Legislative Council meeting of 30 January 2019

Motion on

"Promoting the development of a financial technology hub to reinforce Hong Kong's position as an international financial centre"

Progress Report

At the Legislative Council ("LegCo") meeting of 30 January 2019, the motion on "Promoting the development of a financial technology hub to reinforce Hong Kong's position as an international financial centre" moved by Hon CHAN Chun-ying, as amended by Hon CHAN Kin-por, Hon Charles Peter MOK, Hon WONG Ting-kwong and Hon Christopher CHEUNG, was passed. Full text of the motion is at **Annex.** The motion covers various recommendations to promote the development of financial technologies ("Fintech"), including -

- (a) attracting Fintech companies to establish presence in Hong Kong and supporting local Fintech start-ups;
- (b) nurturing local and attracting overseas Fintech talents;
- (c) applications of Fintech;
- (d) regulations (including personal data protection and cybersecurity);
- (e) funding support (including the Technology Voucher Programme); and
- (f) strengthening public education on Fintech.

We would like to report to Members on the progress of the work concerned.

(a) Attracting Fintech companies to establish presence in Hong Kong and supporting local Fintech start-ups

2. InvestHK's dedicated Fintech team attracts and assists

Fintech companies, start-up entrepreneurs, investors and incubators from all over the world to establish their presence in Hong Kong. The team has rendered assistance to over 480 Fintech companies since its establishment in September 2016. Last year, InvestHK organised a number of Hong Kong Fintech seminars in the Mainland and overseas, including London, Amsterdam, San Francisco, New York, Beijing, Shanghai, Hangzhou and Shenzhen. InvestHK also participated in overseas Fintech events, including Money 20/20, Paris Fintech Forum, Innovate Finance Global Summit and Consensus 2018, to assist Fintech companies with potential in major Fintech hubs to expand their business in Hong Kong and showcase the latest development and advantages of Fintech in Hong Kong.

- 3. InvestHK also supports and participates in a series of local Fintech events. Amongst these events is the annual flagship, Hong Kong Fintech Week ("HKFTW"). HKFTW 2018 drew more than 8 000 attendees from over 50 economies, and was the first cross-boundary Fintech event with a Shenzhen Day, where Fintech communities from overseas, the Mainland and Hong Kong were brought together for business exchanges. InvestHK also supports events organised by industry players, such as "Hong Kong Blockchain Week" and "Finovate Asia", bringing the diverse and vibrant Fintech community together to drive Fintech development.
- The Government is also committed to support local Fintech start-ups. Over the years, Cyberport has launched various programmes to support Fintech start-ups, nurture talents and provide matching service between financial institutions and start-ups. As at end February 2019, 94 Fintech start-ups have participated in the Cyberport Incubation The Cyberport University Partnership Programme has sponsored more than 210 university students to attend entrepreneurship boot camps organised by renowned universities in the United States. Last year, Cyberport launched the Easy Landing Scheme and the Overseas/Mainland Market Development Support Scheme ("MDSS"). The Easy Landing Scheme further enhances Cyberport's Fintech ecosystem by attracting multi-national corporations, such as overseas and Mainland leading Internet enterprises and Fintech companies, to set up offices and research and development ("R&D") units in Cyberport through the provision of rental concessions. MDSS provides a financial subsidy of up to \$200,000 to incubatees and alumni of the Cyberport programmes in conducting market research and promotion, as well as participating in trade fairs outside Hong Kong with a view to assisting start-ups in expanding into new markets and attracting investors.

