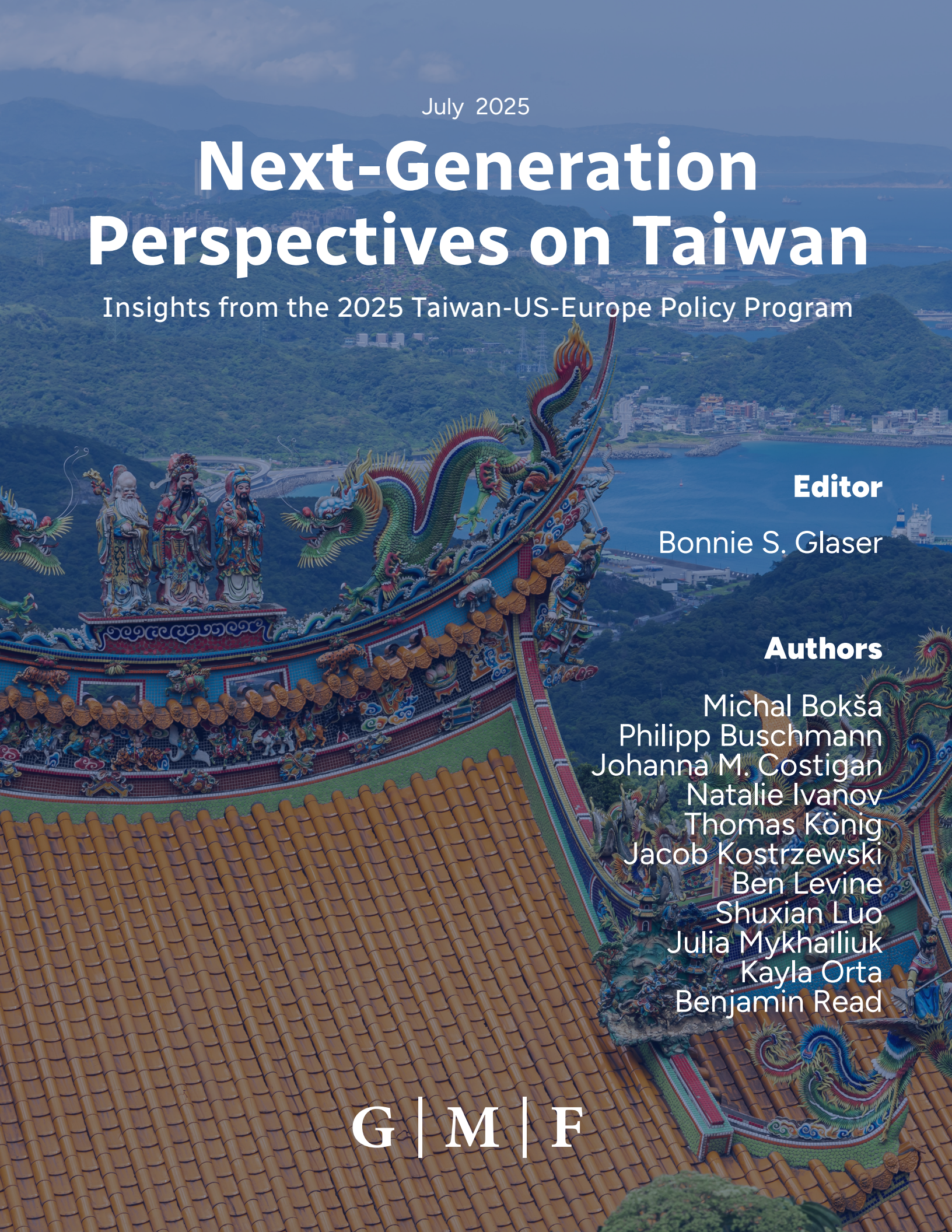
July 2025

Next-Generation Perspectives on Taiwan

Insights from the 2025 Taiwan-US-Europe Policy Program



Editor

Bonnie S. Glaser

Authors

Michal Bokša
Philipp Buschmann
Johanna M. Costigan
Natalie Ivanov
Thomas König
Jacob Kostrzewski
Ben Levine
Shuxian Luo
Julia Mykhailiuk
Kayla Orta
Benjamin Read

G | M | F

G | M | F

About GMF

The German Marshall Fund of the United States (GMF) is a non-partisan policy organization committed to the idea that the United States and Europe are stronger together.

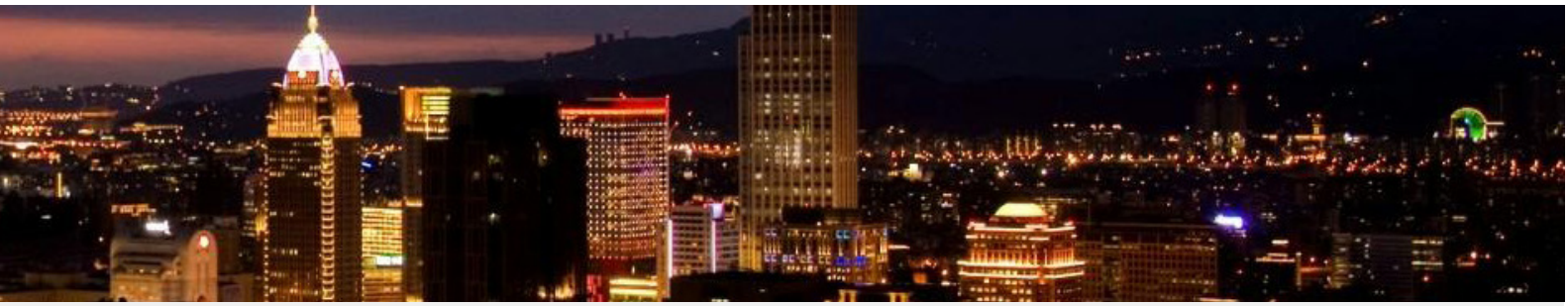
Founded as an independent American foundation in 1972 by Guido Goldman (November 4, 1937 – November 30, 2020) with a gift from Germany in appreciation for aid received through the Marshall Plan after World War II, GMF is one of the world's leading international policy institutions that champions democratic values and the transatlantic alliance by strengthening civil society, forging bold and innovative policy ideas, and developing a new generation of leaders to tackle global challenges. GMF delivers hope by upholding the dignity of the individual and defending freedom in the spirit of the Marshall Plan.

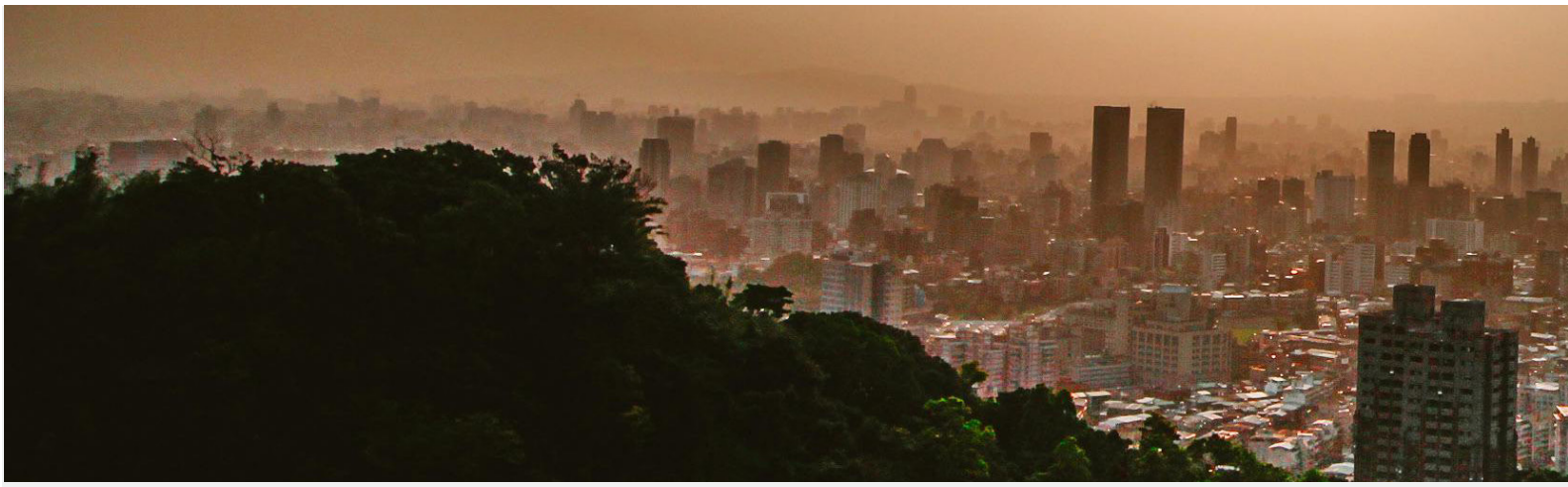
GMF is headquartered in Washington, DC, with offices in Ankara, Belgrade, Berlin, Brussels, Bucharest, Paris, and Warsaw.

Disclaimer

The views expressed herein are those solely of the authors and do not necessarily reflect the policy positions of GMF or the authors' other affiliates. As a non-partisan and independent research institution, GMF is committed to research integrity and transparency.

