

ITEM FOR FINANCE COMMITTEE

CAPITAL WORKS RESERVE FUND

HEAD 710 – COMPUTERISATION

Office of the Government Chief Information Officer

New Subhead “Setting up of the ‘Digital Corporate Identity’ Platform”

Members are invited to approve the creation of a new commitment of \$300 million under Capital Works Reserve Fund Head 710 – Computerisation for the setting up of the “Digital Corporate Identity” Platform.

PROBLEM

To strengthen digital infrastructure and accelerate the digital economy development in Hong Kong, it is necessary to facilitate corporations in Hong Kong to undergo corporate identity authentication and make use of digital signature in a secure, convenient and efficient manner when using e-government services or conducting online business transactions, simplifying the complicated procedures and thus accelerating their digital transformation.

PROPOSAL

2. The Government Chief Information Officer, with the support of the Secretary for Innovation, Technology and Industry, proposes the creation of a new commitment of \$300 million for the setting up of the “Digital Corporate Identity” (CorpID) Platform as a key digital infrastructure for the development of the digital economy and smart city, and thus accelerating the digital transformation of corporations.

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JUSTIFICATION

Facilitate the Use and Provision of e-Services by Corporations

3. Currently, most corporate-related e-government services provided by government bureaux/departments (B/Ds) and e-services offered by public and private organisations adopt their own systems and use different ways to verify the identities of corporations and their authorised representatives, many of which require corporate users to input corporate information, submit originals or copies of relevant paper documents, and/or stamp the company chops to prove their corporate identities. Corporations are often required to repeat similar procedures and submit the same supporting documents each time when they apply for different e-services. This requires corporations to allocate substantial resources to handle these tedious administrative tasks involving paper documents when using e-services.

4. On the other hand, corporations, as e-service providers, currently do not have a unified, automatic and systematic way to verify the identities of corporate clients and their authorised representatives (such as verifying the company chops and the identities and signatures of authorised representatives). Therefore, on receiving applications and supporting documents from corporate users, e-service providers often need to carry out manual procedures to conduct identity verification of corporate clients, such as arranging personnel to conduct company searches through the services of the Inland Revenue Department (IRD) and/or the Companies Registry (CR), making the verification process complicated and time-consuming. Even so, it is not always possible to verify the authenticity of certain information (such as the company chop or authorisation letter). Therefore, service providers will generally need more time to process business transactions and they may encounter human errors or fraud issues, which will then increase the administrative work and related operating costs. Corporate clients will also experience longer waiting time and are required to submit more additional documents. Such inconvenience will affect their user experience, and thus weakening the service providers' competitiveness.

5. Currently, when corporations use e-government services, relevant data cannot be exchanged across B/Ds, making it inconvenient for corporations (especially small and medium-sized enterprises (SMEs)) to conduct business. It will also result in an increase in the application processing cost of the Government. By unifying corporate identities into a single identity bundled with authorisation, data exchange between corporations and the Government can be more convenient and effective, thereby enhancing the operational efficiency of both parties.

6. In addition, if corporations can connect and interoperate with other corporate identity codes (such as the Legal Entity Identifier by the Global Legal Entity Identifier Foundation) that are widely adopted in other local and overseas industries, it will enable corporations to adhere to relevant standards, facilitating the conduct of trade activities by corporations in Hong Kong and helping them expand their businesses in domestic and overseas markets.

Major Functions

7. The proposed CorpID Platform is a digital infrastructure of the Government, which facilitates the use and provision of e-services and the conduct of electronic commercial activities by corporations. Apart from improving the user experience of corporate users, it can also simplify the business processes of service providers, thus promoting the digital transformation of corporations in Hong Kong. The proposed CorpID can serve as an integrated digital key for identity authentication, enabling corporations to use e-government services and conduct electronic commercial activities with ease. Specifically, CorpID will involve issuing a corporate version of the digital certificate to corporations, which is intended to be equivalent to a digital version of the company chop, so that corporations may perform digital signing under their digital identities with the same effect as stamping with a physical company chop. This arrangement allows corporations to undergo identity verification with ease when conducting electronic commercial activities with the Government and other public and private organisations, thus saving the administrative costs and resources.

