13 Sep 2024

To:
Division of Foresight and Applied Science and Technology
Taiwan National Science and Technology Council

Submitted by email

ASIFMA Submission on Taiwan National Science and Technology Council Consultation on Draft Basic Law on Artificial Intelligence

Dear Sir/Madam,

On behalf of the Asia Securities and Financial Markets Association ("**ASIFMA**")[1] members, we thank you for the opportunity to respond to the Draft Basic Law on Artificial Intelligence (*"**Draft AI Law**"*) developed by the Taiwan National Science and Technology Council ("**NSTC**").

The feedback set out in this response has been collected from ASIFMA's AI Sub-Working Group, which have been closely following global, regional, and local developments related to artificial intelligence ("**AI**") and emerging technologies in recent years. We encourage the NSTC to establish a continuous feedback mechanism to allow stakeholders to provide ongoing input post-enactment of the law. This could be achieved through quarterly public consultations and online feedback portals.

ASIFMA has published its perspectives and recommendations regarding regulatory frameworks for AI in financial services in:

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[1] ASIFMA is an independent, regional trade association with over 160 member firms comprising a diverse range of leading financial institutions from both the buy and sell side, including banks, asset managers, law firms and market infrastructure service providers. Together, we harness the shared interests of the financial industry to promote the development of liquid, deep and broad capital markets in Asia. ASIFMA advocates stable, innovative, and competitive Asian capital markets that are necessary to support the region's economic growth. We drive consensus, advocate solutions and effect change around key issues through the collective strength and clarity of one industry voice. Our many initiatives include consultations with regulators and exchanges, development of uniform industry standards, advocacy for enhanced markets through policy papers, and lowering the cost of doing business in the region. Through the GFMA alliance with SIFMA in the United States and AFME in Europe, ASIFMA also provides insights on global best practices and standards to benefit the region. More information about ASIFMA can be found at: www.asifma.org.

- our 2021 paper on "Enabling an Efficient Regulatory Environment for AI"[2]; and
- our recent addendum (in January 2024) to the above paper, on "Practical Considerations for Generative AI"[3].

The latter assesses the new and incremental challenges of generative AI; explores how these are already addressed by existing regulations, tools and governance frameworks; explores mitigants to such challenges; identifies gaps in current regulatory frameworks; and make suggestions on how to address the gaps with the aim to ensure the safe and responsible adoption of generative AI in the capital markets industry, so as to realise the full benefits of generative AI.

Additionally, the Global Financial Markets Associations[4] had also published a Letter on Key Considerations for AI in Capital Markets[5], which includes a set of industry views concerning key considerations regarding the use of, and the regulatory approach to, AI in capital markets. To aid global standard setters in their analysis on this topic, they have provided an illustration of the wide range of existing functional policy areas that already apply to businesses, and a non-exhaustive list of jurisdictions that have enacted, or are in the process of enacting, AI-specific regulations, legislation, and frameworks. If local jurisdictions also enact new standards specifically aimed at AI, it will only introduce a third layer of legal requirements that constituents would have to address when using this technology, which could detrimentally impact their ability to realize the benefits of AI. Introducing additional AI-specific regulations for capital markets could cause further fragmentation if they are inconsistent with, or rendered redundant by, such existing requirements.

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[2] ASIFMA (2021), Enabling an Efficient Regulatory Environment for AI, https://www.asifma.org/wp-content/uploads/2021/06/enabling-an-efficient-regulatory-environment-for-ai-report_june-2021.pdf
[3] ASIFMA (2024), Enabling an Efficient Regulatory Environment for AI – Practical Considerations for Generative AI, https://www.asifma.org/wp-content/uploads/2024/01/2024-asifma-gen-ai-paper-final-updated-18032024.pdf
[4] The GFMA represents the common interests of the world's leading financial and capital market participants, to provide a collective voice on matters that support global capital markets. We advocate on policies to address risks that have no borders, regional market developments that impact global capital markets, and policies that promote efficient cross-border capital flows, benefiting broader global economic growth. The Global Financial Markets Association ("GFMA") brings together three of the world's leading financial trade associations to address the increasingly important global regulatory agenda and to promote coordinated advocacy efforts. The Association for Financial Markets in Europe ("AFME") in London, Brussels and Frankfurt, the Asia Securities Industry & Financial Markets Association ("ASIFMA") in Hong Kong and Singapore, and the Securities Industry and Financial Markets Association ("SIFMA") in New York and Washington are, respectively, the European, Asian and North American members of GFMA.
[5] https://www.gfma.org/wp-content/uploads/2024/06/gfma-key-considerations-for-ai-in-capital-markets-5.28.24.pdf

We would also like to acknowledge the Draft AI Law's reference to frameworks from multiple jurisdictions in an effort to align with international standards, as well as the NSTC's recognition for public-private collaboration to promote the innovative application of AI, which our members believe is a step in the right direction.