(b) Nurturing local and attracting overseas Fintech talents

- 5. To nurture local Fintech talents, six local universities have rolled out Bachelor's or Master's degree programmes related to Fintech. The Study Subsidy Scheme for Designated Professionals/Sectors also covers self-financing Fintech-related undergraduate programmes starting from the 2018/19 academic year. In addition, the Hong Kong Monetary Authority ("HKMA") has upgraded its Fintech Career Accelerator Scheme ("FCAS") as FCAS 2.0 in 2018, which offers four internship programmes.
- 6. For practitioners in the financial services industry, the University of Hong Kong, together with Cyberport and other industry players, launched Asia's first Fintech Massive Open Online Course in 2018 in which practitioners can enroll. The Government and the industry have also offered various training programmes to enhance the digital literacy of practitioners of the financial services industry. For instance, under the Pilot Programme to Enhance Talent Training for Asset and Wealth Management Sector, industry associations can make use of the Financial Incentive Scheme for Professional Training to enhance the capability of practitioners to adopt innovative technology.
- 7. The Government has also been proactively attracting talents from overseas and the Mainland. In August last year, the Government promulgated the first Talent List of Hong Kong, which covered, amongst others, "experienced professionals in Fintech", "experienced data scientists", "experienced cyber security specialists" and "innovation and technology experts". Immigration facilitation is provided to eligible persons under the Talent List through the Quality Migrant Admission Scheme. The Government also rolled out the Technology Talent Admission Scheme ("TechTAS") in June last year to provide a fast-track arrangement for the admission of overseas and Mainland R&D talent to undertake R&D work in Hong Kong. As a start, TechTAS is open to tenants and incubatees of the Hong Kong Science and Technology Parks Corporation and Cyberport that are engaged in Fintech or other specific technology areas.

(c) Applications of Fintech

8. Fintech has been applied to various financial services sectors to enhance their competitiveness and to provide customers with more and better service choices.

Banking

- 9. In the banking industry, HKMA has approved the first batch of virtual bank licences in March, and is processing the remaining five applications. The first batch of virtual banks is expected to commence operation in six to nine months. The introduction of virtual banking is a milestone for Hong Kong to enter into the new era of smart banking. In addition to promoting Hong Kong's Fintech development and innovation, virtual banks can also greatly improve customer experience and promote financial inclusion.
- 10. In addition, HKMA published the Open API Framework in July last year. The Framework adopts a risk-based principle and a four-phased approach to implement various Open API functions. The first phase was launched in January this year as scheduled. Twenty retail banks launched over 500 Open APIs, covering information of deposits, loans, insurance, investments and other banking products and services, to address various financial needs of customers.
- Association of Banks ("HKAB") to explore how the know-your-customer utility ("KYCU") could potentially be used to enhance efficiency of customer (mainly small and medium enterprises and corporates) due diligence processes and customer experience. With the support from HKMA, HKAB has earlier gathered market interests and proposals on potential solutions available and the review is now in progress. When designing the electronic identity ("eID") system, Innovation and Technology Bureau and the Office of the Government Chief Information Officer have also provided flexibility for supporting future services to be provided by public and private organisations, including facilitating financial institutions to perform KYC procedure.
- 12. A trade finance platform, eTradeConnect, was launched in October last year. eTradeConnect is the first large-scale multi-bank blockchain project in Hong Kong by a consortium of twelve member banks. eTradeConnect aims to improve overall trade efficiency, reduce risks and fraud by digitising trade documents and automating trade finance processes. A Memorandum of Understanding has been signed between the operator of eTradeConnect and a European trade finance platform to conduct a Proof-of-Concept on connecting the two platforms. HKMA is proactively looking for opportunities to connect eTradeConnect with trade platforms in other regions. The operator of eTradeConnect is

improving the functionalities of the platform based on the feedbacks collected from banks and other users.

Insurance

- 13. In the insurance sector, the Insurance Authority ("IA")'s Fast Track offers a dedicated channel for new authorisation applications from insurers using solely digital distribution channels (i.e. without the involvement of intermediaries) to provide insurance products with a simple structure and high protection element. The Fast Track expedites the authorisation process while maintaining all prudential regulatory requirements. In December last year, IA granted the first authorisation of a virtual insurer under the Fast Track. IA will continue to process other applications under the Fast Track.
- 14. In addition, the Insurtech Facilitation Team established by IA helps insurers, technology companies and start-ups to gain better understanding of the current regulatory landscape and provides a platform for the exchange of ideas related to Insurtech initiatives. The team has handled more than 150 enquiries so far and held about 70 meetings with various stakeholders. Separately, the "Embracing Fintech in Hong Kong" working group has been set up under the "Future Task Force¹" of the insurance industry to promote the application of Fintech in the insurance industry. The working group comprises representatives from the insurance industry and other stakeholders. The working group meets regularly and acts as a platform for exchanging ideas of innovative Insurtech initiatives among key stakeholders.
- 15. Hong Kong insurance sector has also launched two Insurtech projects in December last year, namely the Insurance Fraud Prevention Claims Database ("IFPCD") and the Motor Insurance DLT-based Authentication System ("MIDAS"). IFPCD uses AI technology to help detect patterns of fraudulent insurance claims, especially those involving multiple claims and syndicates. MIDAS makes use of blockchain to examine the validity of motor insurance policies with ease and helps address cases of insurance scams.