8. The proposed CorpID Platform will provide digital corporate identities and related services to Hong Kong corporations established or registered under the Companies Ordinance (Cap. 622) and registered under the Business Registration Ordinance (Cap. 310), and will provide the following functions –

- (i) setting up a portal for corporations to apply for CorpID online, set the authorised representatives and their authorities, and authenticate the identities of other corporations (including verifying the signatures of the corporations and their authorised representatives);
- (ii) providing CorpID for corporate identity authentication^{Note} and digital signing, in lieu of the existing physical signatures and company chops of corporations;
- (iii) authorising the extraction of corporate information registered in the platform and stored in systems of e-government services for pre-filling of forms; and

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^{Note} Including the identity authentication of corporations' owners, directors and authorised representatives

- (iv) storing digital licences and permits of corporations (e.g. licences issued by government departments) , etc.

CorpID will not only reduce the time and efforts required for corporation users to submit originals or copies of the above relevant paper documents and/or stamp the company chop when using e-services, but will also improve the manual process of e-service providers for authenticating the identities of corporate clients and their authorised representatives, as well as verifying their signatures and/or company chops. Additionally, it can strengthen the overall security of the authentication process. The CorpID Platform also provides a unified user interface and authorisation function, allowing corporations to authorise their staff representatives in a simple and convenient way to conduct online business activities, eliminating the need for corporations to go through individual tedious authorisation processes for different e-services. Furthermore, CorpID, serving as a unified corporate identity authentication, can promote cross-departmental e-government services, making it easier for corporations (especially SMEs) to conduct business while increasing the cost-effectiveness of application processing by the Government. The unified corporate identity authentication can also facilitate data exchange between corporations and their business counterparties, as well as between corporations and the Government, thereby enhancing the operational efficiency.

Operational Arrangement

9. The proposed CorpID Platform will be applicable to various government services and corporate business sectors, covering e-services of “Government-to-Business” (G2B) and “Business-to-Business” (B2B).

10. With regard to G2B services, we will roll out several functions in collaboration with the B/Ds which have more business dealings with corporations, in order to connect the CorpID Platform to the e-government services commonly used by corporations. In the long run, we will require all corporate-related e-government services provided by government departments to support the use of CorpID.

11. Regarding B2B operations, we will provide the program modules and application programming interfaces (APIs) that facilitate corporate identity authentication and digital corporate signature verification, in order to support and promote the use of CorpID by public and private organisations in their e-services. For example, when conducting B2B commercial activities (e.g. online transactions), public and private organisations can make use of CorpID to conduct mutual corporate identity authentication, including the authentication of the

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identities of their authorised representatives. As mentioned in paragraph 4 above, corporations can also streamline their processing of applications through the program modules and APIs.

12. We will also collaborate with the Hong Kong Monetary Authority (HKMA) to support the operation of its Commercial Data Interchange (CDI) by adopting CorpID, which will simplify the business processes of financial institutions (particularly banks), especially the “Know-Your-Customer” processes for corporate clients. Since corporations have already undergone the necessary verification when applying for and using CorpID, and authorised specific personnel to represent the corporations to conduct digital signing when using various e-government services and conducting electronic commercial activities. Therefore, the process of verifying clients’ authorisation and signatures by corporations can be automated, allowing them to skip steps in the corporate identity verification process, thereby simplifying the entire business process and improving the overall business efficiency.

Data Protection and System Security

13. Making reference to the outcomes of the Proof-of-Concept testing and study on the application of digital corporate identity in the CDI completed in 2023 by the Office of the Government Chief Information Officer (OGCIO) and HKMA, we will adopt OGCIO’s information technology (IT) infrastructure when establishing the CorpID Platform, including using the Government Cloud and the Shared Blockchain Platform for hosting the system of the CorpID Platform. We will also use the Public Key Infrastructure, which is an internationally recognised security standard, for identity verification process, so as to ensure the security of the CorpID Platform. Before launching the CorpID Platform, we will conduct security risk assessment and audit, privacy impact assessment and audit, and network red team testing, etc. for the platform. Additionally, we will consult the Office of the Privacy Commissioner for Personal Data and relevant B/Ds to ensure that the platform design and operation comply with relevant legal requirements. Prior to the launch of the platform, we will also engage an independent third party to conduct load and stress testing to ensure the stability, security and reliability of the CorpID Platform.

