Business Software Alliance

5 November 2026

Ministry of Law
Intellectual Property Office of Singapore

By email: MLAW_Consultation@mlaw.gov.sg

BSA RESPONSE TO THE PUBLIC CONSULTATION ON ARTIFICIAL INTELLIGENCE AND SINGAPORE'S INTELLECTUAL PROPERTY REGIME

The Business Software Alliance (**BSA**)[1] welcomes the opportunity to comment on the Ministry of Law (**MinLaw**) and Intellectual Property Office of Singapore (**IPOS**) *Public Consultation on Artificial Intelligence and Singapore's Intellectual Property Regime* (**Consultation Paper**).[2]

BSA members are leaders in AI development, integration, and deployment. They are also major copyright owners whose software depends on effective protection and enforcement. BSA has supported Singapore's approach to AI and copyright since the Copyright Review began in 2016,[3] including the computational data analysis (**CDA**) exception introduced in the Copyright Act 2021.[4] We cite the exception as a model for other jurisdictions in the Asia-Pacific region and beyond, including in Australia, Hong Kong, India, and Korea.[5]

The CDA exception is effective because it provides developers with legal certainty, protects rights owners through the lawful access safeguard, and preserves remedies for infringing outputs. The Consultation Paper confirms that the legal position on the exception's scope is clear. Singapore should preserve this framework. Targeted guidance can address remaining questions without legislative amendment. This submission responds to the topics and questions raised in Part III of the Consultation Paper.

Summary of Recommendations

1. **Retain the CDA exception without amendment (Issue A(I)).** Confirm its application to generative AI and commercial training in IPOS guidance, not legislation.
2. **Keep the lawful access safeguard focused on how works are accessed and preserve section 187 (Issue A(II)).** Retain the contract illustration in section 244(2)(d) and discussed in Figure 2 of the Consultation Paper as non-binding to guide

[1] The Business Software Alliance (www.bsa.org) is the global trade association of the enterprise software industry. BSA's members include: Adobe, Alteryx, Amadeus, Amazon Web Services, Asana, Atlassian, Autodesk, Avalara, Bentley Systems, Box, Cisco, Cloudflare, Cohere, Cohesity, Dassault Systemes, Databricks, Datadog, Docusign, Dropbox, Elastic, EY, Graphisoft, HubSpot, IBM, Kyndryl, MathWorks, Microsoft, Morisawa, Notion, Okta, OpenAI, Oracle, PagerDuty, Palo Alto Networks, PTC, Rubrik, Salesforce, SAP, ServiceNow, Shopify Inc., Siemens Industry Software Inc., TrendAI, TriNet, Veeam, Workday, Zendesk, and Zoom Communications Inc.

[2] Ministry of Law Singapore, Public Consultation on Artificial Intelligence and Singapore's Intellectual Property Regime, 26 August 2026 at https://www.mlaw.gov.sg/public-consultation-on-artificial-intelligence-and-singapore-s-intellectual-property-regime/. PDF version of consultation document at https://www.mlaw.gov.sg/files/Public_Consultation_on_AI_and_IP_20260826.pdf

[3] BSA Comments on Proposed Changes to Singapore's Copyright Regime, 24 October 2016, at https://www.bsa.org/policy-filings/singapore-bsa-comments-on-proposed-changes-to-singapores-copyright-regime

[4] BSA Feedback on Draft Copyright Act 2021, 5 April 2021, at https://www.bsa.org/policy-filings/singapore-feedback-on-draft-copyright-act-2021

[5] See BSA submissions on AI and IP at https://www.bsa.org/policy-issues/policy-filings

interpretation rather than elevating the illustration to a deeming provision. Preserve section 187, which voids contract terms that exclude or restrict the exception.

3. **Keep technical measures voluntary, machine-readable, and international (Issue A(III)).** Support efforts to develop internationally recognized standards.
4. **Apply existing infringement principles to AI outputs (Issue B(I)).** Assess responsibility by each party's role, control, and knowledge. Do not create AI-specific liability rules.
5. **Encourage voluntary output safeguards without mandates or size thresholds (Issue B(II)).**
6. **Affirm copyright protection for AI-assisted works, including software code (Issue C).** Use IPOS guidance to confirm that human-directed software development with AI tools produces protected works.

Issue A(I): Scope and Applications of the CDA Exception

Question (a): What existing and emerging applications of AI training would benefit from the exception?

