

ITEM FOR FINANCE COMMITTEE

CAPITAL WORKS RESERVE FUND

HEAD 710 – COMPUTERISATION

Legal Aid Department

New Subhead “Revamp of Case Management and Case Accounting System and the related query system of the Legal Aid Department”

Members are invited to approve the creation of a new commitment of \$79,072,000 for the revamp of the Case Management and Case Accounting System and Knowledge Support System of the Legal Aid Department.

PROBLEM

The Legal Aid Department (LAD) needs to revamp its Case Management and Case Accounting System (CM&CAS) and the related query system, Knowledge Support System (KSS), as the technology they adopt has become obsolete and can no longer meet LAD’s operational requirements.

PROPOSAL

2. The Director of Legal Aid (DLA), with the support of the Chief Secretary for Administration and Government Chief Information Officer, proposes to create a new commitment of \$79,072,000 for the revamp of CM&CAS and KSS.

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JUSTIFICATION

Challenges and Limitations

3. CM&CAS and KSS have been in use for over 17 years. The technologies adopted at the time of their development are already much outdated and require revamping as soon as possible. The outdated software and hardware have also rendered the systems vulnerable to security threats. In addition, due to limitation in system architecture and design, the two systems are inflexible in adding new functions or adopting new technologies to cope with the changing and more complicated operational needs today. LAD relies heavily on CM&CAS to conduct its day-to-day operations. Service disruption to and system failure of CM&CAS will have significant adverse impact on LAD's operations and provision of service to its stakeholders, which include legal aid applicants, relevant courts, the legal profession and other service providers.

4. LAD engaged a consultancy firm to conduct a feasibility study in 2018 to assess the operational needs and technical feasibility of revamping CM&CAS and KSS. The study, completed in October 2020, identified various design, operational and technical limitations of the existing systems, e.g. the cessation of support for the programming language of the existing systems, slow processing time and security vulnerabilities due to outdated hardware and software. There is also much room for improvement in the systems' user friendliness, ability to generate documents, data searching and case progress tracking.

Proposed Systems and Expected Benefits

5. LAD accepted the consultant's recommendations to revamp the two systems. The revamped systems will be hosted and operated in the Government Cloud Infrastructure Services (GCIS) platform.

6. LAD considers that the revamped CM&CAS and KSS will bring about the following benefits –

(a) *Facilitate application processing*

(i) Enhanced services provided to applicants

When an applicant makes multiple legal aid applications concerning different subject matters or a number of applicants each makes an application concerning the same subject matter at the same time, the revamped systems will be capable of creating multiple enquiry notes with common information to

/facilitate

facilitate subsequent sharing of information electronically, tracking additional information and alerting users for prompt follow-up actions. This will greatly reduce the processing time for legal aid applications and enhance the efficiency of frontline staff.

The revamped systems will reduce certain manual work in the day-to-day operations and enhance efficiency in the provision of legal aid services to the public with workflow oriented design and automation. For example, the system will upgrade the current document generation and storage functions and support version control of documents and multiple levels of templates so that suitable version of documents such as case-specific application forms, notice of assignment of lawyers, etc. could be generated automatically depending on the case nature of the legal aid application, and according to whether the aided person is applying in his/her own right or as a representative for others, etc.

(ii) More efficient information sharing with other parties

When conducting the means test on legal aid applicants, much time is now spent on obtaining, updating and keeping records of market data of investments they hold. The revamped systems will speed up LAD's handling of legal aid cases by better and more efficient information capturing, sharing, collaboration and processing. The revamped systems will link with the Hong Kong Exchanges and Clearing Market website to automatically download open market stock prices and update the relevant information in the systems so that much time and effort would be saved by LAD's staff in downloading and cross-checking each and every stock to verify their respective prices for means testing.

The revamped systems will also be able to capture information provided to LAD by other government bureaux and departments in physical form and store it electronically for easy retrieval.

(b) *More efficient case assignment*

Under the revamped systems, the refined rules on assignment of cases will save handling time for manual checking and verification of information. These include increased search and filtering criteria for

/lawyers

lawyers on the Legal Aid Panel to render the identification of suitable lawyers more efficiently. The revamped systems will convert manual assignment processes to e-assignment processes. They will also keep track of more information about Panel lawyers and provide alerts to users during assignment.