Promotion

14. To promote the wider adoption of CorpID by corporations in future, we plan to publicise and promote the main functions and convenience of CorpID among corporations through diversified means and different channels, including thematic websites, social and media platforms, promotional videos, etc. We also plan to collaborate with relevant departments and industry associations to jointly organise promotional events and explore appropriate support measures, so as to further facilitate the adoption of the CorpID Platform by corporations.

15. Eligible corporations in Hong Kong may opt to apply for and use CorpID as they deem necessary. The details on charges related to the use of CorpID by corporations (mainly involving the application for the corporate version of the digital certificate) will be determined upon the award of the contract for the implementation and operation of relevant systems of the CorpID Platform.

Expected Benefits

16. The proposed CorpID Platform will facilitate corporations to go through corporate identity authentication, and perform digital signing or verify corporate digital signature in a secure, convenient and efficient manner when they use e-government services (such as applying for registration, licences and government subsidies, and conducting government electronic trading and procurement activities) or conduct online business transactions. Through the integration between the CorpID Platform and the relevant systems of CR and/or IRD for electronic search, corporations, with their staff staying indoors, can verify the identity of other corporations and their authorised representatives. Corporations can also through authorisation extract their data registered in the platform and stored in the systems of other e-government services for form filling in future, alleviating the need to undergo the complicated procedures of submitting and verifying paper copies or duplicate copies of related documents and company chops. This will save time and reduce human errors in handling business, thereby simplifying the application process and facilitating the verification of documents in a shorter time.

17. Furthermore, when the e-services of corporations serving as e-service providers support the use of CorpID, the CorpID Platform can provide corporate identity verification function in conjunction with the “identity verification” function offered by “iAM Smart” for individuals, facilitating the verification of identities of corporate clients and their authorised representatives and their digital signatures, as well as verification of signatures and company chops in an efficient and secure manner. This can enhance the overall efficiency and reduce the operational costs of service providers. On the other hand, the CorpID enables service providers to expand their business in digital modes, changing the traditional business model that relied on manual verification of paper documents in the past, thus promoting the digital transformation of corporations for further enhancement of their competitiveness.

18. The functions of the CorpID, such as the document wallet, can store corporations’ licences and permits, facilitating them to show the relevant documents conveniently. By identity authentication and form pre-filling through the platform, corporations no longer have to send personnel to conduct individual business activities in person and go through the process of repeatedly inputting the

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same information, which help reduce the administrative burden on corporations in conducting business and further encourage them to use e-government services and e-services provided by public and private organisations, thus accelerating the digital transformation of corporations in Hong Kong (especially SMEs) as a whole. By using CorpID, all processes involving corporate identity authentication, verification of authorisation information, verification of signatures of authorised representatives and company chops, etc. can also be switched from manual operations to automated completion, which is faster as the processes in general take several days for completion, and real-time processing can even be achieved.

FINANCIAL IMPLICATIONS

Non-recurrent Expenditure

19. We estimate that the implementation of the above proposal will incur a non-recurrent expenditure of \$300 million from 2024-25 to 2027-28. The indicative cost breakdown and estimated cash flow requirements by financial year are as follows –

	2024-25	2025-26	2026-27	2027-28	Total
	\$million	\$million	\$million	\$million	\$million
(a) Engagement of a recognised certification authority in Hong Kong to design and develop a new digital certificate for CorpID	-	8	10	2	20
(b) Cloud services, hardware and software	-	45	32	23	100
(c) System implementation services	-	6	28	4	38
(d) System enhancement services of B/Ds adopting CorpID	-	5	42	5	52
(e) Contract staff	9	23	23	20	75
Sub-total	9	87	135	54	285
(f) Contingency (5%)	-	-	-	15	15
Total	9	87	135	69	300

20. On paragraph 19(a) above, the estimate of \$20 million is for engaging a recognised certification authority in Hong Kong to design a new digital certificate for CorpID, as well as for developing related systems and APIs, etc.

