



NEW ZEALAND
FOREIGN AFFAIRS & TRADE
Manatū Aorere

JULY 2023

Indonesia's National Strategy for Artificial Intelligence

MARKET INTELLIGENCE REPORT

Summary

Prepared by the New Zealand Embassy in Jakarta

- The Government of Indonesia (GoI) first launched its “National Strategy for Artificial Intelligence” on 10 August 2020 as a guideline to GoI in developing AI between 2020 and 2045.
- In 2022, Indonesia’s National Research and Innovation Agency (BRIN) established an AI and Cybersecurity Research Centre to draft new AI regulations, amongst other things, which may be codified in a Presidential Regulation as early as end-2023. Following that, the implementing regulations would be drafted and take effect by end-2025.
- There are opportunities for New Zealand businesses and universities in the science and technology sector to collaborate with BRIN through research activities, in particular, joint research on AI development in the areas of smart agriculture, smart aquaculture, and the Internet of Things.

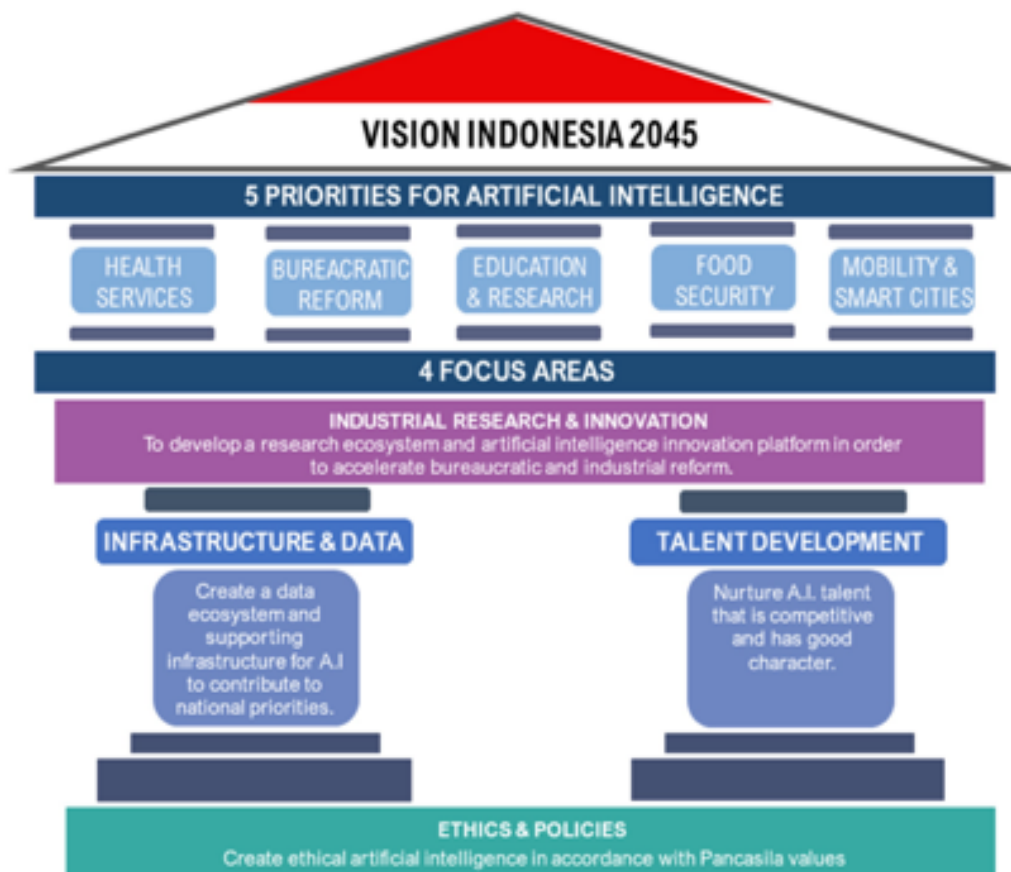
Report

The Government of Indonesia (GoI) first launched its “National Strategy for Artificial Intelligence” ([STRANAS KA](#)) on 10 August 2020, through the Agency for the Assessment and Application of Technology (BPPT).

The strategy provides a national guideline to GoI in developing AI between 2020 and 2045. The GoI outlined five sectors of focus to support its aims to reform Indonesia from being a natural resource-based economy to an innovation-based country, AI, Internet of Things, advanced robotics, augmented reality, and 3D printing.