The CDA exception supports computational tasks, including AI training, across the economy. Examples include:

- foundation models and generative AI systems for text, images, audio, and code; including retrieval, grounding, and embedding;
- output safeguards, such as content-safety classifiers, protected-material detection and code-referencing;
- software development tools, including code completion, testing, and vulnerability detection;
- cybersecurity threat detection;
- fraud detection and financial crime monitoring;
- translation, speech recognition, and accessibility tools;
- medical imaging, drug discovery, and scientific research; and
- enterprise models that organisations fine-tune for their own operations.

Agentic AI systems also depend on models trained under the exception.

Because future applications will emerge, the exception's technology-neutral design will also cover applications no one can list today.

Question (b): Are the scope and applications of the exception sufficiently clear and if not, what statement(s) or illustration(s) should be added to the legislation for greater clarity?

The scope of the CDA exception is clear. The Consultation Paper confirms that the exception covers generative AI and commercial use (paragraphs 23 to 28). The 2019 Copyright Review Report, the 2021 Parliamentary debates, and the IPOS AI Training Explainer say the same.

Amending the legislation is unnecessary and carries risk. Reopening section 244 invites proposals to narrow the exception or add new conditions. Amendments could also imply that the current text was not intended to cover generative AI, casting doubt on good-faith training conducted since 2021. Regulatory stability is a stated feature of Singapore's copyright regime. It is also a key reason AI developers invest here.

Recommendation: Retain section 244 unchanged. Address any remaining questions by updating the IPOS AI Training Explainer. If the Government nonetheless considers legislative

clarification, any illustration should only confirm existing coverage of generative AI and commercial training and add no new conditions.

Issue A(II): Legal Obligations that Safeguard Rights Owners' Interests

Question (a): What technical or legal measures do rights owners employ to control access to or use of their copyright works for AI training?

BSA member companies are rights owners as well as AI developers, integrators, and deployers. They control access through licences, authentication, encryption, subscriptions, and API rate limits. Circumventing these measures defeats lawful access, so the exception does not override them.

Question (b): Is it clear from the exception when the exception applies despite rights owners' use of any such measures?

i. **If not, should the issue be addressed by allowing case law to develop, legislative amendment, or non-legally binding instruments? Please explain the reasons for your preference.**

ii. **If you propose legislative clarification or non-legally binding instruments, what form should this take and what scenarios should be covered?**

Please consider the above-mentioned scenarios (where applicable) and any other similar scenarios you may have encountered.

The current framework strikes the right balance. BSA supports the lawful access safeguard. The applicability of the safeguard should depend on *how* a user obtains access. Circumventing a paywall or access control, entering a non-public area without authorisation, or copying from flagrantly infringing sources all fall outside the exception. BSA members respect these limits.

Unilateral terms attached to public content are different. Many websites publish standard terms that users never see or accept. Such terms vary widely and website owners can change them without notice. To avoid undermining section 187, BSA opposes amending section 244 by elevating the section 244(2)(d) illustration to a deeming provision. Codifying the illustration, rather than leaving it as an example to guide interpretation, could make every contract term a potential bar to the exception, undermining section 187 and creating the uncertainty the CDA exception was designed to remove.

The following is further consideration of some of the other elements discussed in the scenarios of Figure 2:

- **Terms controlling access to non-public areas.** Unauthorised access to non-public areas already falls outside lawful access. No change is needed.
- **Terms protecting security and stability.** Rights owners may take reasonable measures to protect their systems, as the 2019 Copyright Review Report confirmed. Responsible crawlers respect rate limits and avoid overburdening services.
- **Terms that do not reference the CDA exception.** Terms that limit use to "personal" or "non-commercial" purposes can operate as indirect restrictions on the exception. To that extent, section 187 should void them.

Preferred approach. These scenarios are fact specific. Courts are best placed to resolve them on a case-by-case basis. Non-binding IPOS guidance can supplement the case law with practical examples, making legislative amendments unnecessary and premature.

Recommendation: Do not amend section 244(2)(d). Preserve section 187 in full. If the Government issues guidance, confirm that lawful access depends on circumvention of access controls and unauthorised access, not on unilateral terms of use.

Issue A(III): Non-Legally Binding Technical Measures

BSA agrees that the technical measures referred to in the Issue A(III) section of the Consultation Paper should remain legally non-binding (paragraph 36). BSA supports multi-stakeholder work on preference signals in the Internet Engineering Task Force (**IETF**) AI Preferences Working Group.[6] Effective signals are machine-readable, internationally interoperable, and granular enough to opt out of AI training without losing search visibility.

