

**For discussion on
25 March 2019**

**Legislative Council Panel on
Administration of Justice and Legal Services**

**Development of an Online Dispute Resolution and
Deal Making Platform by Non-governmental Organisation**

BACKGROUND

In the 2018 Policy Address, the Chief Executive indicated support for funding the cost of non-governmental development of an e-arbitration and e-mediation platform so that Hong Kong will be able to provide efficient and cost-effective online dispute resolution services. On 27 February 2019, the Financial Secretary announced in the 2019-20 Budget that \$150 million will be provided for the development and initial operation of the online dispute resolution and deal making platform. The development of such a platform will enhance the development of LawTech in Hong Kong and consolidate Hong Kong's position as an international legal and dispute resolution services centre and raise Hong Kong's favourable position and status in the provision of professional legal services.

PROPOSAL

2. This paper briefs Members on the proposal to provide one-off funding support of \$150 million for the development of an Electronic Business Related Arbitration and Mediation (eBRAM) Platform by the non-governmental eBRAM Centre (The Centre).

JUSTIFICATIONS

Robust development of dispute resolution services in Hong Kong

3. Over the past decades, Hong Kong has been one of the world's leading international arbitration jurisdictions. By virtue of the high-quality and efficient legal services, arbitration-friendly legislation and government policy supporting dispute resolution, and the ease of enforceability of its arbitral awards worldwide, including in the Mainland, Hong Kong has

consistently been ranked as one of the most preferred Asian cities to conduct arbitration.

4. Furthermore, with the presence of reputable dispute resolution bodies, excellent arbitration facilities, extensive pool of highly reputable talents (with English, Chinese and other language proficiency) and the capitalistic free-market system, Hong Kong has a solid foundation to develop as an international legal and dispute resolution services centre.

5. Capitalising on the opportunities brought about by the Belt and Road (B&R) Initiative as well as the Greater Bay Area Development Plan and in line with our stated policy objective to promote Hong Kong as an international legal and dispute resolution services centre, we have examined the development of online dispute resolution services, and an e-arbitration and e-mediation platform which will provide an efficient, cost-effective and secure platform for online deal-making and resolving disputes among parties in any part of the world, including commercial and investment disputes involving B&R countries and within the Greater Bay Area. The dispute resolution methods will cover negotiation, mediation and arbitration. We consider the development of such an online platform by local non-governmental organisation (NGO) consistent with our stated policy objective.

The eBRAM Centre

6. Incorporated in June 2018, the eBRAM Centre is a company limited by guarantee formed by enthusiastic professional arbitrators, mediators and legal practitioners (i.e. members from The Law Society of Hong Kong (Law Society), The Hong Kong Bar Association (Bar Association), the Asian Academy of International Law Limited (AAIL)¹, and the Logistics and Supply Chain MultiTech R&D Centre (LSCM)²). The Centre aims to elevate

¹ AAIL is an independent and non-profit making body set up in Hong Kong to further the studies, research & development of international law in Asia.

² LSCM was founded in 2006 with funding from the Innovation and Technology Fund. Since its inception, LSCM's mission is to foster the development of core competencies in logistics and supply chain related technologies in Hong Kong, and to facilitate the adoption of these technologies by industries in Hong Kong as well as in Mainland China. The Centre is hosted by three of Hong Kong's universities : The University of Hong Kong, the Chinese University of Hong Kong, and the Hong Kong University of Science and Technology.

Hong Kong's arbitration and mediation services, and build capacity to meet the rapid expanding demand for legal and dispute resolution services across borders, by utilising innovative technology and Artificial Intelligence (AI) to enable Hong Kong to become a LawTech centre and the hub of deal-making as well as dispute avoidance and resolution for global business, investment and trade, in collaboration with international organisations and participating economies such as Asia-Pacific Economic Cooperation (APEC), Association of Southeast Asian Nations (ASEAN), B&R countries and beyond, as well as the Greater Bay Area.