BPPT is now under Indonesia’s National Research and Innovation Agency (BRIN). BRIN continues to reference the National Strategy for AI in its planning, with a focus on AI projects in health services, bureaucratic reform, education and research, food security, as well as mobility and smart cities. This grouping marks not only the widespread expertise that AI can offer but a degree of insight into how machine learning and automation can address persistent issues in developing countries.

Indonesia’s National Strategy for Artificial Intelligence Framework:



The strategy also noted the dominance of imported technology in the Indonesian market, disruptions to the workforce and data misuse as hurdles to AI development and identifies four key focus areas for the government's action: Ethics and Policies, Infrastructure and Data, Talent Development, and Industrial Research and Innovation.

A number of state projects already employ AI technology, with machine learning helping to streamline agriculture production and anticipate forest fires, while some government agencies are promoting AI development and technology-based solutions at schools and teaching faculties.

Recognising the lack of provisions for regulations to oversee AI developments, the guideline suggest the establishment of a data ethics board to oversee its development as well as to create regulations and setting national standards for AI innovation.

In 2022, BRIN established an AI and Cybersecurity Research Centre to draft new AI regulations, amongst other things, which may be codified in a Presidential Regulation as early as end-2023. Following that, the implementing regulations would be drafted within the next two years. The research centre's activities fall into three research themes: Computer Vision and Image Processing, Machine Learning, and Cybersecurity.

[KORIKA](#), an Indonesian AI orchestration organisation based on Quad Helix collaboration (which consists of government, industry, academics and community) is also part of the team developing the Presidential Regulation.

To support the [Indonesia 2045 vision](#), the Presidential Regulation on AI is intended to be implemented by as early as the end of 2025. The five priority sectors for AI implementation are **health, government services, education, food security, and mobility and smart cities**.

The establishment of the AI and Cybersecurity Research Centre by BRIN, and the development of a Presidential Regulation on AI, presents opportunities for New Zealand businesses and universities in the science and technology sector. BRIN has expressed an interest in collaborating with New Zealand on research activities, and in AI sector development, in the areas of **smart agriculture, smart aquaculture, and the Internet of Things**.

AI generated content, intellectual property, and taxation

Parties who are required to register as an Electronic Systems Provider (PSE) in Indonesia are listed in Regulation Number 71 of 2019 on the Organisation of Electronic Systems and Transactions. PSE registration must be carried out by every party that organises an electronic system in Indonesia, both from the state (public bodies) and

private parties.

At the time of writing, Indonesia's existing legal frameworks tend to reject the concept of ChatGPT (AI based chatbot) generated content as work that is subject to Intellectual property protection due to said work being created by non-human/legal entities, as well as the lack of any specific human-related creative and intellectual elements being involved in the production process.

ChatGPT has yet to be officially determined as an electronic system by the GoI and has simultaneously yet to be registered as an Electronic Systems Provider (PSE) in Indonesia.

ChatGPT would have to be registered as a PSE if it generates revenue from Indonesia (i.e. paid plan such as ChatGPT Plus), which would see the chatbot regulated by the GoI for the purposes of taxation and content supervision.

In 2022, the Ministry of Information and Communications informed all internet services operating in Indonesia – whether domestic or international – to register as a PSE for the purposes of cyber security and user protection. Failure to comply would result in an operational ban in the country. The PSE policy led to brief bans on several internet services and games companies, including some of the largest in the world like Google, Meta, Yahoo! and Valve Corporation, but they eventually registered their services in Indonesia.

Comment

As with many other countries in Southeast Asia, Indonesia faces structural challenges related to infrastructure, access, and digital literacy. Moreover, these challenges are complicated by the nation's size, spread, and diversity on a scale that few others have to grapple with. Post will continue to monitor progress including whether the draft AI regulations remain on track for completion by the end of the year.

External links

The following links may provide useful information to businesses:

- Indonesia's National Strategy for Artificial Intelligence ([STRANAS KA](#))
-

More info

More reports

View full list of market reports from MFAT at www.mfat.govt.nz/market-reports

If you would like to request a topic for reporting please email exports@mfat.net

To get email alerts when new reports are published, go to our [subscription page](#).

To learn more about exporting to this market, New Zealand Trade & Enterprise's comprehensive [market guides](#) cover export regulations, business culture, market-entry strategies and more.

To contact the Export Helpdesk

email exports@mfat.net

call 0800 824 605

visit Tradebarriers.govt.nz

Disclaimer

This information released in this report aligns with the provisions of the Official Information Act 1982. The opinions and analysis expressed in this report are the author's own and do not necessarily reflect the views or official policy position of the New Zealand Government. The Ministry of Foreign Affairs and Trade and the New Zealand Government take no responsibility for the accuracy of this report.