Table of Contents





Next-Generation Perspectives on Taiwan

Introduction by Bonnie S. Glaser

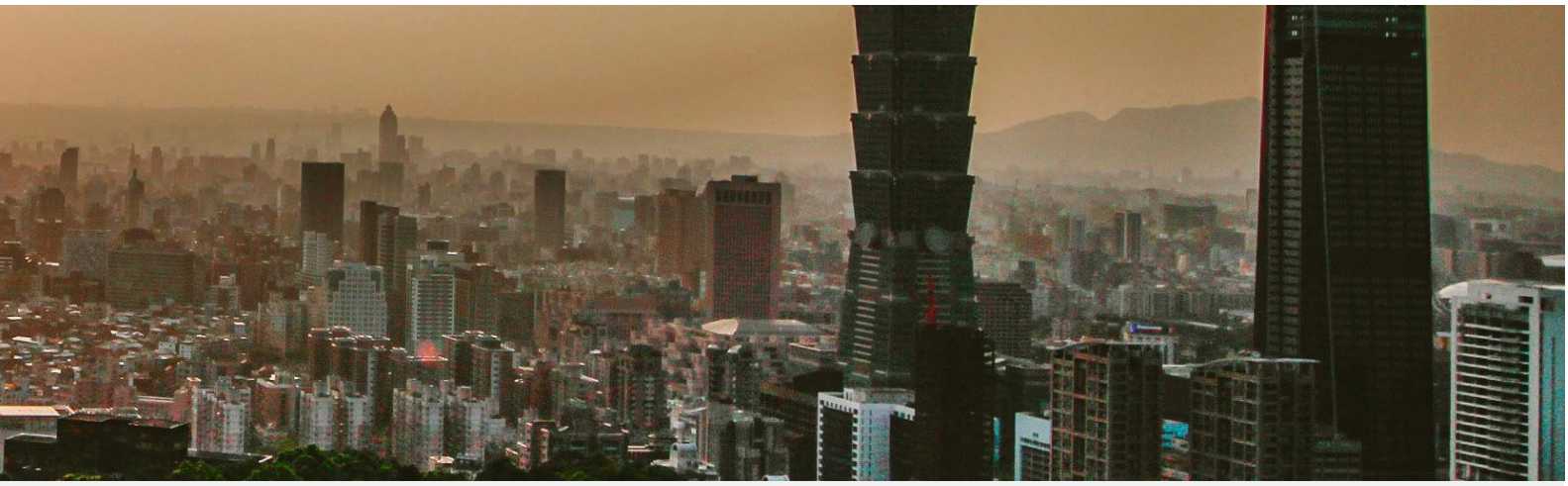
In an increasingly fractured world where authoritarianism is gaining ground, Taiwan stands as one of the strongest and most resilient democracies. Taiwan placed first in Asia and 12th globally in the 2025 democracy index compiled by the London-based Economic Intelligence Unit. This year, Freedom House ranked Taiwan as the sixth-freest country in the world with a score of 94 out of 100. These are remarkable achievements for a relatively young democracy that experienced decades of authoritarian rule, lifted martial law in 1987, and conducted its first direct presidential election in 1996.

Taiwan is also an economic powerhouse. With just 23.5 million people, Taiwan has a GDP of nearly $760 billion, which puts it close to the top 20 economies of the world. Its crucial role in global technology supply chains is unquestionable, especially in semiconductor manufacturing, where Taiwanese companies produce close to 70% of the world's chips and over 90% of the most advanced ones. Taiwan is also driving innovation and delivering state-of-the-art solutions in artificial intelligence, information technology, and renewable energy.

Taiwan is a global leader in public health, including medical technology, public hygiene, and transplants. It has one of the best national health care systems in the world and among the most competitive biomedical industries. Taiwan is also among the world's leading nations in scientific research to improve prevention and detection of diseases.

Another area where Taiwan excels is in the provision of disaster preparedness and relief, both domestically and internationally. Taiwan's government and non-governmental organizations (NGOs) frequently provide aid to countries affected by disasters, donating supplies, offering financial assistance, and dispatching search and rescue teams. After Japan's massive Tohoku earthquake in 2011, Taiwan donated over $250 million in combined aid. Following the 2023 earthquake in Türkiye, Taiwan provided financial aid along with a search-and-rescue team.

Taiwan's importance to the international community is undeniable. As a full member of the World Trade Organization (WTO), the Asian Development Bank (ADB), and the Asia-Pacific Economic Cooperation (APEC) forum, Taiwan has demonstrated that it is a valuable and reliable partner. Yet Taiwan is largely



excluded from participating in the United Nations System, including the World Health Organization, the International Civil Aviation Organization, and the Kimberley Process aimed at ensuring that diamonds are not used to fund violent conflicts or undermine legitimate governments. The People's Republic of China (PRC) actively thwarts Taiwan's participation in international organizations by exerting pressure within those organizations and on individual member countries.

The Taiwan-US-Europe Policy Program (TUPP) encourages young professionals from the United States and Europe to include Taiwan in their research and activities and help Taiwan to expand its global networks. Established in 2017, annual TUPP delegations were originally composed only of Americans, but expanded to include Europeans in 2022 in support of GMF's mission of promoting transatlantic cooperation.

TUPP enables future leaders to acquire a deeper understanding of Taiwan and its relations with the world. Delegation members are selected through a rigorous application process. The annual program begins in Washington, DC, where the cohort (five Americans and five Europeans) meets with officials and experts, and continues with a week-long visit to Taiwan to gain firsthand exposure to Taiwan's politics, culture, and history.

Through their participation in TUPP and especially their experience in Taiwan, participants are instilled with an appreciation for Taiwan's history, its commitment to the principles of democracy and human rights that undergird the existing international order, and its potential to contribute more actively to international organizations. They also gain a deeper understanding of the importance of strengthening international support for maintaining peace and stability in the Taiwan Strait.

Over time, TUPP aims to create a body of global experts with firsthand knowledge of Taiwan who support sustaining and expanding its international ties. It is my earnest hope that all the TUPP participants will be inspired to work both on and with Taiwan. I am grateful to the Henry Luce Foundation, the Global Taiwan Institute, and the Taiwan Foundation for Democracy for their support of these goals.

The contributions here, written by the members of the 2025 TUPP cohort, underscore the importance of deeper study and understanding of Taiwan. I sincerely hope that they stimulate greater transatlantic and global attention to Taiwan and its future.

Keep Calm and Deepen the Europe–Taiwan Relationship

By Michal Bokša

Donald Trump's second term as president of the United States has quickly ushered in a period of geopolitical adaptations. From the infamous Zelensky–Trump Oval Office meeting to the overhaul of US trade policy, many European as well as Taiwanese politicians and analysts have labeled some of the recent developments "regrettable" and "unreasonable", with some even suggesting that the United States needs to be replaced as a global leader.[1] However, in these turbulent times, it is important (perhaps more than ever before) to avoid chest-beating statements, and in the paraphrased words of Rudyard Kipling, keep our heads when everyone else is losing theirs.

This wider strategic volatility, for all its faults, creates a diplomatic window for Europe and Taiwan to deepen their engagement. First, with the United States imposing tariffs on the People's Republic of China (PRC), Beijing is likely to redirect a significant portion of its exports toward Europe.[2] To gain favor with European political elites, the PRC may, within limits, turn a blind eye to a growing degree of informal engagement between Europe and Taiwan. Second, while Donald Trump's unorthodox approach to global politics raises understandable concerns in both Taiwan and Europe, his unpredictability also poses a challenge for the United States' rivals, led by Moscow and Beijing. The United States' decision to eliminate Iranian Quds Force Commander Qassem Soleimani during Trump's first term exemplifies the kind of abrupt action that adversaries must factor into their strategic and geopolitical calculations.[3] Although some argue that the uncertainties around US policy may embolden the PRC to take action on its ambitions regarding Taiwan,[4] it's equally plausible that Trump's volatile style could have a deterrent effect, creating more room for informal Europe–Taiwan relations to expand. Finally, as the United States shifts away from a values-based foreign policy, there may be a natural gravitational pull between Europe and Taiwan, driven by shared democratic principles and mutual strategic interests.

Regarding how Europe's policy should be concretely adjusted in pursuit of deeper ties with Taiwan, there are several factors to be considered. Importantly, mutual ties and security should be advanced not only by proactive measures, but also by "desist" measures—measures that involve restraint or avoidance rather than positive engagement.

Europe and Gray-Zone Diplomacy

European engagement with the Indo-Pacific, particularly with Taiwan, has been quietly but steadily growing in recent years. This trend has become sufficiently pronounced that some observers have begun referring to it as a "rebirth" of Europe–Taiwan relations.[5] While this renewed interest is promising, the relationship still has a long way to go. For Europe, it is vital to ensure that any support for Taiwan does not further escalate tensions across the Taiwan Strait—an objective easier to state than to reach. A case in point is the 2022 visit to Taiwan by then-US House Speaker Nancy Pelosi, which triggered

an intense reaction from the PRC. The People's Liberation Army (PLA) launched large-scale and, in many ways, unprecedented military drills across six zones surrounding Taiwan. The fallout raised serious questions about the strategic value of such high-profile diplomatic gestures, especially when weighing any symbolic benefits against the very real risks.[6]

European actors should avoid similarly heavy-handed overtures, as they rarely produce constructive outcomes. Still, as the PRC continues to intensify its gray-zone tactics, European governments and the EU should develop ways to respond. This requires embracing "gray-zone diplomacy": deepening bilateral ties and strengthening Taiwan's international position by subtly adjusting the current engagement framework while staying below the threshold of the PRC's retaliation or backlash (as witnessed after the Pelosi visit). Within this careful balancing act, there remains significant room for meaningful action.

At the policy level, European governments and the EU should remain fully committed to a "One China" policy, as it constitutes the primary and mutually recognized framework for engaging with the PRC. While the United States has begun to speculate about the possibility of replacing this framework with a "cross-Strait policy",[7] for Europe such a discussion or signaling would be ill advised and could ultimately backfire on Taiwan. Rather than attempting to revise the framework itself, Europe should adapt the way it operates within it.

First, as part of broader "desist measures", references to a "One China" policy should be minimized, though not eliminated. A single, clear statement of adherence in strategic documents is sufficient. Repeated mentions do little to strengthen ties with Beijing or alter realities on the ground. On the contrary, constant reaffirmation could embolden the PRC's increasingly aggressive behavior.

Second, Europeans should avoid defining or referencing Taiwan primarily through the lens of a "One China" policy. Doing so not only weakens Taipei's international standing but also imposes unnecessary constraints on Europe's broader Indo-Pacific engagement. While each European government, like the EU itself, has its own "One China" policy, a clear distinction between a "One China" policy and a separate, coherent Taiwan policy should always be maintained.

Third, European governments must assert greater ownership over the interpretation of their "One China" policies. It should be made clear that these policies are defined and implemented in accordance with European interpretations, interests, and values. This message is increasingly important as the PRC actively seeks to reshape the policy's meaning, blurring the lines between a "One China" policy and Beijing's "One China" principle. The latter asserts that Taiwan is an inalienable part of China, while the former centers on "acknowledging", but not accepting, the PRC's sovereignty claim over Taiwan.[8]

At the international level, both the EU and individual European governments should pursue two overarching objectives in their approach to Taiwan. First, they should focus on strengthening ties with Taiwan through multilateral platforms. Second, they should work toward the internationalization of cross-Strait security issues. These goals are not only complementary but also mutually beneficial in the long term.

