infrastructure	8.3	Q1	Q2/2020-21
90	Upgrade of Laboratory Information Management System for DNA Database Section	1.3	Q1	Q2/2020-21
91	Departmental Information Technology Plan Study	5.5	Q1	Q3/2020-21
	Government Logistics Department			
92	Replacement of e-Leave System	0.6	Q2	Q1/2020-21
	Highways Department			
93	IT Security Risk Assessment and Audit	0.9	Q1	Q1/2020-21
94	Enhancement of Excavation Permit Management System	2.8	Q2	Q3/2020-21
	Home Affairs Department			
95	Replacement of Computers and Upgrade of Operating System and Office Automation Software	9.8	Q1	Q4/2019-20
96	Development of Demerit Points Information System for Community Halls / Community Centres	1.8	Q1	Q1/2020-21
97	Replacement of Network Routers	6.8	Q1	Q1/2021-22
98	Replacement of Computers and Network Equipment for District Councils	7.8	Q2	Q2/2021-22
	Hong Kong Observatory			
99	Departmental Disaster Recovery Plan Study	1.6	Q1	Q4/2019-20
100	Meteorological Data Processing System of Smart Lampposts	1.3	Q1	Q4/2019-20
101	Replacement of Hardware for Core Operational Network	9.8	Q1	Q2/2020-21
102	Revamp of Databases	9.8	Q1	Q2/2020-21
103	Replacement of Computer Systems of Aerodrome Meteorological Observing System	2.0	Q1	Q4/2020-21

	Project name	Project estimate ($M)	Planned start date[Note]	Planned end date
104	Replacement of Computing Facilities of Rainstorm and Severe Weather Nowcasting System to Enhance its Capability in Development of New Algorithms	3.6	Q1	Q4/2020-21
105	Replacement and Consolidation of Meteorological Data Collection and Processing System	9.8	Q1	Q3/2021-22
106	Implementation of IT Service Quality Management for Critical IT Infrastructure	7.9	Q1	Q4/2021-22
107	Archival System for Geostationary Satellite Data	9.4	Q2	Q4/2020-21
108	Development of Electronic Inventory System	7.4	Q2	Q4/2020-21
	Hong Kong Police Force			
109	Provision of IT Network System for New Kowloon East Regional Headquarters Complex and Ngau Tau Kok Police Services Centre	6.2	Q1	Q3/2019-20
110	Strengthening Data Security of Command and Control, and Event Planning System	1.6	Q1	Q4/2019-20
111	Implementation of Data Encryption for Enhancing Office Automation Servers and File Sharing System	9.7	Q1	Q3/2020-21
112	Enhancement of Training Management System	4.0	Q1	Q3/2020-21
113	Strengthening Data Security of Virtual Workstation Servers	9.7	Q1	Q3/2020-21
114	e-Solution to Promotion to Sergeant Qualifying Examination	5.8	Q1	Q4/2020-21
115	Strengthening Data Security of Case Management, Investigation, Licensing and Registration, and Complaints Systems	1.0	Q1	Q4/2020-21
116	Strengthening Data Security of Crime Forensics and Specialist Tools Systems	9.8	Q1	Q4/2020-21
117	Strengthening Data Security of Finance, Stores and Inventory Management Systems	3.4	Q1	Q4/2020-21
118	Strengthening Data Security of Human Resources Management and Discipline Systems	8.4	Q1	Q4/2020-21
119	Strengthening Data Security of IT Infrastructure and Information Management Systems	9.1	Q1	Q1/2021-22
120	Strengthening Information Security of Workstation Management Infrastructure	3.2	Q1	Q1/2021-22