¹ "Future Task Force" of the Insurance Industry ("FTF") was set up by IA to build and sustain a regulatory environment conducive to business development and embrace technology, and to work hand in hand with IA in exploring the future of the insurance industry. FTF is headed by Chairman of IA and comprises experts and professionals from the insurance industry and the academia.

Securities

- 16. For remote client onboarding in the securities industry, the Securities and Futures Commission ("SFC") has updated the "Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission", and issued circulars to develop a code for intermediaries regarding online client onboarding. In gist, SFC provided more guidance to the industry on the regulatory requirements for non-face-to-face account opening, including allowing the use of certification services that are recognised by the Electronic Transactions Ordinance ("ETO"), or the use of electronic signature certificates issued by overseas certification authorities for client identity verification.
- 17. In addition, SFC issued a Consultation Paper on the "Proposed Guidelines on Online Distribution and Advisory Platforms" in May 2017, and published the consultation conclusion in March 2018. The Guidelines provide tailored guidance to the industry on the design and operation of online platforms, including specific guidance on the provision of automated or robo-advice. This allows greater flexibility for investors to manage their investments and fosters the growth of online platforms. The Guidelines become effective in April this year.

Stored Value Facilities ("SVF") (e.g. e-wallets)

- 18. The SVF industry continued to register growth. At the end of 2018, the total number of SVF accounts in use was 56.1 million, representing a 20.1% increase from end 2017. SVF operators are actively expanding their service and customer reach to different sectors such as public transport, wet markets and small merchants, providing more choices and convenience in making payments. Recently, some SVF operators have extended the use of their Hong Kong e-wallets for retail payments in the Mainland.
- 19. In view of the increase of Hong Kong residents living and working in the Greater Bay Area, HKMA has been actively liaising with the Mainland authorities on cross-boundary financial and banking services in the Greater Bay Area. Recently, a local bank announced the launch of a pilot scheme for Hong Kong residents to open Mainland personal bank accounts in the Greater Bay Area remotely. Hong Kong residents may complete the Mainland account opening procedure by attestation in one of the Hong Kong branches under the same banking group. This new measure should facilitate Hong Kong residents to register for and make use of Mainland e-wallets. We will continue to

study and support cross-boundary account opening in the Greater Bay Area in order to provide more convenient financial and banking services to the public.

Faster Payment System and the Common QR Code Standard

- The Faster Payment System ("FPS") was launched in 20. FPS operates on a round-the-clock basis and September last year. connects banks and SVF operators on the same platform. The public can use internet banking, mobile banking or e-wallets to make real-time fund transfer between banks and SVFs with the use of recipient's mobile number or email address as an account proxy. With just a few months after its launch, FPS has recorded over 2.5 million registrations. end February 2019, FPS has processed over 8.7 million transactions involving an aggregate amount of \$180 billion. FPS has an average daily turnover of around 60 000 transactions worth \$1.2 billion. Government is planning for the use of FPS to provide the public with greater convenience in paying taxes, rates and water charges. Transport Department, the Immigration Department and the Leisure and Cultural Services Department will examine the feasibility of accepting payments through FPS at their shroff counters on a pilot basis.
- 21. HKMA also launched the Common QR Code Standard for Retail Payments in Hong Kong, together with an associated mobile application tool for converting multiple QR codes from different payment service providers into a single, combined QR code. This should facilitate merchants in using a single QR code to accept different payment schemes, thereby promote the adoption of QR code payments in Hong Kong.

