

# A decade of the Indonesian Space Law: What next?

This year marks the anniversary of the 2013 Space Law. The legislation came into force long after Indonesia achieved the distinction of being the first developing country to own and operate satellites for domestic communication in 1976.

Given its unique geographical and demographic attributes, Indonesia relies on science and space technology to pursue national interests.

The Space Law assumes a critical role in facilitating the effective implementation of a national space policy.

Ideally, a space law should be innovative, comprehensive and in harmony with international space law conventions.

Two decades ago, in 2003, the academic document pertaining to Indonesian space law was meticulously finalized. The formulation of this academic document followed Indonesia's ratification in 2002 of the Magna Charta Outer Space Treaty of 1967.

After undergoing a dynamic process, the draft Space Law was approved by the House of Representatives on July 9, 2013, and was enacted as Law No. 21/2013 on (Outer) Space on Aug. 6 of that year.

The law made Indonesia the first country in ASEAN to enforce national space legislation. The Philippines followed suit in 2019, and Malaysia in 2022. A few ASEAN member states are either considering or are already in the process of drafting national space legislation, such as Thailand, Vietnam and Singapore.

The aim of a legal framework regarding outer space is to welcome further development of space activity, laying the foundation for space industry growth. Foreign Direct Investment (FDI) in space activities comes with legal certainty, which can attract investors.

Legal certainty is crucial considering the dual use of space technology as an agent of growth in peace and the ultimate weapon in the 21<sup>st</sup>-century war.

Coordination between the Investment Ministry and the Defense Ministry is one of the keys to the growth of Indonesia's space industry.

Foreign investment in sectors pertaining to the space industry and services should be well calculated according to national interests. Currently, ASEAN as a regional initiative has neither a clear nor progressive blueprint on space activities, leaving it to each ASEAN member state to determine their own guidelines.

Regarding public international law, Indonesia has conveyed a clear message to the world. The 2013 Space Law stipulates a spatial approach, namely demarcation lines between airspace and outer space in between 100 and 110 kilometers from earth's surface. This provision is not explicitly mentioned within the articles, but in the explanatory part of the law.



**Into orbit:** A Falcon-9 rocket belonging to SpaceX carrying Indonesian satellite SATRIA-1 takes off at Cape Canaveral Space Launch Complex 40 in Florida, the United States, on June 18.



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Nevertheless, this commendable achievement is noteworthy considering the legal void at the international level concerning airspace and outer space delimitation. Indonesia consistently addressed the delimitation issue and proposal at many annual meetings of the United Nations Committee on the Peaceful Uses of Outer Space in Vienna.

regulations must be completed within two years of its enactment, or 2015.

As Indonesia braces for a presidential election in February of next year, it is not clear if space activities will gain the government's attention this time around.

The obligation to devise space policies is stipulated in Article 9 of the Space Law. Previously,

**How Indonesia positions itself now will determine the future path for the country's investors to conduct sustainable business in spacefaring countries.**

Indonesia's effort are in line with the Constitution, which mandates that the state help preserve global peace.

Currently, Indonesia could carry its momentum to ASEAN through spaceport construction in the archipelago. Launching from the equator requires less fuel and therefore costs less. Not all ASEAN member states enjoy this geographical privilege.

The 2013 Space Law does not mention spaceport implementation or technicalities, so Presidential Regulation No. 45/2017, also known as Indonesian Space Policy, addresses these matters.

A long-term plan has been set to realize a spaceport between 2030 and 2040.

However, there is doubt surrounding this because of delays in implementing the short-term plan since 2017. This parallels the unfinished drafting of all government regulations needed to implement the Space Law. The law stipulates that all government

this task was entrusted to the National Institute of Aeronautics and Space (LAPAN) prior to its integration with the National Research and Innovation Agency (BRIN).

Following the reorganization, the question of which entity within BRIN should bear the responsibility of crafting such a policy—whether BRIN as the parent organization or its subsidiary the space and aviation research organization (ORPA)—has arisen. Considering its strategic policymaking decisions and continued implementation tardiness, a prompt solution is of utmost significance because of the changing landscape of space exploration.

Indonesia is facing two space phenomena this year.

First is the renewed competition to reach the Moon. India's recent success in landing Chandrayaan-3 on the south pole of the Moon should serve as a wake-up call for Indonesia.

This mission, which cost India only US\$75 million, took place in an area where no country has ever successfully landed. Chandrayaan-3's success puts India fourth behind Russia, the United States and China as nations that have successfully landed on the Moon.

Indonesia does not need to compete in the race. It is wise to learn from this momentum by being agile in redefining the Common Heritage of Mankind (CHM). The Moon Agreement of 1979 creates CHM guidelines for the Moon and other celestial bodies.

A test of CHM is ongoing, with Saudi Arabia as the last to withdraw from the Moon Agreement in January 2023. Some countries postulate that the agreement will hamper space mining. Indonesia is not a signatory.