(c) *Enhance monitoring of assigned-out cases*

(i) Better performance and operational efficiency in case management

In monitoring assigned-out cases, the case handling officers have to update the progress of the cases regularly and consider applications from assigned lawyers for the extension of legal aid certificates, engagement of experts and counsel, etc. The revamped systems will convert more manual approval processes to e-approval processes. They will also enable more data to be stored in the systems to allow closer case monitoring and management.

(ii) Reduce manual work and reliance on physical files and paper documents

The processing and following up of legal aid cases often involve massive paper documents. Unlike the current systems, the revamped systems will be capable of storing additional types of data and documents electronically. Coupled with conversion of various manual approval to e-approval processes, the reliance on physical files will be reduced and time and manpower spent on frequent conveyance and sorting of bulky physical files can be saved.

(iii) Better means for dissemination of information to aided persons/panel solicitors/other departments

The revamped systems will provide better support for data exchange and processing from the Legal Aid Electronic Services Portal which is accessible by legal aid applicants, aided persons and Panel lawyers for making appointments for applications of legal aid, updating personal information, tracking case information and submission of documents, etc. The revamped systems will also enhance document generation functions and increase the efficiency in generating correspondences with legal aid applicants, assigned lawyers and other stakeholders.

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(d) *Improve costs assessment*

Upon conclusion of the legal aid cases, the assigned solicitors and/or the opposite party will submit their bills of costs for LAD's assessment. The revamped systems will facilitate preparation of bills of costs in pre-defined format with automatic calculation. The converted e-process will enhance accuracy and increase efficiency for costs assessment. This will greatly reduce the time needed by LAD staff to assess bills of costs and speed up the entire process of costs assessment.

(e) *Enhance risk management through automatic alerts/validation*

The revamped systems will help reduce the risks of errors in payments related to legal aid, and hence increase work efficiency. Unlike the current systems, the revamped systems will be able to cross-check against different validation criteria before approving a payment to aided persons, assigned lawyers, experts and other parties. This will save time and manpower for manual checking and reduce the risk of overpayment.

The revamped systems will also improve the existing Bring Up and e-Diary functions so that the responsible officers will be alerted automatically to specific tasks such as court hearings and pledge deadline.

(f) *Facilitate data search, retrieval and analysis*

(i) Enhanced data retrieval for comprehensive analysis

The revamped KSS will provide regular snapshots of operational data to facilitate comparison of data trend. It will also provide on-demand analysis of a large volume of cross-functional data from CM&CAS to support management and operational decisions. The revamped KSS will allow users to retrieve data from CM&CAS in a more user-friendly and flexible manner, and to compile comprehensive management and statistical reports more promptly so as to respond to the request for statistics relating to LAD's operations.

(ii) More advanced search engine

An advanced search engine will be introduced to store the index data for efficient full-text search, queries and key-word search, etc. These searching features which are lacking in the current systems will allow users to search for the target data more efficiently and effectively.

/(g)

(g) *Improve system security***(i) Enhanced system security and better operation support**

The revamped systems will run on GCIS, which not only conforms to the latest government security regulations, policies and guidelines, but also provides advance security features. It also streamlines the system operations and reduces system support effort and operating costs.

(ii) Improved system resilience

The GCIS further improves system resilience by automatic replication of production data to resilience site, thus saving the transmission time and facilitating speedy system recovery. The revamped CM&CAS will implement a cost-effective disaster recovery (DR) solution, enabling it to have a quick DR Service to restore lost data immediately, ensure continuity of service and minimise disruption of legal aid services to the public.

(h) *Better support for Official Solicitor's Office (OSO)*

The revamped CM&CAS will support the maintenance of the inventory list of assets owned by a mentally incapacitated person (MIP) when the Official Solicitor acts as the committee of the MIP. It will be able to keep track of all the changes of the inventories of the MIP, generate an updated inventory list marked with all changes since creation and allow staff in OSO to seek approval for retrieval, removal or deposit of any item in the inventory list and keep a record thereof.

FINANCIAL IMPLICATIONS**Non-recurrent Expenditure**

7. The proposal will involve an estimated non-recurrent expenditure of \$79,072,000 over a five-year period from 2021-22 to 2025-26, with breakdown as follows –

/2021-22

	2021-22	2022-23	2023-24	2024-25	2025-26	Total
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
(a) Hardware	-	-	-	660	-	660
(b) Software	-	1,513	2,863	-	2,109	6,485
(c) Cloud Services	-	178	302	1,030	879	2,389
(d) Communication Network	-	63	333	84	21	501
(e) Implementation Services	-	5,332	-	11,954	32,839	50,125
(f) Contract Staff	194	1,859	3,080	3,241	2,696	11,070
(g) Security Risk Assessment & Audit and Privacy Impact Assessment	-	-	178	60	-	238
(h) Training	-	-	106	221	89	416
(i) Contingency	19	895	686	1,725	3,863	7,188
Total	213	9,840	7,548	18,975	42,496	79,072

8. On paragraph 7(a) above, the estimate of \$660,000 is for acquiring the hardware required for implementation of the new systems.