(d) Regulations (including personal data protection and cybersecurity)

Sandboxes and Regtech

22. Financial regulators' sandboxes provide a platform for the industry to conduct pilot trials of Fintech initiatives, expediting the launch of new technology products and reducing the development cost. Since its launch in September 2016 until end February 2019, HKMA's Fintech Supervisory Sandbox ("FSS") has conducted trials of 46 new technology products. Out of these cases, 32 pilot trials have been completed, and the products have subsequently been rolled out. SFC has granted two companies with licences to operate in SFC's Regulatory

Sandbox. Since the launch of Insurtech Sandbox until end February 2019, IA received eight sandbox applications and two were completed and rolled out to the market.

- 23. Our financial regulators are also using technology to enhance regulatory effectiveness and efficiency. In the banking sector, HKMA has expanded the scope of "Banking Made Easy Initiative²" to facilitate the adoption of Regtech and the development of the Regtech ecosystem in Hong Kong, which aims to enhance the effectiveness and efficiency of banks' internal risk management and compliance efforts. Focus areas include anti-money laundering and counter-financing of terrorism surveillance technologies, Regtech for prudential risk management and compliance, and machine-readable regulations. HKMA is also studying the collection of more detailed regulatory data and further use of technology to enhance regulatory processes, and hopes to formulate a strategy for step-by-step implementation. To help build up the Regtech ecosystem, FSS is now open to Regtech projects and ideas raised by banks or technology firms. In the past few months, HKMA received over 40 meeting requests, and 6 Regtech projects have been tested in the FSS.
- 24. For the securities industry, SFC has established interdepartmental unit for analysing market intelligence. The unit would deploy scientific techniques to analyse both internal and external market data to enhance regulatory efficiency. In addition, SFC has analysed data from restructuring and investigating corporations on a trial basis and is able to identify regulatory misconduct and non-compliance situations. In light of the encouraging results, SFC is now formulating the data standard and format for licensed corporations with high transaction volume to submit to SFC on demand.

New regulatory approach for virtual assets

25. On the regulatory front, SFC set out a conceptual framework for the potential regulation of virtual asset trading platforms in November last year, with a view to exploring whether virtual asset trading platforms were suitable for regulation. This regulatory approach, if implemented, could provide a path for compliance for those platform operators capable and willing to adhere to a high level of standards and practices. In

A Banking Made Easy Task Force was set up by HKMA to work with the banking industry to minimise regulatory frictions that may hinder technological innovations and customer experience in using digital banking services.

addition, SFC also issued guidance on the regulatory standards expected of virtual asset portfolio managers and fund distributors.

Cybersecurity

- 26. With the prevalence of cyberattacks and the rapid development of Fintech, HKMA has launched the "Cybersecurity Fortification Initiative" ("CFI") to raise the level of cybersecurity of the banks in Hong Kong through a three-pronged approach: namely the Cyber Resilience Assessment Framework, which seeks to establish a common risk-based framework for banks to assess their own risk profiles and determine the level of defence and resilience required; the Professional Development Programme, which aims to increase the supply of qualified professionals in cybersecurity; and the Cyber Intelligence Sharing Platform, which allows sharing of cyber threat intelligence among banks.
- 27. Under the Cyber Resilience Assessment Framework, the banking industry is implementing the relevant assessments in phases. Thirty banks (including all major banks) in the first phase have already completed the assessment. Fifty eight banks in the second phase have also completed their own risk assessment and cybersecurity resilience assessment, and will complete the Intelligence-led Cyber Attack Simulation Testing ("iCAST") in the third quarter this year. In the third phase, all remaining banks are required to complete their assessments by mid-2020.
- 28. SFC has also issued guidelines on the baseline requirements to enhance cybersecurity resilience, including the implementation of a two-factor authentication for clients to login to their internet trading accounts, as well as a circular on good industry practices for IT risk management and cybersecurity. In addition, SFC has launched a new round of internet transactions-related cybersecurity inspections in December last year to assess the industry's compliance with relevant requirements and their cybersecurity measures, including mobile device security, personal data protection and cybersecurity management of third party service providers.
- 29. In order to strengthen the insurance industry's resilience in cybersecurity, IA has conducted industry consultation on the draft cybersecurity guidelines in November 2018. The guidelines are expected to come into effect by the end of this year.