	Project name	Project estimate ($M)	Planned start date[Note]	Planned end date
	Immigration Department			
121	Feasibility Study on Implementation of Human Resources Management System	6.0	Q1	Q1/2020-21
122	Implementation of Next Generation of Data Warehousing Information System	9.8	Q1	Q2/2021-22
123	IT Security Risk Assessment and Audit	1.7	Q1	Q2/2021-22
	Information Services Department			
124	IT Security Risk Assessment and Audit	1.0	Q2	Q1/2020-21
125	Revamp of Sales of Publication System and Online Government Bookstore	8.7	Q2	Q2/2020-21
126	Implementation of External Portal	7.0	Q4	Q3/2020-21
	Inland Revenue Department			
127	Enhancement of eTAX System to Enable Instant Processing of Applications for Duplicate Copy of Business Registration Certificates	8.0	Q1	Q4/2019-20
128	Technical Study on Relocation of IT Systems to the New "Inland Revenue Tower" in Kai Tak	4.4	Q1	Q4/2019-20
129	Data Encryption for Document Management System	9.0	Q1	Q3/2020-21
130	Enhancement of Application Systems for Improving Efficiency in Searching Documents of Companies Registry and Land Registry	5.5	Q1	Q3/2020-21
131	Implementation of Data Encryption for Mid-range Systems	9.1	Q1	Q3/2020-21
132	Revamp of Electronic Refund Cheque Control Register	3.3	Q1	Q3/2020-21
	Innovation and Technology Bureau			
133	Replacement of e-Leave System	0.7	Q1	Q4/2019-20
	Intellectual Property Department			
134	IT Security Risk Assessment and Audit	0.3	Q3	Q1/2020-21

	Project name	Project estimate ($M)	Planned start date[Note]	Planned end date
	<u>Joint Secretariat for the Advisory Bodies on Civil Service and Judicial Salaries and Conditions of Service</u>			
135	Upgrade of IT Infrastructure	3.2	Q1	Q3/2020-21
	<u>Labour and Welfare Bureau</u>			
136	Replacement of e-Leave System	0.8	Q2	Q3/2019-20
	<u>Labour Department</u>			
137	Online Course Registration System for Occupational Safety and Health Centre	4.3	Q1	Q4/2020-21
138	Replacement of e-Leave System	1.2	Q3	Q3/2020-21
139	Revamp of Departmental Homepage	7.6	Q3	Q2/2022-23
	<u>Lands Department</u>			
140	Upgrade of Operating System and Software and Virtualisation of Geospatial Data Conversion Suite	6.5	Q1	Q4/2019-20
141	e-Building Plan Data Processing System	9.8	Q1	Q3/2020-21
142	Enhancement of Mesh Models using Multiple Mapping Data Sources	9.4	Q1	Q3/2020-21
143	Establishment of 3D Spatial Database	9.8	Q1	Q3/2020-21
144	Establishment of Centralised Squatter and Licensed Structures Database	8.0	Q1	Q3/2020-21
145	Implementation of Content Management Module in Land Information System	8.7	Q1	Q3/2020-21
146	Upgrade of Secure Internet Gateway	9.1	Q1	Q3/2020-21
147	Advanced Geospatial Data Model Dissemination and Application System	8.5	Q1	Q4/2020-21
148	Integration of Case Monitoring System Module into Land Information System	9.6	Q1	Q4/2021-22
149	Pilot Spatial Land Administration File Management System	9.8	Q3	Q2/2020-21
150	Upgrade of Secure Centralised Storage and Adoption of Network Virtualisation	9.0	Q3	Q3/2020-21
151	Mobile Version of Geospatial Information Hub	6.9	Q3	Q1/2021-22