9. On paragraph 7(b) above, the estimate of \$6,485,000 is for acquiring the system software for servers, database, optical character recognition software, antivirus software, reporting tool, etc.

10. On paragraph 7(c) above, the estimate of \$2,389,000 is for acquiring Cloud Services for the new systems.

11. On paragraph 7(d) above, the estimate of \$501,000 is for acquiring upgraded network services and network security assessment, etc.

12. On paragraph 7(e) above, the estimate of \$50,125,000 is for acquiring implementation and support services from service providers. Main implementation activities include system analysis and design, application development, system installation and configuration, infrastructure implementation at data centres, production rollout and nursing, etc.

13. On paragraph 7(f) above, the estimate of \$11,070,000 is for engaging the services of contract information technology professional staff to supplement the in-house project management team on tendering, project management, support for system analysis and design, and conducting acceptance tests.

14. On paragraph 7(g) above, the estimate of \$238,000 is for acquiring the consultancy service for conducting Security Risk Assessment & Audit and Privacy Impact Assessment for the new systems.

15. On paragraph 7(h) above, the estimate of \$416,000 is for training internal users.

16. On paragraph 7(i) above, the estimate of \$7,188,000 represents about 10% of the costs required for the items set out in paragraphs 7(a) to (h) above as contingency.

Other Non-recurrent Expenditure

17. In addition, the revamp project will require a temporary in-house project team (as stated in paragraph 13 above) for tender execution, project management, system analysis and design, site preparation, quality assurance, acceptance test and implementation control. The staff cost of the project team will be mostly absorbed within LAD's existing resources.

Recurrent Expenditure

18. Upon the implementation of the new CM&CAS and KSS, it will require an indicative annual recurrent expenditure of \$10,330,000 from 2026-27 onwards for maintaining and supporting them. The current annual recurrent expenditure for the existing systems is \$4,066,000. LAD will seek additional resources to cover the increase in annual recurrent expenditure in the relevant financial years as appropriate. The cost breakdown of recurrent expenditure is as follows –

	2026 - 27 and onwards
	\$'000
(a) Hardware and Software	1,031
(b) Cloud Services	1,253
(c) Communication Network	84
(d) System Maintenance	6,254
(e) Contract Staff	1,708
Total	10,330

/Cost

Cost Savings/Avoidance

19. The implementation of the proposed project will enable LAD to save cost on maintaining the continuous operation of the existing systems. The savings include the avoidance of a non-recurrent cost of \$10,992,000 that will otherwise be required for upgrading and enhancing the existing systems. Furthermore, it is estimated that the proposed revamp of CM&CAS and KSS will generate annual savings of \$15,445,000 from 2026-27 onwards, comprising –

(a) Realisable annual savings of \$4,066,000

This represents the annual maintenance and support cost of the existing CM&CAS and KSS. The savings will be ploughed back to cover part of the maintenance and support costs of the new systems.

(b) Notional annual savings of \$9,919,000

With the improvement to be brought about by the new systems, notional savings will be achieved mainly through fragmented reduction in staff effort in various Sections/Units from new features such as diary, alerts and enhanced content search, better preparation of ad hoc management reports and statistical data for planning and analysis, and reduced support effort and operating costs after adopting cloud technologies.

(c) Cost avoidance of \$1,460,000 annually

The additional annual recurrent cost for upgrading and enhancing the existing systems will be avoided.

Encl. 20. A cost and benefit analysis for the proposed project is at Enclosure.