Personal Data Protection

- 30. Some Fintech-powered services may involve a large amount of data and personal information. Therefore, when promoting Fintech development, the Government also puts special emphasis on protecting personal data so as to maintain public confidence in new technologies and enhance the adoption of Fintech in the society.
- 31. The Personal Data (Privacy) Ordinance (Cap. 486) ("PDPO") is applicable to all financial institutions. HKMA required authorised institutions to treat their customers' (and former customers') banking affairs as private and confidential. In collecting, using, holding and erasing customer information, authorised institutions are to comply with PDPO and any relevant codes of practice issued or approved by the Privacy Commissioner for Personal Data at all times. In addition, as the Fintech-powered services generally involve the use of personal data, HKMA's "Banking Made Easy" task force has also coordinated exchanges between the Privacy Commissioner for Personal Data and the banking industry to discuss how to better protect personal data with the development of Fintech.
- 32. In addition to banks, SVF operators and the Hong Kong Interbank Clearing Limited have also adopted comprehensive and appropriate security measures and continue to comply with the PDPO and any relevant codes of practice issued or approved by the Privacy Commissioner for Personal Data, in order to ensure the confidentiality and the integrity of the database and the safekeeping of personal information. They will also ensure that personal information are only used for purposes as specified by bank and SVF operators when collecting personal data from their customers.

(e) Funding support (including the Technology Voucher Programme)

33. Fintech companies are supported by various funding schemes. The Innovation and Technology Fund ("ITF") administered by the Innovation and Technology Commission ("ITC") has funding programmes that assist local companies, including those in the financial services sector, to upgrade their technological level. The Enterprise Support Scheme ("ESS") under the ITF supports companies in Hong Kong for their in-house R&D on a dollar-for-dollar matching basis. As at end February 2019, six Fintech-related projects under ESS had obtained funding/were endorsed by the assessment panel, with total funding support amounting to \$25 million.

- 34. In addition, the \$500 million Technology Voucher Programme ("TVP") administered by ITC subsidises local SMEs in using technological services and solutions to improve productivity, or upgrade or transform their business processes. TVP provides funding on a 2:1 matching basis. Since February 2018, the eligibility of TVP has been expanded to include more local enterprises (non-listed enterprises of all sizes, instead of just for SMEs). ITC has also implemented further enhancement measures since February this year, including increasing the funding ceiling per applicant from \$200,000 to \$400,000, simplifying the application procedures by providing a list of documents required for application on the program website, reminding applicant to submit the required documents, reducing the number of documents to be submitted, at end February 2019, TVP received 29 financial etc. services-related applications. The total amount of funding approved was about \$4.46 million, and the average amount of funding for each application was about \$150,000.
- 35. ITC has also established a \$2 billion Innovation and Technology Venture Fund ("ITVF") in 2017 to co-invest with partner venture capital funds in local I&T start-ups at an overall matching investment ratio of approximately 1 to 2. ITC is considering investment proposals from co-investment partners. Some proposals have Fintech elements.
- 36. Cyberport also has various programmes and initiatives to provide financial support for its technology start-ups, including Cyberport Creative Micro Fund, Cyberport Incubation Programme, Cyberport Accelerator Support Programme and Cyberport Macro Fund. Cyberport has also launched the Cyberport Investor Network ("CIN") to connect local starts-ups with worldwide investors to address their fundraising needs at various stages of development. More than 100 investors have joined the CIN, raising more than \$200 million for Cyberport start-ups.

(f)Strengthening public education on Fintech

37. The Government and financial regulators have conducted a series of public education campaigns so as to increase public awareness and acceptance of Fintech and related products and services. To foster the adoption of SVFs, HKMA has organised lectures (including cooperating with other Government agencies and institutions) and produced education videos to raise public awareness of SVFs and their system. In addition, since the launch of FPS in September 2018, HKMA and the industry have jointly launched a series of consumer education

programme to promote the convenience of FPS, and to encourage the public to register their phone numbers or email addresses with their banks or SVF providers as account proxies.