7. With the support of the Innovation and Technology Fund, a sum of about \$11 million was already provided to the LSCM in 2018 for the eBRAM technical platform development project in order to create a Proof-of-Concept (POC) prototype of an internet-based electronic arbitration and mediation platform. This funding support has provided the requisite domain knowledge and testing to proceed with the development of the e-arbitration and e-mediation platform with confidence. The POC is progressing well and is expected to be completed in around August 2019. As far as we know from available information, the Centre is the only local NGO with founding members from major legal professional bodies (i.e. the Law Society, Bar Association, AAIL) as well as from the innovation and technology sector (i.e. LSCM), and that has demonstrated a strong commitment to implementing an Online Dispute Resolution (ODR) platform. The Centre is also the only service provider from Hong Kong participating in the APEC workshops and meetings on ODR services.

The proposed eBRAM Platform

8. In recognition and anticipation of the rapidly increasing demand of ODR services, the Centre has proposed to develop an internet-based online platform integrating state-of-the-art technologies (Neural Machine Learning on Translation, AI, IoT, Blockchain and Smart Contract³, etc.) for use in

³ Neural Machine Learning applications on machine translation will enable the eBRAM platform to deliver better performance in text translation over the conventional natural language translation systems.

AI is a term for simulated intelligence in machines. These machines are programmed to "think" like a human and mimic the way a person acts, learns, and solves problems.

The IoT or internet of things is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

Alternative Dispute Resolution (ADR). The platform will facilitate the provision of cross-border one-stop dispute resolution services to enterprises worldwide including the B&R region as well as the Greater Bay Area, and Mainland-focused enterprises; as well as redefine the ideas of deal making, negotiation, mediation, arbitration and e-commerce trading in the new innovation era. The key features of the platform are set out at **Annex A**.

9. The eBRAM platform will provide through innovative approaches a full spectrum of ODR services including negotiation, conciliation, mediation, adjudication, arbitration, and others. With the eBRAM platform, the Centre will also be able to provide deal-making services to assist parties to enter into business deals on a secure and user-friendly online platform.

Need for the eBRAM Platform

10. With the extensive use of technology in business transactions, the need for a reliable and efficient ODR platform to provide ADR services has evolved over the years. This need, in particular, has been driven by the expansion of e-commerce: with parties likely to be at a distance from each other, speaking different languages, and incapable of meeting face-to-face, disagreements emerging from online activities can be better resolved online. Domestic courts do not work well for cross-border disputes as they are too tied to geography, jurisdiction and in-person enforcement. The legal and travel costs plus cultural and language barriers all pose difficulties for access to justice through local courts. Traditional in-person arbitration is an improvement but there are still concerns about the high cost and lack of speed. In a recent international arbitration survey, 90% of the respondents reported that, among cases in which disputes are taken to formal dispute resolution mechanisms, in-person arbitration was the preferred method in cross-border trade.⁴ However, nearly three-fourths of respondents to the survey favoured simplified procedures for claims under the value of US\$500,000. Respondents cited cost and lack of speed as the biggest drawback to international arbitration.

Blockchain is literally just a chain of blocks – digital pieces of information (the “block”) stored in a public database (the “chain”).

Smart Contract – mechanisms to support execution of the computerized transaction protocol for digital enforcement of the terms of a contract.

⁴ Queen Mary University of London and White & Case, 2015 International Arbitration Survey <https://www.whitecase.com/publications/insight/2015-international-arbitration-survey-improvements-and-innovation>.

11. It is noted that various international and regional organisations are taking active steps to promote and use ODR to provide a reliable and efficient platform to facilitate ADR. In 2016, The United Nations Commission on International Trade Law (UNCITRAL) published the Technical Notes on Online Dispute Resolution to foster the development of ODR in the world and to assist ODR administrators, platforms, neutrals, and parties to ODR proceedings. The UN General Assembly (GA) has recognised that ODR (as provided in the UNCITRAL ODR Technical Notes) “can assist the parties in resolving disputes in a simple, fast, flexible, and secure manner, without the need for physical presence at a meeting or hearing.”⁵ By applying modern technology to traditional dispute resolution, the whole process can become much faster, affordable and user-friendly. The GA requests all States to “support the promotion and use of the UNCITRAL ODR Technical Notes.”⁶