Regarding multilateral engagement, the EU should seek to increase its footprint in the Indo-Pacific area in general, promoting its regional visibility and enhancing its capacity to protect its own economic and political interests. Furthermore, as European governments and Taiwan frequently face similar challenges, including cyber threats, external disinformation campaigns, and

media manipulation, there is considerable space for deeper collaboration and exchange of best practices. The EU should, for instance, actively seek to become a full partner of the Global Cooperation Training Framework (GCTF), currently consisting of Taiwan, the United States, Japan, Australia, and Canada.[9] Full partnership would not only enable Europe to better capitalize on Taiwan's expertise in addressing issues of mutual concern, but also strengthen Taiwan's international standing.

When it comes to the internationalization of cross-Strait security, European governments and the EU are well positioned to play a distinctive role. In addition to being viewed as more neutral than the United States, the EU as a body has more than 140 delegations around the world; combined with the diplomatic networks and missions of individual member states, the bloc commands one of the most extensive and complex diplomatic and political presences across the globe.[10] European actors should leverage this network to raise issues pertaining to cross-Strait security more frequently in both bilateral and multilateral forums. By doing so, they can increase the reputational costs for the PRC associated with military escalation or sustained military coercion. As the PRC seeks to project the image of a responsible global actor outside the Indo-Pacific, it may be more sensitive to such peer pressure, especially if it affects its broader international standing.[11] Importantly, efforts to internationalize the cross-Strait issue would not entail altering the status quo, but rather reinforce deterrence by making potential unilateral changes to the status quo by Beijing more costly.

Finally, at the military deterrence level, there is relatively little that European governments can do. Those few that can directly support freedom of navigation (the United Kingdom, France, the Netherlands, and Germany are widely considered the only European navies capable of patrolling as far as the West Pacific) and uphold the international order by transiting through the Taiwan Strait should continue to do so.[12]

Despite their limited capacity to directly influence cross-Strait dynamics, European countries could still play a meaningful role in reinforcing deterrence in the Taiwan Strait by recalibrating their strategic ambiguity. Currently, there are effectively two layers of strategic ambiguity: The first concerns whether European states (or the United States, for that matter) would support Taiwan directly in the event of a PRC-led escalation; the second, less acknowledged but equally important, involves whether key US partners (European countries included) would support the United States should Washington decide to intervene. While the first layer of strategic ambiguity should be preserved across the board to maintain diplomatic flexibility and avoid unnecessarily provoking Beijing, the second should be clarified. European countries should make it explicitly known (in concert if possible and individually if necessary) that while their stance on direct intervention remains undefined, they would unambiguously support the United States economically, materially, and politically in the event of its engagement in a Taiwan contingency. This kind of calibrated clarity would bolster US deterrence power without forcing Europeans into premature commitments. It would also signal to Washington that its allies remain credible and valuable strategic partners in the Indo-Pacific and to the PRC that a cross-Strait escalation could have far-reaching, even global repercussions. Such clarity on the second layer of strategic ambiguity would be further strengthened if it were also supported by Indo-Pacific partners including Japan, South Korea, Australia, and New Zealand.

In conclusion, European and Taiwanese leaders should resist the urge to overreact to shifting headlines or dramatic turns in global politics. Despite the current

US administration's bold rhetoric, imposition of tariffs, and skepticism toward traditional alliances, the United States will likely remain a vital partner for both Europe and Taiwan, and vice versa. Even if some members of the current US administration harbor reservations about traditional partners, as also suggested by recent Signal chat leaks, the broader strategic alignments that underpin these partnerships will not change.[13] Instead of dwelling on uncertainties, Europe and Taiwan should focus on emerging opportunities. Right now, a lot can be achieved with very little. Implementing effective "desist" measures and clarifying the second layer of strategic ambiguity constitute an ideal start.

Endnotes

[1] Sławomir Sierakowski, "America Is Gone – Europe Must Replace It", German Council on Foreign Relations, March 3, 2025; Teng Pei-ju, "Taiwan calls Trump's 32% tariff 'deeply unreasonable'", Focus Taiwan CNA English News, April 3, 2025.

[2] Ryan Woo, Xiuhao Chen, and Yukun Zhang, "China's economy tsar invites EU trade chief to jointly resist tariff threats", Reuters, March 27, 2025.

[3] Yaron Steinbuch, "The events that led to US killing of Iranian Gen. Qassem Soleimani", New York Post, January 3, 2020.

[4] "Taiwan on the brink: Trump's isolationism could seal its fate", Policy Circle, March 1, 2025.

[5] Philippe Le Corre, "The 'Rebirth' of Europe-Taiwan Relations: Explaining Europe's New Balance Between Beijing and Taipei", Asia Society Policy Institute, January 10, 2024.

[6] Helen Davidson, "What the fallout from Pelosi's visit means for Taiwan and China", The Guardian, August 5, 2022.

[7] Ryan Hass, "Does the United States need to update its Taiwan policy?", The Brookings Institution, November 22, 2024.

[8] Steven M. Goldstein, "Understanding the One China policy", The Brookings Institution, August 2023.

[9] Zsuzsa Anna Ferenczy, "EU-Taiwan Ties in a New Reality: Time for an Upgrade", Wilfried Martens Center for European Studies, May 2024; "Mission", Global Cooperation & Training Framework, n.d.

[10] "EU Delegation", European Commission, April 2025.

[11] Michael Mazza, "Internationalizing Security in the Taiwan Strait", Global Taiwan Institute, May 5, 2021.

[12] Stuart Lau, "Send warships to Taiwan Strait, Borrell urges EU governments", Politico, April 23, 2023.

[13] Andrew Roth, "Stunning Signal leak reveals depths of Trump administration's loathing of Europe", The Guardian, March 25, 2025.

"A Taiwan emergency is a Japanese emergency"

—and how Japan and Taiwan should prepare for it

By Philipp Buschmann

"A Taiwan emergency is a Japanese emergency … People in Beijing, President Xi in particular, should never have a misunderstanding in recognizing this". These were former Japanese Prime Minister Shinzo Abe's words of warning in 2021.[1]

Japan has good reason for concern given its dependence on sea lines of communication that run through the waters surrounding Taiwan. In the event of conflict, disruption to these vital routes could severely impact Japan's economy and national security. In a worst-case scenario, Japan might be coerced into a state of "Finlandization," where it maintains formal sovereignty but under de facto strategic constraints imposed by Beijing. Furthermore, a US military intervention in defense of Taiwan would inevitably involve the use of US bases on Japanese soil and most likely Japan Self-Defense Forces (JSDF) bases too. China might interpret Japan's logistical and operational support as direct participation in the conflict, thereby drawing Tokyo into the hostilities regardless of its initial intentions.

Faced with this complex threat landscape, Japan should help Taiwan bolster its defenses to deter an attack by China. To this end, this paper recommends a number of concrete measures Japan could undertake to make Taiwan more defensible, including sustained naval patrols, intelligence sharing, evacuation planning, regularized coast guard cooperation, defense-industrial collaboration, and closer political alignment through party channels.

Constitutional and Political Constraints

While deepening defense cooperation between Japan and Taiwan is strategically desirable, it is bounded by several critical constraints—legal, diplomatic, and geopolitical. First, Japan's pacifist constitution, particularly Article 9, imposes strict limitations on the scope of military cooperation it can undertake. Although recent reinterpretations have expanded Japan's ability to contribute to collective self-defense, direct military support to a non-recognized entity such as Taiwan remains politically sensitive and legally ambiguous.[2]

Second, Taiwan's lack of formal diplomatic recognition by Japan and most of the international community complicates institutionalized cooperation. Without official diplomatic ties, Japan and Taiwan must rely on confidential channels, informal mechanisms, and party-level exchanges, which limits the scale and visibility of coordination efforts. Any overt moves toward formal security ties risk provoking backlash not only from Beijing but also from segments of the Japanese political establishment wary of destabilizing regional relations.

Finally, China's significant political and economic leverage in the region—and its willingness to exert pressure—acts as a powerful deterrent against open Japanese collaboration with Taiwan. Even symbolic gestures of defense cooperation can trigger strong

diplomatic protests or retaliatory economic actions by the PRC. As such, Japan must tread a careful line, weighing the potential benefit of any action against the potential backlash from China and balancing the need for enhanced deterrence with the realities of constitutional constraints.

Policy Recommendations

After traveling to Taiwan in February 2025 as a member of GMF's Taiwan-US-Europe (TUPP) Policy Program and discussing potential avenues for enhanced defense cooperation between Taiwan and Japan with senior Taiwanese policymakers and thought leaders, the author of this paper has identified the following areas as most promising—defined as being high-impact while also being fully implementable within the next five to ten years.

Regularized and Expanded Coast Guard Cooperation

Japan and Taiwan already conduct joint maritime drills under the label of "disaster response training," most recently in July 2024 off the Bōsō Peninsula.[3] These drills should be regularized and expanded to include joint exercises in waters near the Southwest Islands, most pertinently Yonaguni and Ishigaki. Doing so would help build shared capacity against Chinese gray-zone tactics such as encroachment by maritime militia and coast guard vessels. Joint exercises should move beyond symbolic gestures to include interagency coordination and standardized protocols. Communication infrastructure between the Japan Coast Guard (JCG) and Taiwan's Coast Guard Administration should be strengthened for real-time data exchange and maritime domain awareness (MDA). Finally, these exercises should include Humanitarian Assistance and Disaster Relief (HADR) components to foster functional, politically less sensitive cooperation.

Sustained Maritime Presence and Multinational Patrols

To counter Chinese gray-zone pressure, Japan should adopt a policy of persistent presence in the Taiwan Strait and the Bashi Channel. This would entail the regular deployment of Japan Maritime Self-Defense Force (JMSDF) and JCG vessels through these waterways, transitioning from ad hoc transits to a consistent presence. Japan should invite like-minded partners such as the United States, Australia, the United Kingdom, France, and Canada to conduct joint patrols, further enhancing deterrence through multilateral signaling. Simultaneously, Japan should expand intelligence, surveillance, reconnaissance (ISR) operations in the region to improve MDA and coordinate with Taiwan to share situational awareness in real-time. These measures could contribute significantly to early warning in a crisis.