Please find in the Annexure our representation on the Draft AI Law which we hope will be helpful. We welcome the opportunity to discuss our response in more detail in a meeting and to contribute to future consultations and remain at your disposal for further engagement or any questions you might have. Please do not hesitate to reach out to us at lvanderloo@asifma.org or phone: +65 6622 5972.

Sincerely,

Laurence Van der Loo
Managing Director, Head of Technology & Operations
Asia Securities Industry & Financial Markets Association

Annexure

No.	Article	NSTC Explanation	ASIFMA Response
2	The term "Artificial Intelligence (AI)", as used in this law, refers to a machine-based system that has the ability to operate autonomously; achieve predictions, content, and recommendations or decisions that affect the	We have taken into consideration the definition of AI from: - US Code 9401 (National AI Initiative Act of 2020) - ISO/IEC 42001 (2023 AI Management Systems) - NIST AI Risk Management Framework - EU AI Act	While we recognise the NSTC's efforts in considering the definition of AI from multiple jurisdictions, ASIFMA does not endorse a specific definition of AI at this time since it is neither a narrow nor static technology. Additionally, ASIFMA believes that if global standards setters utilise a principles-based and outcomes-focused approach by referring to AI characteristics, it may be less

physical or virtual environment through inputting or sensing implicit or explicit objectives or machine learning.	to define AI as a tool designed to have a certain degree of autonomous operational capability, which through "input" or "sensing" "explicit" or "implicit" "objectives", via "machine learning" and "algorithms", to achieve outputs "such as predictions, content, recommendations, or decisions" etc., that affect the physical or virtual environment, and are different from other software systems.	necessary to develop a consensus single, specific definition of AI, particularly since many jurisdictions have recently adopted, or are in the process of adopting, region-specific AI definitions. We equally caution regional authorities from producing specific and prescriptive definitions. We expect the definition of "AI" and related terms to continue to evolve and change as the underlying technologies continue to change. However, ASIFMA understands that in order to comment on considerations relating to this topic, it may be necessary to refer to a common definition. As such, we humbly suggest that the NSTC adopts the OECD's definition of AI systems, which states that: "*An AI system is a machine-based system that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments. Different AI systems vary in their levels of autonomy and adaptiveness after deployment*".[6] The OECD definition is not overly broad as to capture systems that are not considered AI today. Additionally, definitions in many major jurisdictions have followed the OECD definition or have proposed similar definitions based upon the one developed by the OECD. Notably, in May 2024, the OECD

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[6] https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449

			Ministerial Council Meeting adopted the latest revisions to the OECD Principles on Artificial Intelligence, which include 47 state adherents and continues to reference this definition of AI systems.[7] The European Union's AI Act also utilises this definition.[8]
3	3. <u>Privacy protection and data governance</u>: The privacy of personal data should be properly protected to avoid the risk of data leakage, and the principle of data minimisation should be adopted; at the same time, the opening and reuse of non-sensitive data should be promoted.	3. AI participants should respect the rule of law, human rights, and democratic values throughout the lifecycle of the AI system. To this end, refer to the *OECD Recommendation on AI* published in 2019. The second paragraph stipulates that "human autonomy" should be supported and basic human rights, personality rights (e.g., name, portrait, voice), and cultural values should be respected to ensure the basic value of putting people first.	We acknowledge the NSTC's efforts to emphasise the importance of privacy protection. However, we recommend that the promotion of data reuse and openness should not be limited to non-sensitive data for the following reasons: 1. The definition of non-sensitive data is non-standard, and this ambiguity could disrupt regulation and AI adoption. 2. We believe the Draft AI Law should not impose stricter requirements on a specific technology domain (i.e., AI) while the Taiwan Personal Data Protection Act already provides comprehensive protective requirements for the collection, use, and processing of Personally Identifiable Information("**PII**"), regardless of whether it's sensitive or non-sensitive PII. We also humbly suggest amending the language to the below (amendments in red): "<u>Privacy protection and data governance:</u> The privacy of personal data should be properly

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[7] The OECD published revisions to their AI Principles on 5 May 2024 (see adherents section of the revisions for a list of all states).