21. On paragraph 19(b) above, the estimate of \$100 million is for the procurement of a series of cloud services, computer hardware and software, including infrastructure as a service, platform as a service, database as a service, container as a service, hardware security modules, provision of the shared blockchain platform, and digital identity application software, etc. The proposed CorpID Platform is a new and complex digital infrastructure that serves as a platform for verifying digital corporate identity and facilitating conducting of business. We have to ensure the operations of the platform is efficient, secure, reliable, highly resilient and with disaster recovery capability. Therefore, there are higher requirements for related cloud services, hardware and software, and thus higher requirements and budgets are involved correspondingly.

22. On paragraph 19(c) above, the estimate of \$38 million is for engaging service providers to carry out system implementation and support. Specifically, it includes system analysis and design, development, testing, installation, engagement of an independent third party to conduct security risk assessment and audit, privacy impact assessment and audit, load and stress testing, network security testing, etc.

23. On paragraph 19(d) above, the estimate of \$52 million is for supporting system enhancement of relevant B/Ds, aiming to connect the CorpID Platform to B/Ds' e-service systems.

24. On paragraph 19(e) above, the estimate of \$75 million is for hiring contract IT staff who have relevant technical skills and experience to assist in the implementation of the project, coordinating B/Ds to enhance the relevant e-government services to support CorpID (including providing technical standards and guidelines), and promoting and providing technical support to the public and private organisations in adopting CorpID.

25. On paragraph 19(f) above, the estimate of \$15 million represents a 5% contingency on the items set out in paragraph 19 (a) to (e) above.

Recurrent Expenditure

26. We estimate that the CorpID project is expected to be fully implemented in 2027-28, and the subsequent annual recurrent cost will be approximately \$50 million, which will be used for the operation, maintenance and

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support of the CorpID Platform and other related support and promotion services by OGCIO. Relevant provisions will be included and reflected in the estimates of OGCIO in the relevant financial years to meet the requirements.

IMPLEMENTATION PLAN

27. Subject to funding approval of the Finance Committee (FC), we plan to implement the CorpID Platform project according to the following schedule –

		Target Implementation Schedule
(a)	Collect business requirements from various stakeholders for the platform	4 th quarter of 2024
(b)	Award the service contract for setting up the CorpID Platform	first half of 2025
(c)	Design the digital certificate of CorpID and develop related systems	end-2025
(d)	Complete the system design, development, relevant testing and audit, provide some corporate-related e-services on the CorpID portal and launch the platform	end-2026

PUBLIC CONSULTATION

28. We have previously consulted the industry through various channels, including the “Business Facilitation Advisory Committee”, HKMA and some industry associations, etc., to solicit the suggestions and opinions on the functions of CorpID with a view to meeting the needs of corporations’ daily business, driving more corporations towards digital transformation, reducing administrative work and related operational costs of corporations, hence enhancing the overall efficiency. The industry, in particular SMEs, have emphasised that the functions of CorpID should be simple and easy to use. When designing CorpID, we will highly integrate it with “iAM Smart” in order to provide a one-stop service platform for users. We will also adopt a user experience-based principle, enabling corporations’ persons-in-charge and their authorised representatives to use the functions of CorpID with their smart phones/devices easily. We will continue to consult with stakeholders to ensure that the functions of CorpID meet their practical needs and expectations.

29. We briefed the Legislative Council Panel on Information Technology and Broadcasting on the above proposal on 13 May 2024. Members supported the submission of the proposal to the FC for funding approval.

BACKGROUND

30. Promoting digital economy development and developing Hong Kong into a smart city is one of the major development directions of the “Hong Kong I&T Development Blueprint” promulgated by the Government in December 2022. The Financial Secretary announced in the 2024-25 Budget that \$300 million was earmarked to develop the CorpID Platform, thereby facilitating and bringing ease to corporations in their use of e-government services. This proposal indeed coincides with the suggestion of the Digital Economy Development Committee on building relevant digital infrastructure to provide corporations with a secure digital identity, and meets the aspirations of our business sector.

Innovation, Technology and Industry Bureau
Office of the Government Chief Information Officer
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