Enhanced Intelligence Sharing and Exchange of Personnel; Real-Time Information Integration

Though the claim is not confirmed by official sources, Japan has reportedly begun intelligence-sharing with Taiwan and dispatched plainclothes "military attachés" to Taipei.[4] These efforts should be expanded. Such cooperation is legal under current Japanese law, provided the personnel are not in uniform and that their roles emphasize advisory and liaison functions. Where political sensitivities are too high for more formal or overt cooperation, an alternative would be to send active-duty Self-Defense Force (SDF) officers or civilian officials under the status of visiting researchers to research institutions in Taiwan. This would provide effective cover for sustained presence and liaison while minimizing diplomatic exposure. In

parallel, real-time intelligence exchange must become institutionalized, especially for MDA and air domain awareness (ADA) functions. While informal data sharing already exists, formal frameworks—possibly involving the United States and eventually South Korea or the Philippines—should be pursued. Such a framework would enable swift, coordinated responses to Chinese actions in both peacetime and crisis scenarios, and help normalize high-frequency contact between relevant agencies and units.

Infrastructure Preparedness, Evacuation Planning, and Joint Radar Networks

Japan should prepare for non-combatant evacuation operations (NEOs) and wartime logistics by building the necessary infrastructure both in southern Taiwan and in Japan's Southwest Islands. In Taiwan, Japan should support efforts to expand and upgrade Kaohsiung and Tainan ports and airports. These facilities could serve as supply hubs and evacuation points during a crisis, ideally under a trilateral understanding involving the United States. In Japan, the Sakishima Islands (Miyako, Ishigaki, Yonaguni) require improved port and airfield facilities to function as logistics and evacuation nodes. In 2024 and 2025, Tokyo took significant steps toward this end by stationing missile units and bolstering emergency evacuation planning on these islands.[5] These initiatives should continue with sustained funding. With over 20,000 Japanese nationals living in Taiwan, Japan must be ready to execute NEOs in concert with US forces. Japan has already drawn up evacuation plans for its nationals, and there is growing coordination with US forces and the Taipei Economic and Cultural Representative Office (TECO), Taiwan's de facto embassy in Japan. Joint tabletop and field exercises should be conducted to test these evacuation plans and adjust for real-world logistical challenges, such as bottlenecks in southern Taiwanese ports or airfields. Finally, Japan should explore installing its FPS-7-class anti-air radars in Taiwan to improve joint situational awareness across the Taiwan Strait and the Bashi Channel. The goal should be the establishment of a joint MDA/ADA radar network connecting Japan's Southwest Islands and Taiwan. Such systems would dramatically enhance early warning of Chinese air or missile activity and lay the groundwork for future integrated air defense collaboration.

Dual-Use Technology Transfer and Naval Capability Building

Japan has advanced capabilities in stealth propulsion, sonar, radar, and electronic warfare. Japan should discreetly transfer relevant technologies—particularly to improve Taiwan's Hai Kun-class submarines and surface fleet systems such as missile defense and electronic warfare. That said, the current Three Principles on Defense Equipment Transfers pose a legal barrier, as they assume the recipient is a recognized state with whom a formal defense equipment agreement can be signed.[6] Since Tokyo does not have diplomatic relations with Taiwan, transfers of directly defense-related technology risk violating this framework. A promising alternative would be the creation of a joint research and development framework that focuses on dual-use technologies with civilian applications, thus avoiding the appearance of violating the Three Principles. Recent changes to Japanese export laws now allow radar and other subsystem transfers, even if full ship or fighter exports remain prohibited.[7] A precedent involving negotiations over Sōryū-class submarines with Australia in the mid-2010s illustrates the potential flexibility under existing legal constraints.[8]

Institutionalized "2+2" Consultations on the Party Level

In the absence of diplomatic ties, Japan and Taiwan conducted a "2+2" dialogue between their ruling

parties' foreign and defense representatives in August 2021.[9] This mechanism should be regularized and expanded to include other democracies, such as the United States, Australia, and the Philippines. While this format avoids breaking the taboo of Japanese and Taiwanese sitting defense ministers meeting directly—likely inviting a highly escalatory response from China—it allows for substantive dialogue and coordination on security affairs. A multilateral version could serve as an informal "mini-Quad" focused on Taiwan contingencies.

Japanese Presence in Taiwan and Joint European Diplomacy

Taiwan still lacks in-depth expertise on Japanese military strategy, legal constraints, and threat perceptions. When consulted by the author of this paper in February 2025, resident Japan expert at Taiwan's Institute for National Defense and Security Research (INDSR) Dr. Wang Tsun-yen suggested that Japan send more researchers to Taiwanese universities and think tanks while increasing outreach via public diplomacy. Likewise, Taiwan should be encouraged to develop its own Japan expertise, including specialized training programs for foreign ministry and defense officials. Taiwan's limited diplomatic footprint in Europe could be partially offset by joint Japanese-Taiwanese initiatives. Japan should leverage its comparatively stronger presence in Europe to help Taipei gain access to European defense and diplomatic audiences. Italy, the only G7 country whose navy has not conducted a FONOP through the Taiwan Strait, should be diplomatically engaged by Japan to join such efforts.

Charting a Path Forward

This paper has laid out a set of policy recommendations for expanding defense cooperation between Japan and Taiwan in light of growing regional tensions and the increasing threat posed by China. It has done so by carefully identifying areas of collaboration that are both impactful and feasible—defined here as implementable under Japan's constitutional and legal constraints, not requiring formal recognition of Taiwan as a sovereign state, unlikely to provoke an extreme response from Beijing, practical within a five- to ten-year timeframe, and financially sustainable.

The proposed measures range from enhanced coast guard cooperation and real-time intelligence sharing to infrastructure readiness and technology transfer frameworks built around dual-use systems. While each initiative addresses different facets of the regional security environment, they are all designed with a shared aim: to bolster deterrence and readiness without crossing politically or legally untenable lines.

At the same time, it must be acknowledged that several of the recommendations—particularly those involving technology transfers, covert deployments, or multinational frameworks—require further research to fully flesh out implementation details. This paper is therefore intended both as a policy roadmap aimed at offering actionable advice to Japanese and Taiwanese policymakers and a foundation for future inquiry.

Endnotes

[1] *"Former PM Abe Says Japan, U.S. Could Not Stand by If China Attacked Taiwan", The Asahi Shimbun, December 1, 2021. https://www.asahi.com/ajw/articles/14492732*

[2] *Atsuhiko Fujishige, "New Japan Self-Defense Force Missions under the 'Proactive Contribution to Peace' Policy: Significance of the 2015 Legislation for Peace and Security", Center for Strategic and International Studies, July 21, 2016. https://www.csis.org/analysis/new-japan-self-defense-force-missions-under-proactive-contribution-peace-policy; Yuka Koshino, "Japan's Transformational National-Security Documents", International Institute for Strategic Studies, December 21, 2022. https://www.iiss.org/online-analysis/online-analysis/2022/12/japans-transformational-national-security-documents/*

[3] *"Japan, Taiwan Coast Guards Conduct Joint Exercise; Rescue Operation Simulated off Boso Peninsula", The Japan News by The Yomiuri Shimbun, July 20, 2024. https://japannews.yomiuri.co.jp/politics/defense-security/20240719-199662/*

[4] *Kaori Kaneko et al., "Japan Elevates Taiwan Security Ties in Move Likely to Rile China," Reuters, September 13, 2023. https://www.reuters.com/world/asia-pacific/japan-elevates-taiwan-security-ties-move-likely-rile-china-2023-09-12/*

[5] *Walter Sim, "Japan Prepares for War with New Joint Command, Evacuation Plans and Missile Unit Deployments", The Straits Times, April 1, 2025. https://www.straitstimes.com/asia/east-asia/japan-prepares-for-war-with-new-joint-command-evacuation-plans-and-missile-unit-deployments*

[6] *"Implementation Guidelines for the Three Principles on Transfer of Defense Equipment and Technology," Ministry of Foreign Affairs of Japan, March 8, 2022. https://www.mofa.go.jp/files/000034954.pdf*

[7] *"The Transfer of the Air Surveillance Radar Systems to the Philippines", Ministry of Defense of Japan, November 2, 2023. https://www.mod.go.jp/en/article/2023/11/e005fad85ab5c48087162d939209232fb4cee216.html*

[8] *Arthur Herman, "Japanese Subs Still the Best Deal for Australia", Hudson Institute, November 27, 2014. https://www.hudson.org/foreign-policy/japanese-subs-still-the-best-deal-for-australia*

[9] *John Feng, "Taiwan, Japan Urged to 'Stand Together' as China Threat Prompts Talks", Newsweek, September 2, 2021. https://www.newsweek.com/taiwan-japan-urged-stand-together-china-threat-prompts-security-talks-1624593*

Friendshoring Without Friendship

Trump 2.0 and TSMC

By Johanna M. Costigan

For decades, Taiwanese companies have served as the foot soldiers of globalization, according to one high-level foreign official. These firms succeeded most visibly in electronics and, specifically, semiconductor manufacturing. That sector faced a direct threat to its globally dependent business model in October 2022, when the US Department of Commerce introduced export controls on advanced chips. The Biden administration framed the rules as intended to place limits exclusively on China. While they targeted China, in practice the controls created widely felt side effects for many members of the semiconductor industry, including Taiwan Semiconductor Manufacturing Company (TSMC)—the chip production powerhouse and crown jewel of the island.

In the wake of the controls, TSMC's founder, Morris Chang, made the bleak diagnosis that globalization and free trade were "almost dead".[1] Chang also accurately predicted there was more policy-driven deglobalization to come. In the more than two years since then, US export controls have been iteratively refined, introducing costs and problems for US, European, and Asian firms.

Now, President Donald Trump seeks to swap Biden's "small yard, high fence" for an all-out America First strategy. If imperfect export controls are too blunt a tool to successfully target only a small number of entities, tariffs certainly are not up to the task.