	Project name	Project estimate ($M)	Planned start date(Note)	Planned end date
	Legal Aid Department			
152	Upgrade of IT Infrastructure	1.4	Q3	Q1/2020-21
	Leisure and Cultural Services Department			
153	e-Admission System for Museums	9.8	Q1	Q4/2020-21
154	Replacement of Office Automation Core Network Equipment for Headquarters	7.9	Q1	Q4/2020-21
155	Technology Refresh for Next Generation Integrated Library System Infrastructure	8.2	Q1	Q4/2020-21
156	Enhancement of Tree Data Bank System	9.4	Q1	Q3/2021-22
157	Implementation of IT Systems for East Kowloon Cultural Centre	9.1	Q2	Q4/2020-21
	Marine Department			
158	Replacement of Computers	2.7	Q1	Q3/2019-20
159	Centrally Managed File Storage	4.1	Q1	Q1/2020-21
160	IT Security Risk Assessment and Audit	1.6	Q2	Q4/2020-21
	Office of the Government Chief Information Officer			
161	Relocation of e-Government Infrastructure Service and Upgrade of Capacity	7.5	Q1	Q3/2019-20
162	Refresh of Best Practices and Guides for IT Project Delivery and Promotion of Adoption of Agile Development and Design Thinking	6.7	Q1	Q4/2019-20
163	Enhancement of MyGovHK Portal Functions by Adopting eID for User Authentication	9.8	Q1	Q3/2020-21
164	Implementation of Chatbot to Facilitate Public to Search for Government Forms and Related Application Procedures	9.8	Q1	Q3/2020-21
165	IT Security Risk Assessment and Audit for Critical and Departmental Services	3.8	Q1	Q4/2020-21
166	Renewal of Network Equipment of Central Computer Centre Network Services	9.7	Q1	Q1/2021-22
167	Enhancement of DATA.GOV.HK Portal to Support Real-time Data Visualisation and Provide Self-Service Geo-coding Tools	9.8	Q1	Q4/2021-22

	Project name	Project estimate ($M)	Planned start date[Note]	Planned end date
168	Enhancement of Change of Address Service by Adopting eID for User Authentication	4.0	Q2	Q1/2020-21
169	Enhancement of Infrastructure for Mobile Workplace Services	2.9	Q2	Q2/2020-21
170	Enhancement of Shared e-Procurement Service to Support Procurement via Standing Offer Agreement for Quality Professional Services	4.1	Q2	Q2/2020-21
171	IT Security Risk Assessment and Audit for Electronic Information Management Systems	0.5	Q3	Q4/2020-21
172	Information Security Governance over all B/Ds	9.8	Q3	Q3/2022-23
	Official Receiver's Office			
173	IT Security Risk Assessment and Audit	0.7	Q1	Q2/2020-21
174	Upgrade of Email System	2.7	Q1	Q2/2020-21
175	Upgrade of Operating System and Office Automation Software	5.9	Q1	Q2/2020-21
	Planning Department			
176	Planning and Development Related Information Portal	9.8	Q1	Q1/2020-21
177	Revamp of Departmental Website	9.8	Q2	Q4/2020-21
	Public Service Commission			
178	Upgrade of Operating System, Email System and Office Automation Facilities	3.0	Q1	Q2/2020-21
	Radio Television Hong Kong			
179	Upgrade of Confidential and Departmental Mail Systems	1.9	Q1	Q4/2019-20
180	Upgrade of eTVonline Portal Infrastructure	1.0	Q1	Q3/2020-21
	Rating and Valuation Department			
181	Implementation of Special Rates System	9.8	Q1	Q2/2020-21
182	Replacement of Hardware Infrastructure for Property Information Online	9.8	Q2	Q2/2020-21
183	Upgrade of Operating System and Related Hardware and Software	8.3	Q2	Q3/2020-21

	Project name	Project estimate ($M)	Planned start date[Note]	Planned end date
184	Revamp of Rental Information System	7.2	Q2	Q3/2021-22
185	IT Security Risk Assessment and Audit	0.9	Q3	Q2/2020-21
	Registration and Electoral Office			
186	Upgrade of Geographical Information System	4.5	Q1	Q1/2020-21
187	Upgrade of Online Voter Information Enquiry System	1.4	Q1	Q1/2020-21
188	Mobile Input System for Electoral Statistics	9.6	Q1	Q2/2020-21
189	Implementation of Security Information and Incident Management System	1.7	Q1	Q3/2020-21
190	Upgrade of Web Content Filtering System	1.4	Q3	Q2/2020-21
	Security Bureau			
191	Replacement of File Servers	5.1	Q1	Q3/2020-21
192	Replacement of Network Equipment	2.3	Q2	Q3/2020-21
193	Implementation of Web Content Management System and Enhancement of Internet Websites	4.3	Q2	Q4/2020-21
	Social Welfare Department			
194	Development of Health Workers Registration System	6.8	Q1	Q3/2020-21
195	Development of Online Platform for Residential Care Homes for Elderly and Persons with Disabilities	4.6	Q1	Q3/2020-21
196	Implementation of Government Human Resources Management Services	4.8	Q2	Q1/2020-21
197	Enhancement of Client Information System - Child Protection Registry (Phase 2)	3.1	Q2	Q3/2020-21
198	Redevelopment of Severe Acute Respiratory Syndrome Trust Fund Information System	1.1	Q2	Q3/2020-21
199	Revamp of Departmental Homepage and Enhancement of Web Content Management System	1.4	Q2	Q3/2020-21
	The Treasury			
200	Implementation of Government Human Resources Management Services	3.1	Q1	Q3/2019-20