[8] 6 See Article 3(1) of the EU AI Act (corrigendum).

| | | | protected to ~~avoid~~ mitigate the risk of data leakage, and the principle of data minimization should be adopted, where appropriate; at the same time, the opening and reuse of non-sensitive data should be promoted."

We propose replacing the word "avoid" with "mitigate", as it may not be possible to entirely avoid the risk. On data minimisation, there could be situations where data minimisation might not be desirable, such as where additional data may be needed to conduct fairness assessments. |
| | 4. <u>Information security and safety</u>: In the process of AI research and development and application, information security protection measures should be established to prevent security threats and attacks and ensure the robustness and security of the system. | 4. The development of AI relies on a large amount of data. However, whether the collection, processing, and utilization of data can ensure data security and personal information privacy are currently the most discussed and speculated issues in AI developments. Refer to section 3 of the US Blueprint for an AI Bill of Rights (2022) which stipulates that R&D and application of AI should pay attention to privacy and data management governance. | It may not be entirely possible to guarantee the effectiveness of measures such as prevention of security threats. As such, we suggest amending the language to the below (amendments in red):
"<u>Information security and safety</u>: In the process of AI research and development and application, information security protection measures should be established, which are designed to prevent security threats and attacks and ensure the robustness and security of the system". |

		5. Transparency and explainability: The output of AI should be appropriately disclosed or marked to facilitate the assessment of possible risks and understand the impact on relevant rights and interests, thereby enhancing the trustworthiness of artificial intelligence.	5. AI R&D and application should ensure system robustness and security. Refer to the US *Blueprint for an AI Bill of Rights (2022)* and section 4 of Singapore's *Proposed Model AI Governance Framework for Generative AI (2023)* which discusses security and safety to prevent AI-related security threats and attacks.	In order to avoid conflating the terms between "Transparency" and "Explainability", we respectfully suggest the NSTC to consider taking reference from ASIFMA's 2024 Gen AI Paper which defines that the terms as follows:
				a. Transparency in AI refers to the level and quality of disclosure provided regarding the application of AI in services and/or products, including the challenges that may be involved in AI usage.
				b. Explainability typically refers to the extent to which the workings of a model can be understood.
				As such, we humbly suggest the NSTC to prioritise transparency whose assessment framework is comparatively more mature, but at the same time continue working with industry and academia on how to best address concerns over the explainability of AI systems as well as the operational challenges to do so.
				We encourage policymakers to balance the desire for transparency and explainability against other objectives (e.g. model accuracy, safety, security, privacy etc.). We should be mindful that a "one-size-fits-all" approach to transparency and explainability does not work when different AI tools or stakeholders may require different levels of explanations or no explanation at all depending on the context, including the specific use case.

	6. <u>Fairness and non-discrimination</u>: During the development and application of AI, risks such as algorithm bias and discrimination should be avoided as much as possible, and the consequences of discrimination against specific groups should not occur	6. Decisions generated by AI have a significant impact on stakeholders, and the fairness of the decision-making process needs to be guaranteed. During the R&D and application stages of AI, efforts should be made to balance the accuracy and explainability of decision-making, taking into account the rights of users and those affected. Please refer to the EU Ethics Guidelines for Trustworthy AI (2019) which stipulates the principles of transparency and explainability in Section 5.	Not all forms of discrimination should be avoided, such as positive discrimination, where resources are allocated to disadvantaged segments of the population. Only unjustified discrimination should be minimised. As such, we suggest amending the language to the below (amendments in red): "<u>Fairness and non-discrimination</u>: During the development and application of AI, risks such as algorithm bias and unjustified discrimination should be ~~avoided~~ mitigated as much as possible, and the consequences of unjustified discrimination against specific groups should ~~not occur~~ be minimised."
		7. AI R&D and application must be fair and comprehensive, and algorithms should avoid bias or discriminatory results. Refer to the US *Blueprint for an AI Bill of Rights (2022)* which stipulates fairness and non-discrimination in section 5, emphasizing the importance of social diversity and inclusion to avoid risks such as bias and discrimination.	
5	The government should strive to improve the adjustment of laws and regulations on AI R&D and application. The interpretation and application of relevant laws and regulations should be consistent with Article 3 in the Basic Law and should not hinder the provision of new technology and services.	In order to promote the necessary development and popularization of AI technology, refer to Article 6 of the B*asic Law of Communications (通訊傳播基本法)* Article 17 of the *National Information Architecture Act of South Korea (韓國國家資訊化架構法)*, and *Australia's Safe and Responsible AI in Australia Discussion Paper (2023)*, which stipulate that government agencies should strive to improve the interpretation and application of regulations related to the development and transformation of AI, to facilitate the provision of such technologies or	We encourage the NSTC and policymakers around the world to work together to establish a globally agreed set of regulatory principles on the safe and responsible use of AI, that build on existing regulations covering AI and related topics, and collaborate and consult with the private sector before implementing these global standards in local jurisdictions. Where there may be gaps in existing standards as new AI use cases gain prominence, standards