President Trump's transactionalism represents the United States' moral abstention on the global stage. That is particularly disconcerting for Taiwan, which has for decades relied on rhetorical, values-based amity in its nebulous yet critical relationship with the United States. TSMC—and the "chips" the Trump administration imagines Taiwan can bring to the table—will be central to how Taiwan navigates what is sure to be a tumultuous four years of US–Taiwan relations.

Taipei's Relationship with TSMC

Nearly forty years ago TSMC's founder Morris Chang developed the "pure play" foundry model. It provided a unique manufacturing solution, allowing other chip firms to focus exclusively on design and send orders to TSMC for production.[2] Since then, TSMC has become a household name in Taiwan. The company is a source of national pride and, more debatably, national security. Global demand for advanced semiconductors, including from the United States, is growing in tandem with the rise of AI. Some see this as reassurance that global democracies would protect Taiwan to ensure their access to TSMC-made chips.

Yet TSMC may be undermining that perceived source of security by expanding its operations abroad. In March, TSMC announced it would invest an additional $100 billion (on top of an already announced $65 billion) to build three more fabrication plants, two advanced packaging fabs, and an R&D center in Arizona. In response, former President and opposition party leader Ma Ying-jeou criticized the Lai Ching-te

administration for allowing TSMC to invest so extensively in the US, alleging it was tantamount to "selling" the firm as a "protection fee".[3] While public opinion is mixed, many in Taiwan are worried that too much expansion abroad endangers the island—since for years they've been hearing that TSMC is what makes Taiwan critical to the United States.

The Lai administration, however, ostensibly sees enough value in TSMC's increasingly global presence to support international expansion rather than pressure the company to preserve a purely made-in-Taiwan approach. As President Lai said in a joint press conference with TSMC CEO C.C. Wei, "The development of the semiconductor industry in Taiwan over the past 50 years is the result of the joint efforts of industry, government, academia and research." He continued: "Together, we have created the mountains that protect our country."[4]

TSMC Deserves Better

Washington has demanded that TSMC expands its manufacturing presence in the US, without providing reasonable incentives such as effective industrial policy or state support to strengthen the semiconductor supply chain in America. That puts TSMC in a suboptimal—and in fact, sub-status quo—position. In Taiwan, TSMC already has access to a finely tuned chip production ecosystem.

Cost efficiency leads to higher profits, and higher profits enable TSMC to reinvest more capital into R&D. In turn, more research spending allows the firm to make the most cutting-edge semiconductors for its clients—which, incidentally, are largely American companies. However, TSMC's expanded investment in the United States shows that efficiency is no longer its sole or possibly its primary driver. For better or worse, the world's most advanced chip manufacturer has been brought into the United States' geopolitical competition with China. In that sense, Washington has already won.

As a paper published by Taipei-based Research Institute for Democracy, Society, and Emerging Technology (DSET) put it: "Regardless of whether it's under Biden or Trump, the US federal government has a core policy goal that clashes with Taiwan's national interests: reducing reliance on Taiwan as the sole hub for advanced semiconductor manufacturing."[5] While some US-based manufacturing can work for both sides, the paper continues, "preserving Taiwan's efficient and innovative tech ecosystem is crucial for maintaining an edge in the U.S.-China tech rivalry".

However, it is worth noting that representatives from TSMC and government officials are strikingly aligned in their assurance that the massive investments in US production were driven by client needs. As a spokesperson from TSMC put it via email, "The intended investment is to support leading AI and technology companies such as Apple, Nvidia, AMD, Broadcom, and Qualcomm for AI and other cutting-edge applications."

Ironically, some of those leading AI firms might prefer TSMC to stay in Taiwan. Nvidia CEO Jensen Huang said in May he believes Washington's export control regime targeting China-bound chips has been "a failure".[6] Days earlier, Huang announced Nvidia's plans to build out its overseas headquarters in Taipei.[7] At a press conference with C.C. Wei, Trump proudly announced that "the most powerful AI chips will be made right here in America."[8] But if his goal is to ensure that the United States has access to the most advanced chips, the better bet would be to do all he can to help TSMC maintain its technical advantage. That might mean simply doing as little as possible to disrupt Taiwan's effective and efficient domestic

supply chain. Without robust industrial policy support to complement TSMC's "friendshoring" efforts, the administration should settle for chips made not in America, but for America.

Policy Recommendations

Insulate the semiconductor industry from Trump's tariffs. Direct chip imports are safe for now (though additional semiconductor-specific tariffs could be coming under Section 232 authority). But the majority of chip imports are indirect. They come in the form of machinery, electronics, and vehicle imports—all of which are subject to the tariffs and therefore vulnerable to higher prices and, as a result, slowing demand (which will eventually affect profits for chipmakers). Only approximately 10% of Taiwan's semiconductor exports to the United States last year would have been eligible for the "semiconductor exemption". As Martin Chorzempa from the Peterson Institute for International Economics put it, "If you are a major chip producer who is making a sizable investment in the US, a hundred billion dollars will buy you a lot less in the next few years than the last few years".[9] The tariffs undermine the value of TSMC's investments and therefore limit the degree of manufacturing capacity that $165 billion can accomplish in the United States.

In an era of tech-driven geopolitics, good advice matters: One high-level Taiwanese official remarked, "Being in this job has forced me to learn about tech." Taiwan's leaders have done their homework much better than their American counterparts. Aides need to understand enough about the chip supply chain and its importance for US interests to convince members of the Trump administration, if not Trump himself, that TSMC's current (record-setting) investments in the United States are sufficient.

Policymakers from Taiwan and elsewhere should start convincingly explaining why TSMC's operations cannot be entirely replicated abroad. Better and more widely distributed messaging about why chips cannot primarily be made in the United States should be targeted at policymakers as well as the general public. Hesitation to do so is understandable given the Trump administration's clear and adamant demands for bringing manufacturing to the United States. But it's worth explaining to administration officials, in addition to members of Congress, some of the basic supply chain advantages Taiwan enjoys (talent first among them) and what makes TSMC's success uniquely possible there.

Alternatively, TSMC's executives might consider making vague promises, publicly, and/or repeating existent commitments but framing them as something new that Trump can claim as a win.

Endnotes

[1] *Cheng Ting-Fang, "TSMC Founder Morris Chang Says Globalization 'Almost Dead'", Nikkei Asia, December 7, 2022. https://asia.nikkei.com/Spotlight/Most-read-in-2022/TSMC-founder-Morris-Chang-says-globalization-almost-dead*

[2] *The Chip History Center, "TSMC Founded - the First Pure-Play Foundry", TechInsights. https://www.chiphistory.org/527-tsmc-founded-the-first-pure-play-foundry*

[3] *Wang Chin-yi, Shih Hsiao-kuang, and Jake Chung, "Ex-President Ma Criticizes William Lai over TSMC Deal", Taipei Times, 台北時報, March 4, 2025. https://www.taipeitimes.com/News/taiwan/archives/2025/03/05/2003832905*

[4] *Teng Pei-Ju, "TSMC chair joins Lai for impromptu press event, in bid to dispel concerns", Central News Agency, March 6, 2025. https://focustaiwan.tw/business/202503060023 "台積電擴大對美投資 賴總統：成就台灣更大實力【談話全文】", 中央社 CNA. 中央通訊社https://www.cna.com.tw/news/aipl/202503060285.aspx*

[5] *Min-yen Chiang, Jeremy Chih-Cheng Chang, Ming-Yen Ho, Chih-Hua Tseng, Chen-An Wei, Cosette Wu, and Fanny Chao, "Walking a Tightrope: Navigating Taiwan-U.S. Semiconductor Security under Trump 2.0", Research Institute for Democracy, Society and Emerging Technology, January 21, 2025. 科技、民主與社會研究中心. January 21, 2025. https://dset.tw/en/research/taiwan-us-semiconductor-security-under-trump-2-0/*

[6] *Meaghan Tobin, "Nvidia's Chief Says U.S. Chip Chontrols on China Have Backfired", The New York Times, May 21, 2025. https://www.nytimes.com/2025/05/21/business/nvidia-china-washington-chip-controls-failure.html*

[7] *Focus Taiwan, "Jensen Huang announces 'Beitou Shilin' as new Nvidia office site", May 19, 2025. https://focustaiwan.tw/business/202505190009*

[8] *The Union Herald, "President Trump Delivers Remarks on TSMC Semiconductor's $100 Billion U.S. Investment", YouTube, March 3, 2025. https://www.youtube.com/watch?v=G70Dd62XwmY*

[9] *Will Knight and Zeyi Yang, "Trump's Tariffs Are Threatening the US Semiconductor Revival", WIRED, April 5, 2025. https://www.wired.com/story/trump-tariffs-impact-semiconductors-chips/*

Smart Energy Resilience for Strategic Stability

The Role of Taiwan's Semiconductor Sector

By Natalie Ivanov

Taiwan's national security depends on its ability to keep the lights on. As cross-Strait tensions escalate and climate risks intensify, energy resilience has become a critical but under-discussed pillar of Taiwan's defense posture.

Climate change and geopolitical instability are converging to challenge the resilience of energy systems around the world. Nowhere is this more evident than in Taiwan, where growing climate risks and potential disruptions stemming from geopolitical tensions place a premium on secure, adaptable energy infrastructure. The government of Taiwan has made some progress on diversifying energy sources and promoting renewable energy. However, the private sector (particularly high-value, high-use industries such as semiconductor manufacturing) must be more deeply integrated into national energy resilience efforts.

Taiwan can enhance its national energy security by incentivizing private sector leaders, especially in the semiconductor industry, to invest in energy resilience. By decentralizing energy infrastructure, scaling short-term energy storage, reforming electricity markets, and expanding emergency preparedness, Taiwan can safeguard both its economy and its security.

Taiwan's Strategic Energy Vulnerability

Taiwan ranks as the sixth-largest economy in Asia and is the sixth-highest CO_2 emitter in the region.[1] In 2024, Taiwan's per-capita energy consumption was 4.6 toe (ton of oil equivalent, the amount of energy released when one ton of crude oil is burned), three times the average of other countries in the region (1.6 toe),[2] over 97% of which was imported.[3] Its energy mix remains dominated by fossil fuels (82%), with renewables (offshore/onshore wind, solar) accounting for just 7%.[4] In the event of a blockade or cyber or kinetic threat, Taiwan's energy security would be severely tested, as it would have to rely on its energy reserves.