It is only a matter of time before space mining begins. How Indonesia positions itself now will determine the future path for the country's investors to conduct sustainable business in spacefaring countries.

A new alliance is being built under the umbrella of the US-led Artemis Accords.

Second, Indonesia is in discussions with Elon Musk's Starlink, which could provide internet connectivity to rural areas faster than conventional telecommunications companies, which require more time and large investments.

Fairness to those living in rural areas should be put forward. Starlink is a real solution, no wonder if competitors are sensitive.

Those in opposition to a partnership with Starlink highlight impacts to the Low Earth orbit (LEO). Space debris in LEO has increased significantly during the past decade, which poses a threat to future launches. Indonesia's approach toward Starlink and the spaceport's future will play a crucial role.

Hopefully, the new Indonesian president will have a spacefaring mindset as many opportunities await in outer space.

# Women's action in Global South can create better planet



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Climate change has different impacts on men and women, especially in the Global South. Patriarchal culture is the cause behind this.

We often do not involve women in responding to environmental problems. Too often, we exclude them in discussions on solutions to the climate crisis.

Leaving women out when coming up with environmental solutions puts them in more vulnerable positions. When climate change-related events occur—such as more extreme weather, forest fires or floods—women and girls bear a heavier burden and experience more severe impacts.

However, we need to change the narrative that women are merely "victims" of the climate crisis.

In reality, women in the Global South countries also possess the abilities and strength to protect the environment. They manifest their power to preserve the environment in various actions, both formal and informal, individual and collective.

Historically, women have played a big part in protecting the environment in Asian and South American countries.

One example is the Chipko movement in India in the 1970s. The Chipko movement started in 1974, when the indigenous women and community of Reni village in India fought to protect the forest from logging that threatened their livelihood. They collectively took action by guarding and embracing trees to push back contractors and prevent deforestation.

During the 1985 Nairobi Conference on Women from Third World Countries, women emphasized the importance of nature conservation and women's environmental actions. Testimonies from the Chipko movement and similar women's movements in other countries were discussed at this conference.

There is a recent example from women in Zapotlito, a village within the Chachahua-Pastoria Lagoon National Park area in southern Mexico.

They have endured a series of environmental challenges, including dead fish, a dreadful ammonia smell and a decline in air and water quality due to a dam project and lime oil factory pollution. The women of Zapotlito worked together to clean the natural canal in the Coaxaca mangrove area. They used shovels and hoes for regular cleanups in 2016.

Even as they fought for change, they continued their daily routines. They cooked food, made tortillas, cleaned houses, cared for children, tended to pets and plants and caught fish for their families to eat, even amid bad environmental conditions.

In Indonesia, fishermen in Central Java have been work-

ing to sustain their community amidst climate change since 2020. Rising sea levels have increased flood risks in their neighborhoods, forcing them to take action by engaging with policymakers, raising awareness and fundraising to build bridges.

Unfortunately, women in these movements often face threats, intimidation and violence. Their enemies tried to undermine their action, by saying "women should stay silent at home and take care of the kitchen" Some of them received death threats.

Despite these challenges, however, they continue their fight to protect their land.

The stories above have shown women are capable of making a difference in environmental activism, from their homes and communities to the national stage.

Since the 1990s, more international policies have emphasized gender as a crucial element in nature conservation and sustainable development. For example, the 1992 Rio Declaration on Environment and Development acknowledges the vital role of women in environmental management and development.

The Beijing Platform for Action, established in 1995, is a resolution that supports gender equality and empowerment of women worldwide.

The reports of the High-Level Intergovernmental Meeting on the Beijing Platform for Action in Asia and the Pacific highlight the critical link between environmental change and women's roles as managers and providers of natural resources.

Recent documents from the United Nations Framework Convention on Climate Change (UNFCCC) highlight the pivotal role of local women's movements and indigenous women in shaping climate policies and actions.

Numerous policies also promote women's participation in the sustainable development agenda, but not all countries adopt those policies.

To empower women's activism, governments worldwide should formulate policies integrating women's roles in conservation and sustainable development strategies within their own nations. As for the public, initiating efforts to document women's activism is crucial.

Both government and public actions are essential to avoid oversimplifying women's experiences across diverse countries, and to move beyond the narrative that portrays them solely as victims.

These actions are fundamental in steering clear of oversimplifying the experiences of women across diverse countries. They are also the first steps toward solving environmental problems in new and better ways.

# Hard truths in the conversation between the US and ASEAN

It is probably time that the United States and Southeast Asia shift gears in their strategic conversation. The one they have been having thus far is in danger of being stuck in a rut.