Question (a): How can the Government support rights owners in deploying non-legally binding technical measures to control access to and use of their copyright works for AI training, and encourage AI developers/deployers and other users to build in or respect such measures? What non-legally binding technical measures should it support?

The Government can convene rights owners and developers, raise awareness of existing tools such as robots.txt, support industry-led content authentication and provenance standards such as the Coalition for Content Provenance and Authenticity,[7]and align Singapore's policies and guidance with internationally recognised standards, like those under development in the IETF AI Preferences Working Group. It should avoid Singapore-specific formats, which would lead to policy fragmentation, confuse rights holders, and burden AI developers.

Issues B(I) and B(II): AI Output Infringement

Copyright holders should have full and effective remedies when an output infringes their rights, whether or not AI produced it. Singapore's existing law provides these remedies (paragraph 38). Whether Infringement occurs depends on the output: whether it reproduces a substantial part of a protected work, who caused it, and with what knowledge.

Recommendation: Support internationally recognised, industry-led standards. Keep all technical measures for AI training voluntary.

B(I) Question (a): When an AI output infringes the copyright in an existing work, when and to what extent should the following parties be liable under Singapore's copyright law?

i. **AI developer;**
ii. **AI deployer;**
iii. **end user (i.e. prompter); and/or**
iv. **any other party not mentioned above**

Copyright holders should have full and effective remedies when an AI-generated output infringes their rights. This principle applies equally to outputs made with AI and outputs made in other ways. Singapore's existing law already provides these remedies. Stakeholders and the Singapore Academy of Law agree that the framework is sound (paragraph 38).

Liability should follow each party's role, control, and knowledge.

- **Developers** provide general-purpose tools with substantial non-infringing uses. Reasonable safeguards, such as output filters and acceptable use policies, should weigh against authorisation liability.
- **Deployers** that design tools to reproduce specific works, for example by building retrieval tools over particular works without authorisation or by disabling provider safeguards, may bear responsibility for that design.

[6] IETF AI Preferences Working Group at https://datatracker.ietf.org/wg/aipref/about/

[7] Coalition for Content Provenance and Authenticity (**C2PA**), at https://c2pa.org

- **End users** who deliberately prompt for infringing output bear primary responsibility.

In enterprise settings, contracts already allocate these responsibilities. Acceptable use policies, licence terms, and indemnities continue to provide clarity to businesses.

B(I) Question (b): How would your views differ in cases where the infringing output arises from the use of agentic AI?

The same principles apply for agentic AI systems. A human sets the agent's objective and permissions. IMDA's workstream on legal responsibility for AI agents is the right venue for broader liability questions.

B(II) Question (a): What technical measures should AI developers, deployers and users adopt to minimise the risk of infringement arising from AI output? Where relevant, please identify: –

i. any industry or international technical standards or norms; and

ii. measures that would help minimise risks specific to agentic AI.

BSA members already use the measures in Annex A, including dataset curation, deduplication, output filters, duplication detection, prompt controls, and acceptable use policies. They also use a range of measures to manage AI risks more broadly, including ISO/IEC 42001 (AI management systems),[8] ISO/IEC 23894 (AI risk management),[9] and the AI Risk Management Framework published by the United States National Institute of Standards and Technology (**NIST**).[10] For agentic AI, useful measures include assigning identities, specifying access and permission controls, ensuring appropriate human approval is required at key decision points, and activity logging as recognized in the Singapore InfoComm Media Development Authority (**IMDA**) Model Governance Framework for Agentic AI.[11]

Singapore's guidance-based approach is the right one. The best measures depend on the models, the use cases, and the deployment context. Mandates, as in the European Union and China, freeze today's techniques into place. Voluntary adoption lets practices improve as technologies evolve.

B(II) Question (b): To what extent should any such measures be calibrated to the scale and capacity of AI developers, deployers and users? If so, how should the relevant threshold(s) be defined?

Voluntary measures need no thresholds. Guidance should scale expectations to each party's role and control over outputs, not company size. Size-based thresholds are hard to define and quickly outdated.