12. Besides, APEC is currently undertaking a project to establish an ODR platform with Micro, Small and Medium-sized Enterprises (MSMEs) as major beneficiary.⁷ In APEC, MSMEs account for over 97% of businesses but they only account for 35% of direct exports. Expansion into international markets is crucial for MSMEs’ continued growth and APEC economies’ well-being. A recent APEC study found that dispute resolution was one of the greatest challenges for MSMEs that trade across borders, with 83% reporting that effective and consistent dispute resolution was a problem.⁸ Another study reported that as many as 35% of cross-border disputes involving MSMEs remain unresolved with the average value of the dispute being some US\$50,000.⁹

⁵ GA Resolution 71/138, UNCITRAL Technical Notes on Online Dispute Resolution, December 13, 2016.

⁶ GA Resolution 71/138, *supra*.

⁷ In August 2017, APEC economies discussed a Work Plan for Developing a Cooperative ODR Framework for MSMEs in B2B Transactions, prepared by the Friends of the Chair on Strengthening Economic and Legal Infrastructure under the APEC Economic Committee (SELI) (a counsel from the Department of Justice of Hong Kong serves as the convenor of SELI), which was endorsed by the APEC Economic Committee. Currently, 14 (out of 21) APEC member economies (namely Australia, Canada, Chile, Indonesia, Japan, Mexico, New Zealand, the Philippines, Papua New Guinea, Peru, Russia, Chinese Taipei, the US and Hong Kong, China) have agreed to be co-sponsors of the Work Plan. The Work Plan is being carried out under the auspices of SELI.

⁸ ABAC, USC Marshall, Driving Economic Growth through Cross-Border E-Commerce in APEC: Empowering MSMEs and Eliminating Barriers at 35, 69, 81 (APEC interviews with 506 business executives plus 244 survey responses).

⁹ Ecorys, Study on the Use of Alternative Dispute Resolution for Business to Business Disputes in the European Union, at 6, 123, 125 (2012) (commissioned by the European

13. Given that some services providers in other APEC economies have already expressed interest in providing ODR services under APEC¹⁰, it is crucial that Hong Kong should secure early-mover advantage in taking early action to grasp the opportunity of developing a platform for providing such services by leveraging on our excellent legal foundation, reputable dispute resolution talents and experience, and technological competency to jumpstart our development as a leading ODR centre in the global arena.

Benefits of the eBRAM Platform

Facilitate development of local MSMEs and legal professionals

14. From a local perspective, the development of the platform as proposed by the Centre will bring clear benefits to Hong Kong, including: the provision of a secure, innovative and comprehensive ODR platform, which is low-cost and affordable for local MSMEs, thereby facilitating their business operation and also achieving “better access to justice”; provision of business opportunities and enhancement of training opportunities¹¹ for local professionals; enhancing Hong Kong’s role as an international city of business in Asia through the operation of the Centre as a credible, acceptable and sustainable regional dispute resolution body with its administration based in Hong Kong; showcasing Hong Kong’s unique status and capability under the “one country, two systems” constitutional arrangement in addressing the service need of diverse legal and judicial systems in various places, using Hong Kong as the seat of arbitration; and more generally, promoting the use of various forms of ADR in Hong Kong.

Commission) <http://www.adrcenterinternational.com/wp-content/uploads/2015/01/ADR-Final-Report-151012.pdf> (based on part interviews with 10 840 businesses including MSMEs); European Commission, DG Enterprise and Industry, Business Disputes Keep Businesses from Doing Business, at 4.

¹⁰ eBRAM Centre is one of the several ODR services providers which have indicated an interest in providing ODR services under APEC. Representatives from eBRAM Centre (the only ODR services provider from Hong Kong invited by the APEC workshop organisers) participated actively in APEC workshops and meetings on ODR since 2018 and the Centre’s expertise on the subject was well recognised by other APEC economies.