IMPLEMENTATION PLAN

21. The planned implementation schedule of the revamp project is as follows –

Activity	Target Completion Date
I. CM&CAS	
(a) Tender preparation, tendering and award of tender	June 2022
(b) System Analysis and Design (Phase 1 & 2)	January 2023
(c) Phase 1 User Acceptance Test	May 2024
(d) Phase 1 Live Run	June 2024
(e) Phase 2 User Acceptance Test	May 2025
(f) Phase 2 Live Run	June 2025

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Activity	Target Completion Date
II. Query System (KSS)	
(a) Procurement	January 2025
(b) User Acceptance Test	July 2025
(c) System Live Run	August 2025

ALTERNATIVES CONSIDERED

22. Apart from a major revamp, the consultant also explored the feasibility of using off-the-shelf package with customisation. However, as legal aid service is unique and not otherwise available in the market, significant customisation work is needed for these packages in addition to changes of internal process required for their adoption. A major revamp, building on new system framework and custom-built design, of the two systems would be more cost effective and would minimise implementation risks.

PUBLIC CONSULTATION

23. We briefed the Legislative Council Panel on Administration of Justice and Legal Services on 1 March 2021. Panel Members supported the submission of the proposal to the Finance Committee for funding approval.

BACKGROUND

24. Under the Legal Aid Ordinance (Cap. 91) (LAO), LAD provides legal representation to eligible legal aid applicants who must first satisfy both the merits test and the means test. The LAO provides that DLA may act for an aided person through in-house professional lawyer or assign any lawyer in private practice selected from the Legal Aid Panel. Legal aid is available, *inter alia*, to civil and criminal cases in the District Court, the Court of First Instance, the Court of Appeal and the Court of Final Appeal. It is also available for committal proceedings in the Magistrates' Courts. Since DLA is also designated as the first Official Solicitor under the Official Solicitor Ordinance (Cap. 416) to represent the interests of persons under the age of 18 or MIP, LAD maintains an OSO to discharge relevant duties under this Ordinance.

25. To facilitate the effective provision of legal aid services to the public, LAD launched CM&CAS in August 2003 as the critical internal information system with the full range of functions covering the entire process of a legal aid case from processing applications, assigning lawyers, monitoring progress of assigned-out cases, conducting litigation at court and costs and accounting management.

26. In 2019, CM&CAS handled 16 074 legal aid applications and processed 7 734 legal aid certificates. The system has also provided comprehensive functions in monitoring about 11 788 assigned-out cases and the administration of 3 234 counsel and solicitors on the Legal Aid Panel.

27. LAD also maintains a KSS which is designed as an essential companion for CM&CAS in handling and generating reports.

Chief Secretary for Administration's Office
Legal Aid Department
March 2021

Cost and Benefit Analysis for the Revamp of Case Management and Case Accounting System and Knowledge Support System

		Cash Flow (\$'000)											
		2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	Total
1	Non-recurrent												
	Expenditure	213	9,840	7,548	18,975	42,496	-	-	-	-	-	-	79,072
	Staff Cost	-	12,778	17,037	17,246	5,093	-	-	-	-	-	-	52,154
	Total Non-recurrent Cost	213	22,618	24,585	36,221	47,589	-	-	-	-	-	-	131,226
2	Recurrent												
	Expenditure	-	-	216	768	3,934	10,330	10,330	10,330	10,330	10,330	10,330	66,898
	Total Recurrent Cost	-	-	216	768	3,934	10,330	10,330	10,330	10,330	10,330	10,330	66,898
	Total Non-recurrent and Recurrent Cost (A)	213	22,618	24,801	36,989	51,523	10,330	10,330	10,330	10,330	10,330	10,330	198,124
3	Savings												
	Realisable Saving ^{Note 1}	-	-	-	-	2,940	4,066	4,066	4,066	4,066	4,066	4,066	27,336
	Notional Saving ^{Note 2}	-	-	-	-	7,217	9,919	9,919	9,919	9,919	9,919	9,919	66,731
	Cost Avoidance ^{Note 3}	-	-	-	-	10,992	1,460	1,460	1,460	1,460	1,460	1,460	19,752
	Total Savings (B)	-	-	-	-	21,149	15,445	15,445	15,445	15,445	15,445	15,445	113,819
	Net Savings (C) = (B) - (A)	(213)	(22,618)	(24,801)	(36,989)	(30,374)	5,115	5,115	5,115	5,115	5,115	5,115	(84,305)
	Net Cumulative Savings	(213)	(22,831)	(47,632)	(84,621)	(114,995)	(109,880)	(104,765)	(99,650)	(94,535)	(89,420)	(84,305)	

Notes –

1. This represents the maintenance and support cost of existing systems and other ongoing enhancements to be incorporated in the systems.
2. Notional savings will be achieved by more efficient operations and reduced demand for IT support from the new systems.
3. This represents the additional cost for upgrading and enhancing systems, which will be avoided with revamp of the systems.