	Project name	Project estimate ($M)	Planned start date[Note]	Planned end date
201	Upgrade of IT Security Monitoring and Auditing System	3.1	Q1	Q4/2019-20
202	Opening up of Government Expenditure Data	9.7	Q1	Q3/2020-21
203	Upgrade of General Demand Note System and e-Billing Services	9.8	Q1	Q1/2021-22
204	Technology Refresh for Database and Application Platforms	8.7	Q1	Q2/2021-22
205	Enhancement of Treasury Intranet Portal System, Government Financial Management Database and Electronic Register of Treasury Grades Officers	7.0	Q2	Q2/2021-22
206	Design and Implementation of New Backbone Network	9.8	Q3	Q2/2022-23
207	Revamp of Departmental Website	5.7	Q4	Q2/2021-22
	Trade and Industry Department			
208	Upgrade of Departmental Portal	0.9	Q1	Q4/2019-20
209	Replacement of Computers	4.1	Q1	Q4/2020-21
210	IT Security Risk Assessment and Audit	0.7	Q3	Q4/2020-21
	Transport and Housing Bureau			
211	Replacement of e-Leave System	0.9	Q2	Q3/2019-20
212	Migration of Email System to Centrally Managed Messaging Platform	0.8	Q2	Q4/2019-20
213	Upgrade of IT Infrastructure and Office Automation Facilities (Transport Branch)	1.4	Q2	Q1/2020-21
	Transport Department			
214	IT Security Risk Assessment and Audit	1.0	Q1	Q4/2019-20
215	Enhancement of e-Services Systems to Support New Version of e-Government Infrastructure Service Reference Modules	2.6	Q1	Q1/2020-21
216	Enhancement of Vehicles and Drivers Licensing Integrated Data System V to Support Issuing of In-vehicle Units to Vehicle Owners	9.8	Q1	Q2/2020-21
217	Expansion of Mobile Field Operation System	5.3	Q1	Q2/2020-21
218	Feasibility Study on Adoption of eID to Enhance Online Vehicle and Driver Licensing Services	4.8	Q1	Q2/2020-21

	Project name	Project estimate ($M)	Planned start date[Note]	Planned end date
219	Development of Implementation Roadmap and Strategy for e-Licensing Riding on In-vehicle Units	4.8	Q1	Q3/2020-21
220	Enhancement of Website and Web Content Management System	1.7	Q1	Q3/2020-21
	University Grants Committee Secretariat			
221	Upgrade of Operating System and Office Automation System Facilities	4.6	Q1	Q3/2019-20
222	IT Security Risk Assessment and Audit	0.3	Q1	Q4/2019-20
	Water Supplies Department			
223	Mobile Solution for Inspection of New Plumbing Works	4.7	Q1	Q1/2020-21
224	Revamp of Human Resources Management System	6.5	Q1	Q3/2020-21
225	Centralised Security Log Collection and Analysis System	5.2	Q1	Q4/2020-21
226	IT Security Patching System	7.9	Q1	Q4/2020-21
227	Replacement of Network Equipment	9.7	Q1	Q2/2021-22
	Working Family and Student Financial Assistance Agency			
228	Replacement of Network Equipment (Student Finance Office)	2.9	Q1	Q4/2019-20
229	Departmental Information Technology Plan Study	5.7	Q1	Q1/2020-21
230	Replacement of Hardware and Software of SFO E-link and E-Submission System	2.5	Q1	Q4/2020-21