As the Executive Yuan has reported, current energy reserves amount to 167 days of oil, 56 days of coal, and 14 days of liquefied natural gas (LNG), though the government of Taiwan is trying to extend liquefied natural gas storage to 21 days.[5] These stockpiles would be insufficient in a blockade scenario, especially when we consider the centralized and vulnerable nature of Taiwan's energy storage infrastructure. Framing storage solely in terms of "days of supply" fails to account for distributional and operational realities during a crisis—one that could last weeks, months, or even years, as evidenced by Russia's war in Ukraine.

Taiwan must invest in curbing demand, building local storage, and preparing for emergency rationing. This will not only improve resilience but send a strategic signal to Beijing: Taiwan can sustain itself in the face of energy supply disruptions.

The Semiconductor Industry: A Strategic Driver of Energy Demand

Semiconductor manufacturing—Taiwan's economic backbone—is extraordinarily energy-intensive. In 2023, 55% of Taiwan's electricity consumption came from industrial users, with the Taiwan Semiconductor Manufacturing Company (TSMC) alone accounting for 8% and projected to consume 24% by 2030.[6] As TSMC produces increasingly advanced semiconductors, energy needs grow; the company's electricity consumption more than doubled when they started producing 3nm chips in 2023, compared to production of 10nm chips in 2016.[7]

The electronics and chemical sectors are the top energy consumers in Taiwan's manufacturing sector. However, it is also worth noting that the electronics industry is the driver of Taiwan's economy (in 2016 it contributed 17% of Taiwan's GDP).[8] Further Taiwanese economic growth will rely on continuous stable access to energy.

Stable energy access is non-negotiable for maintaining Taiwan's competitiveness and reputation as a reliable partner in global supply chains. Yet national energy resilience cannot be built by government alone. The private sector must share responsibility for securing Taiwan's energy future.

What the Industry Is Already Doing

Taiwanese firms are not starting from zero. TSMC and others have already participated in the government-led Whole-of-Society Resilience initiatives.[9] Independently, TSMC has committed to returning to 2020 levels of energy use by 2030, moving to 100% renewable energy by 2040, and achieving net zero emissions by 2050.[10] It has also invested in more efficient equipment and energy control systems for cooling.[11]

Still, these initiatives must be scaled and integrated into a broader cross-Taiwan strategic framework.

Four Strategic Pillars for Private-Sector-Led Energy Resilience

Decentralized Energy Infrastructure

Taiwan's grid is largely centralized and managed by Taipower, a state-run entity.[12] Greater geographic and institutional diversification of energy assets will reduce systemic vulnerabilities by allowing for redundancies and easier corrective action in the case of cyber or kinetic attacks. Taiwan took a step in the right direction with the Electricity Act of 2017, which required Taipower to split into two companies, one to oversee generation and one to oversee distribution.[13] The Electricity Act also allowed for independent power producers (IPPs) to operate, either via the existing grid or through Taipower's, and allowed power generated from renewable energy facilities to be sold directly to end users under a corporate power purchase agreement (CPPA).[14] A framework is in place to allow for more private investment and diversification in the grid.

Short-Term Distributed Energy Storage

Without distributed storage, a maritime blockade or cyberattack could grind Taiwan's economy to a halt within days. Taiwan must work with industrial energy users to deploy a decentralized system of smart batteries and microgrids capable of sustaining essential operations under pressure. The authorities should also incentivize essential industry partners to establish their own in-house energy storage systems to allow for continued operation during periods of limited energy access. Additional redundancies could include microgrids that connect to the larger Taipower network but that can also run independently in case Taipower's network becomes unreliable. There are further arguments for these private energy generation and storage systems to resupply energy to the public infrastructure as needed, similar to systems in California that buy surplus energy from private home renewable energy systems.[15]

Electricity Market Reform

Taiwan's electricity is among the cheapest in the world due to government subsidies.[16] In 2022 and 2023, Taipower lost over TWD 425 billion because the cost of imported energy exceeded retail prices.[17] While positive for the general population, cheap energy disincentivizes conservation and private investment. The Electricity Act of 2017 aimed to establish an independent electricity regulatory agency and to conduct reviews of provisions for large electricity consumers; however, this has yet to be done.[18] Taiwan began course-correcting with an 11% rate increase in 2024.[19] Regular price reviews (at least quarterly) should be conducted to bring Taiwan's electricity pricing to levels comparable with others in the region and reduce Taiwan's coal use—one of the world's highest per capita.[20]

Another way to engage the private sector in energy resilience activities would be to establish a carbon tax and/or a carbon credit system to incentivize companies to reduce CO2 emissions, which in turn can reduce energy demands.[21] The revenue from the tax could go towards public and private research and development for smart energy-sourcing and storage solutions.

Emergency Planning and Energy Rationing

While it would be difficult to predict exactly what an energy shortage would look like during a state of emergency, Taiwan has already experienced blackouts and other instances of energy shortages, most notably a series of energy outages in the summer of 2022.[22] With climate change increasing demand and volatility, emergency scenario planning must include public-private coordination on load shedding, blackout protocols, and industry-specific energy priorities. Heavy users such as TSMC should be incentivized to invest in on-site backup generation and storage to reduce dependence on the public grid during crises.

As part of the Whole-of-Society Defense Resilience work, the government of Taiwan should invest in studies and collaborations with the public and private sectors to establish rationing strategies as a part of emergency scenario planning. Protecting Taiwan's people and their security will require investment in and buy-in to well-thought-out, aggressive energy resilience planning across all sectors.

Policy Recommendations

Expand Microgrids Outside of Taipower's Direct Control: Allow and incentivize large users to create microgrids that can operate independently in emergencies.

Create a Resilience Incentive Framework: Use tax credits, grants, and/or regulatory benefits to reward private sector entities that invest in smart storage, efficiency, or backup systems.

Reform Electricity Pricing Structures: Phase out counterproductive subsidies and increase electricity rate transparency. Ensure that the pace of reform protects low-income consumers.

Enhance Industry Engagement: As part of the Whole-of-Society Resilience planning efforts, institutionalize public-private coordination on energy security, particularly as it relates to situational planning for energy shortages and energy rationing so that necessary measures allow for the thoughtful scaling back of energy use while minimizing long-term damage to Taiwan's economy and its citizens' livelihoods.

Conclusion

Taiwan's energy resilience is not simply a technical or environmental challenge—it is a strategic imperative. Taiwan's ability to deter aggression increasingly depends on its ability to function under duress. The private sector, and particularly Taiwan's semiconductor industry, holds untapped potential to safeguard national security through smarter, less centralized, and more robust energy practices. Policy and private-sector investments must evolve to activate this potential. Taiwan has taken important steps, but in a time of intensifying global and regional pressure, the time to go further is now.

Endnotes

[1] Hon Chung Lau and Steve C. Tsai, "A Decarbonization Roadmap for Taiwan and Its Energy Policy Implications", Sustainability, July 2022. https://doi.org/10.3390/su14148425

[2] Enerdata, "Taiwan Energy Market Report", Enerdata, 2023, https://www.enerdata.net/estore/energy-market/taiwan/

[3] International Trade Commission, U.S. Department of Commerce, "Taiwan – Electric Power Equipment (ELP) and Energy", January 10, 2024. https://www.trade.gov/country-commercial-guides/taiwan-electric-power-equipment-elp-and-energy

[4] Lau and Tsai, "Decarbonization Roadmap", p.4.

[5] Lin Tze-Luen, interview by Natalie Ivanov, Taipei, February 18, 2025.

[6] Charlotte Trueman, "TSMC Could Account for 24% of Taiwan's Electricity Consumption by 2030", Data Center Dynamics, October 7, 2024. https://www.datacenterdynamics.com/en/news/tsmc-could-account-for-24-of-taiwans-electricity-consumption-by-2030/

[7] Ibid.

[8] Lau and Tsai, "Decarbonization Roadmap", p. 4.

[9] Drew Thompson, "Whole-of-Society Resilience: A New Deterrence Concept in Taipei", Brookings Institution, December 6, 2024. https://www.brookings.edu/articles/whole-of-society-resilience-a-new-deterrence-concept-in-taipei/

[10] Taiwan Semiconductor Manufacturing Company (TSMC), "TSMC 2023 Climate and Nature Report", 2023. https://esg.tsmc.com/file/public/2023-TCNFDReport-e.pdf

[11] S.J. Chen, Chih-Hsing Chou, and C.N Chang, "TSMC Introduces High-efficient Transformers, Saving 66 Million kWh of Electricity", TSMC ESG, May 24, 2024. https://esg.tsmc.com/en-US/articles/307

[12] Lau and Tsai, "Decarbonization Roadmap", p. 3.

[13] Executive Yuan, Taiwan, "Amendments to the Electricity Act", January 2, 2019. https://english.ey.gov.tw/News3/9E5540D592A5F-ECD/216f6992-1527-4258-8be0-3fe3d21a6e6a

[14] PwC Taiwan, "Energy, Power & Utilities". https://www.pwc.tw/en/services/deals/energy-utilities-resources.html

[15] Pacific Gas and Electric Company (PG&E), "Net Surplus Compensation (NSC)", PG&E Clean Energy Programs, accessed April 8, 2025. https://www.pge.com/en/clean-energy/solar/solar-incentives-and-programs/net-surplus-compensation.html

[16] Lau and Tsai, "Decarbonization Roadmap", p. 3.

[17] Franklin D. Kramer, Philip W. Yu, Joseph Webster, and Elizabeth Sizeland, "Strengthening Taiwan's Resiliency", Atlantic Council, July 2, 2024. https://www.atlanticcouncil.org/in-depth-research-reports/report/strengthening-taiwans-resiliency/

[18] Mori Lin, "Taiwan's Energy Transition and Security from the Perspectives of Legal Reforms", Taiwan Insight, August 19, 2024. https://taiwaninsight.org/2024/08/19/taiwans-energy-transition-and-security-from-the-perspectives-of-legal-reforms/

[19] Ministry of Economic Affairs, Taiwan, "The review committee decided to adjust the average electricity price by about 11%, with lower adjustment for residential electricity consumption and industrial electricity consumption adjusted according to business conditions and electricity consumption, taking into account both power saving and reducing the impact on people's livelihood", MOEA News, March 22, 2024. https://www.moea.gov.tw/MNS/populace/news/News.aspx?kind=1&menu_id=40&news_id=114222

[20] Worldometer, "Coal Consumption by Country", accessed April 2, 2025. https://www.worldometers.info/coal/coal-consumption-by-country/

[21] Lau and Tsai, "Decarbonization Roadmap", p. 23.