		services and avoid affecting technological development.	setters and regulators should explore if existing governance frameworks can be updated sufficiently or if new guidance may be necessary to fill in any gaps. After such analysis, if these options are insufficient, only then should new standards be considered that are complementary to existing processes and procedures for technological innovations.
6	In order to promote the innovation and sustainable development of AI technology, the authorities of various businesses may establish or complete an innovative experimental environment for existing AI R&D and application services for AI innovative products or services	With reference to the EU AI law, the governments of its member states are encouraged to establish an AI Regulatory Sandbox to provide a controlled environment to promote the innovation of AI so that it can be used, tested, and validated for a limited time before being put on the market or put into use. It is stipulated that the competent authorities of each purpose enterprise should establish, or complete innovative experimental environments related to AI R&D and application to further benefit the people.	Reiterating our recommendation earlier in relation to Article 2, we suggest that the NSTC adopts the OECD's definition of AI systems for consistency throughout the framework to avoid confusion and fragmentation. We are also supportive the NSTC's approach of establishing AI Regulatory Sandboxes for the promotion of innovation of AI.
9	The government should prevent AI applications from harming the lives, bodies, freedom, or property security of citizens; social order; and the ecological environment; or violating relevant laws and regulations by causing conflicts of interest, bias, discrimination, false advertising, misleading or falsified information, etc.	1. With reference to the *Executive Order on Safe, Secure, and Trustworthy AI* issued by the US President in 2023 which stipulates that the government should prevent the application of AI from causing harm to citizens' (life) safety or the ecological environment; or from causing conflicts of interest or bias, discrimination, false advertising, misleading or falsified information, and violation of relevant laws and regulations such as the *Child and Adolescent Welfare and Rights Protection Act*, the *Fair Trade Act*, the *Consumer Protection Act*, and the *Personal Data Protection Act*.	We are supportive of leveraging existing well-established, technology-neutral, risk-based and principles-focused regulatory frameworks, and suggest the NSTC to allow for such approach, as well as aligning its Draft AI Law with international standards.

	The Ministry of Digital Affairs and other relevant agencies may provide or recommend tools or methods for assessment and verification to facilitate the handling of the matters mentioned in the preceding paragraph by authorities.	2. To facilitate the competent authorities of various industries to handle the business mentioned in the preceding article, the Ministry of Digital Affairs and other relevant agencies may provide or recommend domestic and foreign assessment and verification tools or methods.	
10	The Ministry of Digital Affairs should reference international standards or frameworks to develop AI information security classification and management and promote interactions with the international community on AI risk classification. Respective authorities may formulate risk classification standards for the businesses they supervise based on the risk classification frameworks	1. The government should promote AI R&D and application with a risk-based approach to ensure the safety and stable operation of AI. To enable AI risk classification specifications, and align the verification and assurance mechanisms to international standards, the Ministry of Digital Affairs will refer to international standards or practices to promote AI risk classification framework, e.g. the *EU AI Law* stipulating four levels of risk, including prohibited AI practices, etc. 2. Due to the different industries involved, the authorities of each area may formulate risk classification and related management regulations based on the risk classification framework in the preceding paragraph.	We suggest that rather than formulating an AI risk clarification standard in any further guidance, the NSTC should consider setting out a list of factors relevant to whether a matter is considered a high-risk use case, and that businesses should instead be responsible for determining the risk level of each use case. This approach would be a more "future-proof" one to this issue rather than simply prescribing high-risk use cases based on the NSTC's view of the use of this technology as at the present date. As technologies progress, the actions may no longer be relevant, and new mitigation actions will be required as technologies and use cases evolve.
11	The government should identify, assess, and reduce the risks of AI use. While promoting the R&D and application of AI through standards, specifications, or	To facilitate various organizations in implementing classification assessments and management, and to assist all sectors of society in taking measures to respond to risks through standards, specifications, or guidelines. Please refer to the 2023 US Executive Order on Safe, Secure, and Trustworthy AI to	In many instances, AI Systems are used in conjunction with traditional risk assessment methods, including human review. This hybrid approach can potentially mitigate the risks associated with incorrect outputs from the AI System. Therefore, it may be beneficial to consider a

