Annex A

Fact Sheet - OPEN-SOURCING OF AI VERIFY AND SET UP OF AI VERIFY FOUNDATION

About AI Verify Foundation

IMDA has set up the AI Verify Foundation to harness the collective power and contributions of the global open source community to develop AI Verify testing tool for the responsible use of AI. The Foundation will boost AI testing capabilities and assurance to meet the needs of companies and regulators globally.

Current AI governance principles such as transparency, accountability, fairness, explainability, and robustness continue to apply to generative AI. The Foundation aims to crowd in expertise from the open-source community to expand AI Verify’s capability to evaluate generative AI as sciences and technologies for AI testing develop.

The not-for-profit Foundation will:
• Foster a community to contribute to the use and development of AI testing frameworks, code base, standards, and best practices
• Create a neutral platform for open collaboration and idea-sharing on testing and governing AI
• Nurture a network of advocates for AI and drive broad adoption of AI testing through education and outreach

AI Verify Foundation has seven premier members, namely, Aicadium, Google, IBM, IMDA, Microsoft, Red Hat and Salesforce, who will set strategic directions and development roadmap of AI Verify. The Foundation also has more than 60 general members. For full list of members, please visit https://aiverifyfoundation.sg/foundation-members/

About AI Verify

IMDA had developed AI Verify, an AI Governance Testing Framework and Toolkit, to help organisations validate the performance of their AI systems against internationally recognised AI governance principles through standardised tests.

AI Verify is extensible so that additional toolkits (e.g. sector-specific governance frameworks) can be built on top of it. Contributors are encouraged to build components as plugins to AI Verify, and participate in growing the AI testing ecosystem.

Jurisdictions around the world coalesced around a set of key principles and requirements for trustworthy AI. These are aligned with AI Verify’s testing framework which comprises 11 AI governance principles, namely,
• Transparency
• Explainability
• Repeatability/reproducibility
• Safety
• Security
• Robustness
• Fairness
• Data Governance
• Accountability
• Human agency and oversight
• Inclusive growth, social and environmental well-being

The testing processes comprises technical tests on three principles, namely, Fairness, Explainability, and Robustness. Process checks are applied to all 11 principles. The testing framework is consistent with internationally recognised AI governance principles, such as those from EU, OECD and Singapore.

AI Verify is a single integrated software toolkit that operates within the user’s enterprise environment. It enables users to conduct technical tests on their AI models and record process checks. The toolkit then generates testing reports for the AI model under test. User companies can be more transparent about their AI by sharing these testing reports with their shareholders.

AI Verify can currently perform technical tests on common supervised-learning classification and regression models for most tabular and image datasets. AI Verify does not set ethical standards, neither does it guarantee AI systems tested will be completely safe or be free from risks or biases.

AI Verify was first developed in consultation with companies from different sectors and of different scales. These companies include AWS, DBS, Google, Meta, Microsoft, Singapore Airlines, NCS/LTA, Standard Chartered, UCARE.AI and X0PA. AI Verify was subsequently released in May 2022 for an international pilot, which attracted the interests of over 50 local and multinational companies, including Dell, Hitachi, IBM, and UBS.