¹¹ The Centre has proposed the establishment of an ADR training academy and a pupillage system to nurture young aspiring professionals and also enhance the skills of existing professionals, and to provide them with access to the e-arbitration and e-mediation community.

Enhance business opportunities under the B&R and Greater Bay Area Initiatives

15. Hong Kong being a cosmopolitan city, has unique advantage in respect of the market for ODR services among B&R jurisdictions and in the Greater Bay Area given our legal and judicial systems with the common law system preserved, the multilingual abilities of our talents and our reputation as a leading international financial centre as well as an international legal and dispute resolution services centre in the Asia-Pacific region. In this regard, many of the features proposed by the Centre (e.g. application of AI translation on the Chinese, English, Russian, Arabic and Spanish languages; the adoption of blockchain and secure cloud platform for transactions; usage of state-of-the-art data centres and strong legal framework for privacy protection) would be particularly attractive and useful not only to the businesses from B&R jurisdictions as well as the Greater Bay Area but also to all their trading partners across the globe.

Complement and enhance existing dispute resolution services

16. Instead of creating competition, the operation of the Centre will complement and create synergy with existing dispute resolution service providers (e.g. the Hong Kong International Arbitration Centre (HKIAC)¹²) to make the Hong Kong arbitration and mediation industry broader, more diverse and inclusive of the latest digital technology. The eBRAM platform can also be utilised by existing arbitration bodies including the HKIAC, Hong Kong Maritime Arbitration Group, etc. Such arrangement will further enhance the synergy between the existing dispute resolution bodies and the Centre, and elevate the dispute resolution services in Hong Kong to scale new height.

¹² Although the HKIAC is one of the leaders in international arbitration and mediation, it has not developed an ODR platform of its own. It mostly provides services for high value disputes (e.g. in 2017, the average amount in dispute in HKIAC administered arbitration was \$240.3 million), and the total number of arbitration cases is consistently a few hundred per year. According to a study conducted by KPMG as commissioned by the Hong Kong Trade Development Council with the support of the Department of Justice, the average cost of an arbitration case conducted in Hong Kong was US\$1.2 million (of which about 58–60% was attributed to legal practitioner’s fee and about 16–17% was attributed to arbitrator’s fees). However, the average fee for the arbitration service to be provided through the eBRAM platform is estimated at \$38,000. As such, it is quite clear that the eBRAM platform as a start targets lower value transactions and thus a different market segment which is not addressed by existing service providers, whilst aiming to also cover higher value transactions in the longer run.

Institutional framework of the eBRAM Centre

17. The Centre was incorporated in June 2018 with founding members from major stakeholders in the legal and related sectors. To enable the Centre to function effectively, it should have a high degree of independence and flexibility in planning and operating its businesses, as well as in managing its human and financial resources. Membership of the Board of the Centre will have wide representation of relevant sectors, including representatives from the Law Society, the Bar Association, AAIL, academic institutions with legal and arbitration and mediation experience, trade associations, research institutions, public bodies, and persons with legal, accounting, financial / management background, etc. Moreover, government representatives (e.g. from the Department of Justice, Commerce & Economic Development Bureau, Innovation & Technology Bureau / Innovation & Technology Commission / Office of the Government Chief Information Officer (OGCIO), etc.) can serve on the Board to give advice from their respective policy perspectives. It is also proposed that a memorandum of understanding be signed between the Government and the Centre on specific areas in relation to the Centre's operation (including appointment of the Board of Directors by the Government) and the utilisation of any funding provided, as in the case of other Government subvented organisations. The objectives of the Centre will be clearly set out in its Memorandum and Articles of Association. As a non-profit-making entity, the Centre will not be allowed to distribute its dividends.

Delivery timetable

18. The Centre is working with the LSCM to develop the initial structure and technology to launch the arbitration, mediation, negotiation and deal-making services, with target roll-out of the online platform by the end of 2019. Once the eBRAM platform is launched, the Centre will focus on ensuring the smooth and secure running of the system and the recruitment of suitable arbitrators, mediators and other talents. Thereafter, the Centre will proceed to develop the provision of arbitration / mediation services for e-commerce business to business activities as well as the provision of training as a commercial service for the region.