	guidelines, it should also assess potential weaknesses and abuse situations based on risk classification to improve the verifiability of AI decision-making and human controllability.	improve the verifiability and human controllability of AI decision-making.	more nuanced perspective that takes into account the diverse ways in which AI Systems can be integrated into risk management. Having a blanket requirement for human in the loop could make it impossible to use better techniques to problems for which AI Systems are well suited, as technology evolves and further develops. As such, we suggest that the NSTC factor into its considerations that over time as the AI Systems and technology evolves, there will be cases where a human in the loop is not necessary and where business can ensure that the use of a model without that control would be better than a process that it might replace. We suggest that over time, there should be flexibility to allow businesses to dial down human involvement if deemed appropriate and safe.
12	The government should increase the trustworthiness of AI applications through mechanisms such as standards, verification, testing, labeling, disclosure, traceability, or accountability based on AI risk classification, and establish relevant conditions, responsibilities, relief, compensation, or insurance for AI applications. Standardize and clarify	1. When using AI applications, there should be clear ways to reduce possible risks through safety standards and verification mechanisms, such as those stipulated in the US NIST AI Risk Management Framework, labelling or information disclosures for AI outputs, transparent and explainable traceability or accountability mechanisms, etc. All organizations are required to establish application responsibility mechanisms, including regulations for the implementation of foreign AI products, to reduce compliance costs.	It would be prudent to emphasise the importance of distinguishing the roles of developer and deployers. As such, we suggest amending the language to the below (amendments in red): "The government should increase the trustworthiness of AI applications through mechanisms such as standards, verification, testing, labelling, disclosure, traceability, or accountability based on AI risk classification, and establish relevant conditions, responsibilities, relief, compensation, or insurance for AI applications. Standardise and clarify responsibility attribution

	responsibility attribution and conditions. In addition to complying with the basic principles of Article 3, the R&D of AI technology and any activities before application shall not apply to the regulations related to application responsibilities in the preceding paragraph, to facilitate technological innovation and development.	2. To avoid affecting the freedom of academic research and industrial front-end R&D, Article 2(8) of the EU AI Law stipulates that any research, testing, or development activities only need to be carried out by applicable EU laws, and AI laws are not applicable. It is stipulated in Article 2 that the R&D of AI technology, and any activities should abide by the basic principles of Article 3 before application, and the relevant regulations on application responsibility shall not apply, to facilitate the development of technology innovation.	across the relevant actors in the AI ecosystem and conditions."
17	After the implementation of this Act, the government shall review and adjust its responsibilities, businesses, and regulations in accordance with the provisions of this Act to implement the purposes of this Act.	1. To implement this law and ensure the effective promotion and development of AI technology, concerning Article 16 of the Basic Law on Education, Article 16 of the Basic Law on Communications, Article 34 of the 原住民族基本法, and Article 16 of the 海洋基本法, in Article 16 One stipulates the review of regulations to facilitate the Executive Yuan to coordinate the review of existing regulations and related mechanisms and measures by various ministries.	Reiterating our recommendations earlier relating to Article 5, we encourage the NSTC and policymakers around the world to work together to establish a globally agreed set of regulatory principles and use a gap analysis to review if existing regulations are sufficient or if new regulations are needed.

	Before the regulations mentioned in the preceding paragraph are enacted or revised, if there are no provisions in existing regulations, the central authority in charge of relevant industries shall coordinate with the National Science and Technology Council to interpret and apply them in accordance with the provisions of this Law.	2. Regarding the relevant laws and regulations that should be revised or abolished in accordance with the provisions of the first paragraph, before completing the legal procedures, to ensure that the relevant affairs comply with the provisions of this law, the second paragraph stipulates that the central industry competent authority shall coordinate with the National Science and Technology Council. Institutions shall interpret and apply it in accordance with the provisions of this Law.	