[22] Lauly Li and Cheng Ting-Fang, "Taiwan's Frequent Blackouts Expose Vulnerability of Tech Economy", Nikkei Asia, August 30, 2022. https://asia.nikkei.com/Business/Technology/Taiwan-s-frequent-blackouts-expose-vulnerability-of-tech-economy

Taiwan and Germany's Economic Security

—Too Important to Be Left to the Markets

By Thomas König

Taiwan has been on Germany's mind—in recent years perhaps more than in previous decades. And why shouldn't it be? Taiwan, after all, has attracted more than €6.1 billion in German investments with almost 300 German companies successfully conducting business on the ground.

Not only is Germany the second-largest EU investor in Taiwan, but it will also be home to Taiwan Semiconductor Manufacturing Company's (TSMC) first semiconductor plant in Europe, in the eastern German city of Dresden. The joint venture between TSMC, Robert Bosch GmbH, Infineon Technologies AG, and NXP Semiconductors NV officially broke ground on the site in late 2024. It has also been groundbreaking in the sense that it has initiated an open debate about the kinds of foreign direct investments Germany wants and needs to future-proof its currently strained economy.

Navigating contemporary trade relations has never been more hazardous and complicated than it is now; alliances are shifting, trade routes are in flux, and economic interdependencies are increasingly weaponized. Within this context, the export-driven German economy finds itself at a crucial point in its own history: Safeguarding the long-term interests of the German economy, ensuring overall competitiveness of the German market economy, and promoting and protecting innovation "Made in Germany" should be key tenets of the economic policy of the new administration in Berlin.

During World War I, French Prime Minister Clemenceau famously proclaimed, "War is too important to be left to the generals." The sentiment holds true when it comes to economic security as well: Economic security is too important to be left just to the markets. The government must identify economic risks and proactively mitigate them in close cooperation with the business community.

Germany is open for business and will remain so, but the government can take concrete steps to signal the overall strategic importance of continued, stable trade relations with Taiwan. Economic interdependencies are a primary feature of a liberal world trade order; we have taken these interdependencies for granted for the longest time while geopolitical realities have shifted right under our noses—and throughout that shift, Taiwan has successfully established itself as an economic force to be reckoned with. Much of the world's technology is powered by computer chips made in Taiwan. TSMC, a single Taiwanese company, controls two-thirds of the global semiconductor market.[1] Whether or not we like these interdependencies, they are an economic reality that will directly impact the interests of the German economy.

"It's the economy, stupid" has turned into "it's economic security, stupid". Germany needs to face up to its economic dependencies and make sure that risks are minimized to the extent possible. To that end, and given the already established stakes, Germany should confidently identify Taiwan as an important trading partner and signal the importance of

continued stable relations between China and Taiwan, which have become increasingly tense in recent years.

A brief look at the current German position on Taiwan highlights that a policy update is in order. The foundation for policy toward Taiwan is the July 2023 "Strategy on China of the Government of the German Federal Republic." In this 64-page document, Taiwan features to only a very limited extent. There is no mention of the deep economic interests that Germany has in Taiwan. Right in the introductory section, Germany reaffirms its commitment to the "One-China" Policy:

> The One-China policy remains the basis for our actions. We only have diplomatic relations with the People's Republic of China. Germany has close and good relations with Taiwan in many areas and wants to expand them.[2]

The economic relationship with Taiwan is noted only in passing on page 51:

> We also have economic and technological interests regarding Taiwan. Taiwan is important for Germany both as a location for German companies and as a trade partner.[3]

These two sentences barely pay lip service to the very real economic interests that Germany has in Taiwan. Most recently, on April 10, 2025, the coalition agreement of the new Federal Government was released; here, too, Taiwan is mentioned only briefly:

> Based on our One-China Policy, we are continuing to develop our relations with Taiwan. Any change to Taiwan's status quo can only occur peacefully and by mutual consent.[4]

At least when it comes to putting pen to paper, Taiwan appears to be a mere afterthought in the German policy sphere, even though there are very concrete, tangible reasons for making Taiwan an economic priority.

With semiconductors alone, the economic interdependencies are undeniable: 80% of all microchips worldwide are produced with lithography optics provided by major German companies such as Trumpf, Zeiss, and Dutch counterpart ASML.[5] In the past five years, German giant Merck has invested around half a billion Euros to further center itself in the semiconductor supply chain while chemical company BASF has announced an investment expansion in Taiwan. According to 2024 statistics compiled by the German Trade Office in Taipei, only 29% of surveyed companies (down from 42% in 2023) cited China–Taiwan relations as a reason for halting investments. Only 29% of German companies in Taiwan cite the China–Taiwan tensions as negatively affecting supply chains, while almost 60%—up 2 percentage points from 2023—reacted negatively to global uncertainties. Nevertheless, over 60% of German companies expected their Taiwan-based subsidiaries to grow.[6] And there is room to grow: Mechanical and plant engineering with robotic features, aerospace, healthcare, and energy and resource management still hold great potential for future German–Taiwanese cooperation—not to mention semiconductors and AI.

To that end, then-Federal Minister of Education Bettina Stark-Watzinger made a historic trip to Taiwan in 2023, the first government-level ministerial visit in 26 years. While in Taiwan, the minister signed a science and technology agreement to expand collaboration in areas such as battery technology, hydrogen energy, AI application, and semiconductors.[7] Minister Stark-Watzinger's visit was heavily criticized by Chinese officials who considered the visit "associating and interacting with Taiwan

independence separatist forces," [8] but the ministry defended the visit as unofficial, noting that the main focus of the trip was knowledge exchange and tightening of economic ties, and that Stark-Watzinger had not met with high-level Taiwanese officials. After all, significant economic cooperation is already an established part of the Germany–Taiwan relationship. A sensible approach to economic relations with Taiwan necessitates this kind of exchange.

The state of Saxony (future home of the TSMC facility) has continued this trend of economic engagement for the sake of economic resilience: In 2023, Saxony Science Minister Sebastian Gemkow opened a science liaison office in Taiwan.[9] In 2024, State Secretary Thomas Kralinski attended the leading semiconductor trade fair SEMICON in Taipei and met with his Taiwanese counterpart for discussions. This year, the city of Dresden will be represented at the SEMICON fair and a visit by Minister President Michael Kretschmer, who welcomed Taiwanese Economics Minister Jyh-huei Kuo to Saxony two months ago, is planned for September 2025.

The economic numbers and inherent potential speak for themselves. It should therefore not be controversial to say that Germany regards stable China–Taiwan relations as a top priority for reasons of economic security. Thus, it would seem that Germany should make clear that economic ties to Taiwan are a strategic priority in which they will continue to invest.

However, any clear statements regarding the economic importance of Taiwan could possibly carry consequences for relations between Germany and China. After all, China was Germany's second-largest trading partner for goods in 2024, and between 2016 and 2023, it was Germany's largest trading partner. Why should Germany potentially ruffle any feathers?

To this day, many policymakers in Berlin view a potential Taiwan conflict primarily as an issue between the United States and China on which Germany should stay mostly neutral. But especially now that the current Trump administration's commitment to Taiwan is in question,[10] global trade tensions are flaring, and Russia's war in Ukraine continues to destabilize the world order, Germany, too, needs to courageously adjust to the "new normal."

Framing Taiwan as an economic security issue for Germany is the most sensible approach to new global dynamics. Germany can clearly make the case that it has significant economic stakes when it comes to Taiwan: An escalation of China–Taiwan tensions could conceivably result in China directly disrupting global supply chains; the 180-kilometer-wide strait separating the island of Taiwan and the Asian continent is a major global shipping corridor through which flows a significant portion of the world's container fleet. Germany must safeguard its access to semiconductors and, with the Dresden facility, will officially join the ranks of important trading hubs for the global semiconductor infrastructure.

Based on this author's professional experience of almost two decades of productively engaging with China, sound economic arguments regarding the strategic importance of Taiwan, with the statistics to back them up, are a very good foundation for any discussions with Chinese counterparts. Germany has stakes in stable relations with Taiwan as well and should not hesitate to clearly state them. Reframing Taiwan's economic output as an economic security priority to safeguard overall German interests will certainly be contentious, but will also help China understand the stakes that Germany has defined for itself in the Indo-Pacific.

The new German government has an extremely complex domestic and international agenda it needs to address as fast as possible. Considering the economic interdependencies, it should (or must?) confidently acknowledge the importance of Taiwan atop its economic agenda and make clear that avoiding any disruptions to Taiwan's semiconductor industry is also a core interest of German economic security.

Surely an issue area this significant deserves more than a few noncommittal sentences in policy papers. Taiwan is an opportunity for Germany to clearly outline its own economic interests and priorities in the Indo-Pacific and the world at large and to acknowledge that in this age of economic insecurity, we should be willing to put our governmental support where our investments are.

A healthy, mutually beneficial relationship with China is an important part of Germany's global trade footprint and the government and business community should and undoubtedly will continue to improve the relationship. Germany will also remain committed to its "One-China" policy. But within that framework, it is important to make room for an honest assessment of the overall economic importance of Taiwan and the strategic implications for the German economy at large.

The time has come for Germany to take economic security seriously and to adjust its strategy accordingly.

