



Our Ref.: B1/15C

20 September 2024

The Chief Executive
All Authorized Institutions

Dear Sir/Madam,

Generative Artificial Intelligence Sandbox

I am writing to invite Authorized Institutions (AIs) to apply for participation in the Generative Artificial Intelligence (GenA.I.) Sandbox initiative announced by the Hong Kong Monetary Authority (HKMA) in collaboration with the Hong Kong Cyberport Management Company Limited (Cyberport) in August 2024¹.

The GenA.I. Sandbox aims to provide a risk-controlled environment for AIs to develop, test, and pilot innovative artificial intelligence-based solutions in real-world banking scenarios. AIs can leverage the computing power offered by Cyberport and obtain targeted supervisory feedback throughout the trial process. Based on the results of the Sandbox trials, the HKMA will share good practices and consider the need for developing further supervisory guidance on the adoption of artificial intelligence².

The HKMA encourages AIs to explore a diverse range of artificial intelligence implementation, including those focused on Retrieval-Augmented Generation, model adaptation, fine-tuning of pre-trained models or training of new models. Sandbox trials are expected to leverage advanced artificial intelligence, including GenA.I., models designed for real-time interaction, domain-specific assessment, decision-making support or predictive analytics, with a specific focus on enhancing risk management, anti-fraud measures and customer experience.

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¹ HKMA Press Release, "[HKMA and Cyberport Launch GenA.I. Sandbox to Bolster A.I. Adoption in Financial Sector](#)" issued on 13 August 2024

² HKMA Circular, "[High-level Principles on Artificial Intelligence](#)" issued on 1 November 2019

With the aim of further developing the Fintech ecosystem, the HKMA encourages AIs to collaborate with Fintech firms when developing use cases for Sandbox trials. A catalogue of Fintech firms, language model providers and GenA.I. solution providers is shared by the Cyberport for reference by AIs when forming partnerships or exploring relevant technologies.

Applications for the first cohort of the GenA.I. Sandbox are now open and will be accepted until 15 November. To achieve a fair allocation of the Sandbox resources, applications will be prioritised based on a number of factors (please refer to the **Annex** for details). Selected projects should begin within one month of announcement, that is tentatively in December for this cohort, and be completed within six months³. Participants will be required to submit regular progress updates and a final report upon project completion.

Should you have any questions regarding the Sandbox or application process, please contact Mr. Nitish Koladoo of Banking Supervision Department at GenAI_sandbox@hkma.gov.hk.

Yours faithfully,

Carmen Chu
Executive Director (Banking Supervision)

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³ Extension requests may be considered on a case-by-case basis

Arrangement for Generative A.I. Sandbox (“Sandbox”)

Objectives

- The Sandbox is intended to:
 - support the development, testing, and pilot of innovative Artificial Intelligence (A.I.) and Generative A.I. (GenA.I)-based solutions in the banking sector; and
 - provide early targeted supervisory feedback to participants in the Sandbox and draw insights from sandbox trials. Where appropriate, the Hong Kong Monetary Authority (HKMA) will further provide guidance and share good practices on the adoption of A.I. and GenA.I..
- The Sandbox use cases are expected to focus on enhancing risk management, anti-fraud measures and customer experience. Some non-exhaustive example use cases are shared below for inspiring innovative ideas:
 - **Risk management** – Optimise risk management processes for the full range of risk disciplines relevant to AIs, evaluation of creditworthiness by analysing financial statements and other unstructured data of borrowers to enhance the efficiency of loan approval, generate risk assessment reports and timely risk warning;
 - **Anti-fraud measures** – Detect and prevent “Deepfake” scams, review website, emails and message contents to automatically identify fraudulent messages as well as devising timely responses; and
 - **Customer experience** – Elevate customer engagement through the use of more advanced customer service chatbots capable of generating personalised responses based on individual customer background, transaction records and past interactions.

General Principles

- The focus of the Sandbox is on solutions that demonstrate a significant level of innovation and potential for substantial impact. Priority will be given to solutions that align with these criteria.
- Adhering to the general principle of data minimisation, Authorized Institutions are strongly encouraged to adopt data sensitisation techniques such as data masking or tokenisation on their training data, where applicable, to minimise the risk of data leakage, while still ensuring the models are trained and tested under realistic conditions.

- A secure data transfer and access mechanism will be made available to ensure the confidentiality and integrity of the data used within the Sandbox. Authorized Institutions are expected to review and implement adequate data security controls, including encryption and access controls where necessary.
- The level of A.I. or GenA.I.-specific risk mitigations associated with the proposed solutions will be a key factor in the project selection. Projects that focus on exploring and testing a wide range of GenA.I.-driven risk mitigation strategies will be prioritised over simpler or commonly adopted cases, the latter of which may offer less learning or impact.

Key Factors for Consideration in Evaluating Applications

- **Level of innovation** – The extent to which the proposed solution introduces novel or alternative ideas, methodologies or models that have the potential to create new digitalisation opportunities;
- **Complexity of the solutions** – The technical sophistication and intricacy of the proposed solutions to promote advancement and added value;
- **Expected contribution to the industry** – The potential for the proposed solution to make a meaningful impact on the financial services sector, such as by addressing industry-wide challenges or by formulating new solutions replicable and scalable by different institutions; and
- **Adherence to the principle of fair use** – The degree to which the proposed solution is designed to be used in a fair, responsible, and ethical manner, avoiding harm to others or misuse of computing power.

Application Procedure

- Interested parties can submit their applications through the HKMA's Supervisory Communication Website or the Survey Tool pilot platform. Applicants are required to provide details including high-level design, applicable models, preliminary risk assessments of proposals and information about their technology partners.
- The HKMA may contact the applicant to gather additional information during the evaluation process. Processing time will depend on the complexity of the business model, quality of the information provided, and responsiveness to follow-up questions.

Others

- Admission to the sandbox does not indicate HKMA's endorsement of the solution.
- Sandbox participants intending to implement the solution after the Sandbox should adhere to established procedures when adopting new technologies.
- The HKMA may publicly announce information regarding sandbox participation, including the disclosure of approved participants.
- The HKMA may adjust sandbox requirements based on participants' proposals and testing progress.

For interested Authorized Institutions, please contact Mr. Nitish Koladoo of Banking Supervision Department at GenAI_sandbox@hkma.gov.hk.