In their efforts to come to terms with intensifying US-China rivalry, Southeast Asian leaders have consistently relayed to their American counterparts variations of the same message along the following lines:

1) Do not force Southeast Asia to take sides in the US' strategic competition with China; 2) Do not drag Southeast Asia into a conflict with China over the South China Sea or Taiwan; 3) America should not have withdrawn from the Trans-Pacific Partnership (TPP) and should now consider joining a regional free trade agreement (FTA) as this symbolizes an important pillar of engagement with the region; 4) the Biden administration's Indo-Pacific Economic Framework for Prosperity (IPEF) has limited value as it does not facilitate market access; 5) the region has anxieties about China's rise and would welcome deeper US engagement to maintain a balance of power—but Southeast Asia does not consider China the enemy; 6) the US' high-level diplomatic engagements in the region and with ASEAN as an institution have been episodic and uneven, espe-



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cially when compared to China's sustained levels of regional engagement.

These messages were candidly conveyed again to members of the Asia Society's Task Force on US-China Policy during a June closed-door gathering in Singapore with Southeast Asian senior academics and former diplomats.

For a more productive conversation with the US, it is perhaps time for Southeast Asia to also internalize what Uncle Sam has been saying for quite some time now. The key messages have been nicely encapsulated in National Security Advisor Jake Sullivan's speech in April and run along these lines: First, America will adopt a "foreign policy for the middle class" which will see it "unapologetically pursuing" an industrial policy that will benefit its workers.

Second, the world should not expect the US to indiscriminately proffer free trade, lower tariffs, and market access as a matter of principle. Globalization and neoliberal economics have not worked for Americans and the "world

needs an international economic system that works for our wage earners, works for our industries, works for our climate, works for our national security, and works for the world's poorest and most vulnerable countries".

These positions translate into some hard truths for Southeast Asian countries.

First, Uncle Sam is likely to become harder to do business with than in the past. As Sullivan has plainly said, domestic politics and imperatives simply do not allow America to be the champion of free trade the region wishes it to be. Statistics show that between 2009 and September 2023, the US topped the list of countries with the highest number of protectionist trade intervention policies, with nearly 9,500 policies implemented. China came in second, with around 6,100 such policies implemented.

Second, America, whether Southeast Asia likes it or not, will remain ideologically driven in its determination to spread its democratic ideals and values. At the very least, it will never profess

otherwise in its public diplomacy. "Like-mindedness" is a foreign policy priority for the US, given how often the term is used as a prerequisite for the formation of US-initiated mini-lateral groups such as the Quadrilateral Security Dialogue (Quad), a strategic forum between Australia, India, Japan and the US.

Insofar as the US and its allies continue to define "like-mindedness" based on an agreement that the most serious strategic and security threats are posed by a communist and autocratic China, then there is every likelihood that the US would view most Southeast Asian countries as being more in the "out group" than "in group".

While most, if not all, countries in Southeast Asia harbor strong reservations and anxieties about China's rise, probably very few would assess that China poses the same degree of existential threat as is perceived in the US.

This mismatch in perceptions about China has serious implications. The question before Southeast Asian leaders is how to convince the US and its allies that there is a way forward to cooperate and engage in important and strategic new domains. As the technological competition between the US and China intensifies, the invocation of national security considerations will increasingly drive

trade and investment policies in emerging critical sectors.

Given how quickly dual-use technologies and applications evolve, it is probably reasonable to assume that the "yard" in the "small yard, high fence" approach is unlikely to remain small. As the US imposes onerous investment screening processes and export controls for a potentially elastic list of critical technologies, the question is whether Southeast Asian countries will have the ability to comply and to what extent future trade and investment flows will be negatively impacted.

It is in Southeast Asia's interests to be deemed, if not "like-minded", then at least trusted enough to be included as nodes in the new supply chain ecosystems for critical technologies. The region's leaders must break the false narrative that the region is economically under the sway of China and therefore unable to exercise strategic agency and independence.

It is also important to urge the US to avoid going down the path of extreme binary thinking, such as advocating for a "hard break" with China, and penalizing countries that do not completely side with the US bloc.

Southeast Asia is far from being economically dominated by China. It is therefore important to impress on the US that the region

remains open and welcoming to deeper US engagement.

According to data trends from the ISEAS-Yusof Ishak Institute annual State of Southeast Asia Survey, the region, in general, has expressed a growing preference to align with the US, a clear reflection of the region's growing anxieties over China's rise and perceptions of its growing assertiveness.

It was encouraging to see the big business delegation President Joe Biden brought along on his recent state visit to Vietnam, and the significant announcements around deepening economic cooperation in the areas of cloud computing, semiconductors, and artificial intelligence.

Also to be closely watched will be negotiations on Indonesia's limited FTA with the US, which will facilitate the export of nickel and other critical commodities used in electric vehicle (EV) production to the US and allow Indonesia's EV ecosystem to benefit from US tax credits.

These developments are promising signals that the region can work productively and substantively with the US in critical new areas. They also underscore the fact the region remains keen to do business with America and that if Uncle Sam puts viable opportunities on the table, these would be very welcome.