38. While promoting Fintech innovation, we are also mindful of our responsibility to protect public interest. In view of the hypes around cryptocurrencies and Initial Coin Offerings ("ICOs"), the Financial Services and the Treasury Bureau ("FSTB") and the Investor and Financial Education Centre ("IFEC") jointly launched a public education campaign last year on the risks associated with cryptocurrencies and The campaign included a series of TV and radio APIs and educational videos, in order to provide the public with a correct and comprehensive understanding of the potential risks of participating in cryptocurrencies and ICO transactions. IFEC's Chin Family webpage also regularly publishes articles to educate investors and the public on the convenience and opportunities brought about by Fintech, as well as the related risks and challenges. The topics of the articles include various Fintech products and services, such as equity crowdfunding, peer-to-peer lending, robo-advisory, cryptocurrencies, etc.

Conclusion

39. We will continue to work closely with financial regulators and the industry to promote the development of Fintech, in order to position Hong Kong as a premier Fintech hub in Asia, as well as to consolidate Hong Kong's status as Asia's leading international financial centre.

Financial Services and the Treasury Bureau April 2019

Motion on

"Promoting the development of a financial technology hub to reinforce Hong Kong's position as an international financial centre" moved by Hon CHAN Chun-ying at the Council meeting of 30 January 2019

Motion as amended by Hon CHAN Kin-por, Hon Charles Peter MOK, Hon WONG Ting-kwong and Hon Christopher CHEUNG

That the development of financial technology ('Fintech') has already brought tremendous changes to the financial industry worldwide; it is stated in the Chief Executive's 2017 Policy Address that '[a]s an international financial centre with a highly-developed information and communication technology sector, Hong Kong is an ideal place for the development of financial technologies'; in this connection, this Council urges the Government to adopt effective measures to assist the banking, insurance and securities sectors, etc., of the financial industry in the further development and application of Fintech, entice Fintech enterprises and talents to establish their bases in Hong Kong, and encourage local tertiary institutions to offer professional Fintech courses, so as to increase the Fintech adoption rate in society; the Government should also offer retraining courses for financial industry practitioners to enable them to adapt to new developments in Fintech; at present, the financial centres of various countries are actively refining their financial infrastructure, rules and regulations in order to seize the opportunities presented by Fintech; yet, in areas such as opening Application Programming Interface (i.e. 'API') to facilitate the interoperability and sharing of data, exploring the effective use of technologies such as blockchain and regulatory technologies for cost reduction, tackling the challenges posed by technological development to regulatory regimes, and nurturing Fintech talents, Hong Kong remains relatively slow; in this connection, this Council also urges the Government to motivate local employees to pursue studies on Fintech-related skills to assist themselves in self-enhancement and transformation, provide financial institutions with incentives for developing new technology applications, assist local technology start-ups in creating more development opportunities, update legislation in a timely manner to facilitate investment in and application of innovation and technology, improve the regimes for personal data and privacy protection, and offer subsidies to enterprises for enhancing their capabilities in information security, so as to enhance the overall competitive edge of Hong Kong in Fintech; moreover, the Government should also allow

more different industries and Fintech start-ups to use the Fintech Supervisory Sandbox introduced by the Hong Kong Monetary Authority for conducting trial runs on their Fintech initiatives, develop electronic 'know your client' utilities, enhance the interfacing of the electronic payment and clearing platforms among Hong Kong, the Mainland and the international community, and step up public education on Fintechs and their associated products and services, so as to foster Hong Kong's development into a Fintech hub; this Council also urges the Government to review the Technology Voucher Programme which aims to subsidize small and medium enterprises ('SMEs') in using technological services and solutions, including raising the funding amount of technology vouchers, reducing the proportion of financial contribution required of applicant enterprises, expanding the funding scope of technology vouchers, and streamlining the relevant application procedures, as a means of enhancing support for SMEs and encouraging SMEs to upgrade themselves, so as to embrace the advent of an Fintech era.