---

[8] ISO/IEC 42001:2023 Information technology — Artificial intelligence — Management system at https://www.iso.org/standard/42001

[9] ISO/IEC 23894:2023Information technology — Artificial intelligence — Guidance on risk management at https://www.iso.org/standard/77304.html

[10] NIST AI Risk Management Framework at https://www.nist.gov/itl/ai-risk-management-framework

[11] IMDA's Model Governance Framework for Agentic AI at https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/factsheets/2026/updated-model-ai-governance-framework-for-agentic-ai. PDF version of the Updated Model AI Governance Framework for Agentic AI at https://www.imda.gov.sg/-/media/imda/files/about/emerging-tech-and-research/artificial-intelligence/mgf-for-agentic-ai.pdf

Recommendation: Rely on existing infringement and authorisation principles. Continue to encourage voluntary safeguards through the IPOS AI Output Infringement Explainer.[12] Do not mandate technical measures.

Issue C: Human Authorship of AI-Assisted Works

When a human uses AI to enhance their creativity, the resulting work should be protected by copyright. The tools used should not change the analysis and protection should not depend on mandatory disclosure of AI use. Singapore's test already reflects this: a work must be made by a human and causally connected with the engagement of the human intellect. BSA supports this approach.

Question (a): What existing and emerging use cases of generative AI augment human creativity in the process of creating authorial works?

Creators use AI across every category of work. Photographers use AI tools to edit images. Architects use AI tools to refine design for energy efficiency. Filmmakers use AI tools to animate characters. Writers use AI tools to draft and refine written works. An extremely important use case for AI tools is in software development.

Software Code Developed with AI Assistance

Software is a literary work under the Copyright Act 2021. This protection undergirds Singapore's digital economy. Developers now use AI assistants for code completion, generation, testing, debugging, refactoring, and documentation. The resulting programs must remain protected, for five reasons.

1. **Humans make the creative choices.** Developers design the architecture, choose data structures and logic, and write specifications. They accept, reject, edit, and integrate machine generated suggestions.
2. **The protected expression lies in the whole program.** A program's originality lies in its structure, sequence, and organisation. Authorship should be assessed for the program as a whole, not line by line.
3. **AI assistants continue a long history of tools.** Compilers, development environments, autocomplete, and code libraries and generators have long been used in software development, and no one has suggested that the use of such tools would deprive software of protection.
4. **Line-by-line provenance is impractical.** Modern software development is iterative. Developers may accept, rewrite, and test AI suggestions within minutes. It is impractical to attempt to trace each line to its source, human or otherwise.
5. **Uncertainty would harm Singapore's economy.** Copyright underpins software licensing, open-source licences, anti-piracy enforcement, and investment. Doubt about the status of protection of code in Singapore would push development elsewhere.

Question (b): What acts or decisions by creators (i.e. human prompters) demonstrate human creativity when generative AI is involved in creating an authorial work?

For software, such acts or decisions include architectural design, specification and prompting, iterative refinement, selection, editing, testing, and integration. The Figure 4 factors are useful indicators but should not be considered requirements for protection.

[12] IPOS: Artificial Intelligence and Copyright Protection in Singapore: How Does Singapore Law Treat Ai-Generated Content That May Infringe Copyright? at https://isomer-user-content.by.gov.sg/61/e0f5eaac-1139-4729-9fe6-48affb0ee986/ai-infographic-2-how-does-singapore-law-treat-ai-generated-content-that-may-infringe-copyright.pdf

Question (c): Should principles or factors be developed to assess the sufficiency of human creativity in such cases? If so, what should these be and should they be developed by the courts, prescribed in legislation, or provided in non-legally binding instruments?

Courts should develop the test under existing law. Legislated factors would likely become quickly outdated as tools and practices evolve. Non-binding IPOS guidance can help creators evidence their contribution, without burdensome disclosure or record-keeping requirements.

Question (d): How would your views to b and c differ in cases where the AI output is executed using an agentic AI system?

The principles do not change for agentic AI systems. A developer who directs an agent still sets objectives, reviews results, and decides when the code is final and ready for release.

Recommendation: Update the IPOS explainer to explicitly confirm that software developed by humans using AI tools is protected, with authorship assessed for the program as a whole.

Conclusion

Singapore's CDA exception is a global model. It has delivered certainty for AI developers and protection for rights owners since 2021.BSA urges MinLaw and IPOS to preserve it, address remaining questions through guidance, and affirm protection for AI-assisted works, including software.

We thank MinLaw and IPOS for considering our views. We appreciate the decade of engagement with relevant stakeholders, including BSA and our member companies, and stand ready to provide any additional information or support you may require.

Yours sincerely,

Jared Ragland, PhD
Vice President, APAC – Policy
Business Software Alliance
jaredr@bsa.org