19. It is a global trend to develop and use ODR to provide reliable and efficient platform to facilitate ADR. An advanced, efficient and user-friendly ODR platform in Hong Kong will not only facilitate deal-making and dispute resolution for global business, investment and trade, but also provide a valuable opportunity for Hong Kong to showcase its excellent legal foundation, renowned legal and dispute resolution professionals as well as LawTech development capacity in the Asia-Pacific region. Having regard to

the wide representation of major stakeholders in the legal and related sectors, its expertise, competency, practical experience and strong commitment in developing ODR services, the Centre is considered the most suitable local NGO to take forward the development and implementation of the eBRAM platform, in line with our stated policy objective.

FINANCIAL IMPLICATIONS

20. We propose to provide one-off funding support of \$150 million for the development of the eBRAM platform and its initial operation. Based on the Centre's ten-year cashflow projection at **Annex B**, the Centre would have a total deficit of around \$150 million in the first six years of operation. It is expected that it would start to break even from the seventh year of operation and would be able to achieve self-sustainability thereafter.

21. The Centre envisages income from arbitration and mediation, e-translation and e-filing of documents, e-commerce ODR services, training, provision of e-negotiation conference facilities, as well as interest income. The estimated annual income will rise from about \$6.5 million (mainly from training income) in the first year to \$116.6 million (from all of the above services) in the tenth year of operation.

22. As for expenditure, the Centre estimates that a sum of about \$68 million is required in the first year of operation, which also covers various capital costs (including Information Technology (IT) equipment, POC prototype enrichment, one-off purchase of hardware and software etc.) amounting to around \$34.4 million. The estimated recurrent expenditure is projected to increase from around \$33.7 million in the first year of operation to around \$54.7 million in the tenth year of operation, covering staff salaries, marketing cost, IT cost as well as office operation cost. A breakdown of major expenditure items for the first year of operation is at **Annex C**. Regarding IT cost, as the implementation cost for such a sophisticated platform may vary after detailed examination of the technical solutions and the requirement components to meet the functional, security and performance specifications, the cost estimates would be revisited after completion of the POC.

23. Having regard to the above assessment, we consider the revenue and expenditure estimates made by the Centre reasonable and acceptable.

ADVICE SOUGHT

24. Members are invited to advise on the proposed funding support for the Centre. Subject to Members' advice, we plan to submit the proposal to the Finance Committee for funding approval so that the Centre can start the development of the eBRAM platform as soon as possible.

Department of Justice
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Key features of the proposed eBRAM platform

The objective is to provide user-oriented ODR services which are versatile in support of the needs of users.

- (a) It is desirable to allow users to select neutrals rather than have them imposed by any platform. The eBRAM platform will be designed to provide panels of neutrals, facilitate parties' nomination and selection for appointment.
 - (b) The eBRAM platform will provide functionality to assist the eBRAM Centre's secretariat to maintain online panels of neutrals from different areas of expertise and different levels of experience.
 - (c) The eBRAM platform will also enable parties to nominate neutrals who are not on the eBRAM platform panels for consideration for appointment. The Appointments Committee of the eBRAM Centre may reject such nominations if it considers the nominee(s) not suitable for good reasons and may invite suitable nominees to join its panels.
 - (d) The eBRAM platform will support case-based and role-based access control to the case materials, such that documents will be accessible only to the relevant parties for the required tasks.
 - (e) The eBRAM platform will support multiple, secure, convenient and modern payment methods, such as credit cards, TT transfer, PayPal, e-Cheque and Fast Payment System. That would enhance eBRAM Centre's user-friendliness.
2. The eBRAM platform will also provide the following special Artificial Intelligence (AI) functions to facilitate deal-making, transaction and dispute resolution -
- (a) AI on translation – AI applications on machine translation will enable the eBRAM platform to deliver better performance in text translation over the conventional natural language translation systems. Recent technological breakthrough in computing deep learning will be employed to train the eBRAM platform's deep

neural engine with adequate domain-specific translation cases. The eBRAM Centre will focus on applying AI translation in Chinese, English, Russian, Arabic and Spanish.

- (b) AI on chats – AI on online chat and transcription tasks will be adopted for the application, bringing in the capability of real-time translation on chat-style sentences. Another application of the AI engine will be on verbal utterance such as to transcribe the recording of online hearing.
- (c) AI on authentication – AI on continuous user authentication for access security and proper handling of procedures. This will guard against hacker stealing / hijacking user login sessions which is not uncommon in internet-access systems. Video analytics of facial recognition, silhouette tracking, or alike will be employed. The normal login actions will be protected by multi-factor authentication practices. In addition, continuous tracking of users' presence by facial recognition / by the less-sensitive silhouette tracking method will protect against hijacking during momentarily unattended logged-in terminal. Weaker authentication and less demanding method of Radio Frequency proximity sensing will also be implemented. The eBRAM platform will be able to support multi-tier authentication strategies to suit different levels of strength, while maintaining the user-friendly environment.
- (d) Blockchain – Blockchain technology will be adopted to give the eBRAM platform ultimate security in non-repudiated transaction records, and thus enable the eBRAM platform a well-protected infrastructure for the upload, download and exchange of case materials by authenticated parties. As blockchain is the open and distributed internet ledger resources, the existence and use of blockchain reside in the background without requiring explicit actions from users.
- (e) Secure and scalable cloud platform – The eBRAM platform will be operated and maintained in cloud-based and secure IT infrastructure. Users are able to flexibly scale up services to their needs and customise applications as well as access the eBRAM platform anywhere around the world with only an internet connection.

Ten-year projection of income and expenditure for the eBRAM Centre

Item	Period	Income (\$,000)	Expenditure (\$,000)	Net Deficit (\$,000)	Sum of deficit (\$,000)
Capital cost	Year 2019 & 2020	-	(34,350)	(34,350)	Year 1-Year 6: (150,292)
Year 1	2019 - 2020	6,520	(33,705)	(27,185)	
Year 2	2020 - 2021	10,865	(34,663)	(23,798)	
Year 3	2021 - 2022	19,860	(41,153)	(21,293)	
Year 4	2022 - 2023	23,794	(41,847)	(18,053)	
Year 5	2023 - 2024	31,439	(46,739)	(15,300)	
Year 6	2024 - 2025	37,786	(48,099)	(10,313)	
Year 7	2025 - 2026	56,234	(47,190)	9,044	
Year 8	2026 - 2027	66,870	(49,007)	17,863	
Year 9	2027 - 2028	90,490	(51,451)	39,039	
Year 10	2028 - 2029	116,580	(54,674)	61,906	
Total		460,438	(482,878)	(22,440)	

Major expenditure items for the first year of operation

Items	Explanatory notes	Expenditure (\$,000)
<u>Capital cost</u>		
System development and contingency cost	A	31,500
Office set-up cost	B	2,850
<u>Recurrent cost</u>		
Staff salaries	C	10,153
Marketing cost	D	14,120
Information Technology (IT) cost	E	5,550
Office operation cost	F	3,882
	Total	68,055

Explanatory notes

- A System development and contingency cost includes IT equipment cost, Proof-of-Concept prototype enrichment, service launch preparation, one-off research & development of Artificial Intelligence based real-time interpretation etc.
- B Office set-up cost is to cater for the initial set-up of the office including one-off purchase of hardware and software, office equipment and furniture and decoration.
- C Staff salaries cover the salaries of a team of 14 staff (increasing gradually to a full team of 25 in the fifth year of operation) including administration staff, marketing personnel and IT officers.

- D Marketing cost is to cater for the organisation of marketing activities to promote the novice services to be provided in the initial stage of the operation and would be kept at a lower level when the operation gradually stabilises.
- E IT cost covers recurrent licensing fee, annual running cost as well as innovation and technology expenses.
- F Office operation cost includes premises rental, insurance and other general office expenditures.