Endnotes

[1] *Yen Nee Lee, "2 charts show how much the world depends on Taiwan for semiconductors", CNBC.com, March 15, 2021. https://www.cnbc.com/2021/03/16/2-charts-show-how-much-the-world-depends-on-taiwan-for-semiconductors.html*

[2] *Federal Foreign Office, "Strategy on China of the Government of the Federal Republic of Germany", Federal Government, July 2023, p. 13. https://www.auswaertiges-amt.de/resource/b/2608580/49d50fecc479304c3da2e2079c55e106/china-strategie-en-data.pdf*

[3] *Federal Foreign Office, "Strategy on China", p. 51.*

[4] *"Verantwortung für Deutschland Koalitionsvertrag zwischen CDU, CSU und SPD", Federal Republic of Germany, April 10, 2025, p. 128, rows 4085–4087. https://www.spd.de/fileadmin/Dokumente/Koalitionsvertrag2025_bf.pdf*

[5] *Zeiss.com, "With precision and strong partners", April 29, 2025. https://www.zeiss.com/semiconductor-manufacturing-technology/products/markets-and-partners.html*

[6] *German Trade Office Taipei, "Business Confidence Survey 2024/2025", April 2025. https://taiwan.ahk.de/en/publications/business-confidence-survey-2024-2025*

[7] *TaiwanToday.com, "Taiwan, Germany sign science and technology pact", March 22, 2023. https://taiwantoday.tw/Politics/Top-News/234407/Taiwan%252C-Germany-sign-science-and-technology-pact*

[8] *Deutsche Welle, "German minister makes landmark visit to Taiwan", March 21, 2023. https://www.dw.com/en/german-minister-makes-landmark-visit-to-taiwan/a-65056645*

[9] *Technische Universität Dresden, "Free State of Saxony and Dresden University of Technology open scientific liaison office in Taiwan and sign cooperation agreement for a 'Semiconductor Talent Incubation Program' with TSMC", September 19, 2023. https://tu-dresden.de/tu-dresden/newsportal/news/freistaat-sachsen-und-tu-dresden-eroeffnen-wissenschaftliches-koordinierungsbuero-in-taiwan-und-unterzeichnen-eine-kooperationsvereinbarung-fuer-ein-semiconductor-talent-incubation-program-mit-tsmc?set_language=en*

[10] *Vickie Wang, "Taiwan Is Ready to Defend Democracy. Is Trump?", New York Times, November 24, 2024. https://www.nytimes.com/2024/11/24/opinion/taiwan-china-trump.html*

Inoculating Citizens Against Foreign Malign Influence

How Taiwan and the Western Balkans can learn from and support one another in their fights against foreign disinformation

By Jacob Kostrzewski

Democracy is broken. We are stronger than your allies. Your friends will abandon you. These are the types of narratives that the People's Republic of China (PRC) and Russia share through their foreign malign influence campaigns in Taiwan and the Western Balkans, particularly in Serbia, Bosnia and Herzegovina, Kosovo, and Montenegro. The PRC and Russia seek to exploit Taiwan's and the Western Balkan countries' democracies, which allow for free and open speech to share harmful content.[1] Their goals are similar: discredit traditional allies and partners, cast doubt upon democracy as an effective and representative system of governance, and instill a sense of dread and inevitability within the populations of these countries to push them towards the PRC's and Russia's preferred outcomes.

Foreign malign influence, or "any hostile attempt to alter public opinion at the direction of a foreign government," [2] can come in many forms, including information operations, spread of disinformation or fake news, and manipulation of facts to tell an alternate story. The PRC and Russia are among the biggest perpetrators of foreign malign influence,[3] and Taiwan[4] and the Western Balkans[5] among its greatest targets. One of the key challenges facing Taiwan and the Western Balkans, and any country under assault by foreign malign influence campaigns, is that disinformation is inexpensive and easy to produce,[6] even at significant scale, while efforts to refute, counter, or debunk it are time-consuming, expensive, and require significant levels of trust within society. Russell Hsiao, Executive Director of the Global Taiwan Institute, in conversation with the 2025 cohort of the Taiwan-US-Europe Policy Program (TUPP) on February 13, 2025 noted that there is a "tremendous imbalance" between the amount and sophistication of the PRC's efforts to influence Taiwan's population and the resources available to the Taiwanese government and civil society to respond to it.

These critical challenges facing both Taiwan and the Western Balkans yield lessons learned, strategies and approaches, and opportunities for collaboration between governments and civil society actors from both contexts.

Foreign Malign Influence Goals and Narratives

Serbia, Bosnia and Herzegovina, Kosovo, and Montenegro are four Western Balkan states that have transitioned to flawed but generally functioning democracies following the breakup of Yugoslavia in the early 1990s. All are aspiring EU member states with significant Serbian-speaking populations, which makes them targets for Kremlin-backed malign influence campaigns. Russia has long sought to portray itself as the "big brother" of Serbs,[7] and many Serbs find kinship with Russia due to historical,

cultural, and religious ties. While Serbia itself balances its foreign relations between the West and Russia, the other three states have aligned themselves with NATO, with Montenegro acceding as one of its newest members in 2017, and all four countries have sought closer ties with and eventual membership in the EU.

The Russian government under Vladimir Putin has long opposed the eastward expansion of NATO and the EU,[8] and sees stable, functioning, and increasingly wealthy democracies, many of which have populations culturally, linguistically, and religiously similar to Russia's, as a threat to Putin's authoritarian rule at home. Russia invaded Georgia in 2008 and Ukraine in 2014 and 2022 as those countries improved their relations with the West and made progress towards EU and NATO membership. While the Western Balkans are farther away and thus a harder target to attack militarily, they are nonetheless targets of Russia's malign influence campaigns, including widespread disinformation and information manipulation.

Russia specifically targets Serbian communities in these countries (in the case of Serbia, the whole country) with narratives that seek to sow confusion, doubt, and uncertainty among these countries' populations, destabilize their governments and their foreign relations, and bring their citizens and leaders closer to Russia. Among the most common Russian disinformation narratives in the Western Balkans are:

- The EU and the United States are unreliable allies and partners. They regularly abandon their friends and will not support your country in its time of need.
- The EU does not want you to join. Montenegro and Serbia applied nearly two decades ago and still have not been let in.
- The EU and the United States are weak economically, militarily, and politically. Russia is stronger than NATO and would win should a war break out.
- NATO is an aggressor. NATO bombed Serbia and killed Serbian civilians in 1999.
- Russia is your big brother and a reliable friend with your best interests at heart.

Meanwhile, Taiwan is a highly developed, robust democracy with a majority ethnically Han Chinese population. The PRC views Taiwan as a renegade province, and the PRC's leader, Xi Jinping, has made the "reunification" of the Chinese nation a core tenet of his premiership.[9] Taiwan's leaders, meanwhile, have maintained that Taiwan cannot be forcefully annexed by the PRC and that the future of cross-Strait relations must reflect the will of Taiwan's people.[10]

The PRC utilizes "United Front" tactics, or whole-of-society attacks, to (in the words of Russell Hsiao) "co-opt, coerce, and convert" the population of Taiwan against their own government and to favor the PRC perspective on cross-Strait relations. The PRC employs disinformation and information manipulation as core parts of United Front, taking advantage of the openness of Taiwan's democracy to spread information through traditional and social media, and by employing propagandists to work on its behalf. Through these tactics, the PRC aims to instill a sense of dread that Taiwan cannot exist in the current status quo for much longer, and that it is in the best interest of Taiwan to unify with the PRC on the PRC's terms. Common manipulative narratives that the PRC employs against Taiwan include:

- Taiwan cannot militarily or economically withstand the PRC, and thus it is better to simply capitulate and reunify on the PRC's terms.

- The PRC and Taiwan are one country and reunification is inevitable.
- The United States is not a reliable ally and would not come to Taiwan's aid in its time of need.
- The PRC has Taiwan's best interests at heart.

With technological advances in artificial intelligence (AI), the PRC is becoming more creative with its malign influence and disinformation campaigns, as former President Tsai Ing-wen told the TUPP Fellows on February 17, 2025. Similarly, Russia is utilizing AI to generate large amounts of increasingly convincing disinformation targeted at its adversaries.[11] As AI becomes more technologically advanced and the images, videos, and content it produces becomes more realistic, the volume and scope of disinformation threatening both the Western Balkans and Taiwan become significantly more challenging.

Challenges, Successes, and Opportunities in Countering Foreign Malign Influence

Russia and the PRC have developed advanced, inexpensive, and effective disinformation and malign influence tactics that they employ against their targets in the Western Balkans and in Taiwan. However, government, civil society, and citizens in the Western Balkans and Taiwan, along with their allies in other democratic countries, have been working to identify and combat these attacks. Both contexts yield lessons learned on successes and opportunities, as well as shared or unique challenges in their work to combat malign influence.

One challenge shared by government and civil society in both the Western Balkans and Taiwan is short attention spans among citizens, particularly among younger generations who grew up in the age of social media with exposure to soundbites and short videos. Such audiences are less likely to engage with longer content such as articles and in-depth videos debunking narratives. Instead, in the Western Balkans, civil society organizations working to combat Russian disinformation have found short, engaging, to-the-point video clips of approximately one minute in length to be more impactful, engaged with, and shared. Civil society organizations in Taiwan such as Watchout noted similar success with short-form videos. During the TUPP Fellowship, a representative of Watchout noted in conversation that short, "cute" videos routinely received over two million engagements (such as likes and shares), a very significant number for Taiwan's population of approximately 23 million. Short-form videos, however, present their own challenges, as it is difficult to pack significant amounts of accurate information into a 60-second clip. However, the payoff, according to organizations in both contexts, is significant as audiences engage at much higher levels with short rather than long content.

Additionally, in both the Western Balkans and Taiwan, individuals trusted within communities have proven to be highly effective in combating disinformation narratives and malign influence within their communities. In the Western Balkans, young activists known within their communities who share factual information to debunk false narratives spreading in their communities have swayed community members away from disinformation. According to unpublished research by a US-based NGO, in multiple experiments conducted in 2023 and 2024, activists known within their communities went door-to-door sharing pro-democracy messaging and debunking known narratives to their neighbors. In follow-on surveys conducted by local organizations, individuals these activists spoke to showed significantly higher

awareness of what information was false than control groups not reached by activists. Working with individuals on a one-on-one level is expensive and time-consuming. However, numerous cases have demonstrated that it is among the most effective ways of combatting disinformation and foreign malign influence, and therefore is worthy of investment.

Finally, rural and older citizens in both countries are often not technologically literate and lack the tools and knowledge to identify false information or AI-generated content. They are also less likely to know where to turn for truthful content online. Older citizens respond better to in-person events, which tend to be expensive and logistically challenging to organize, particularly in smaller, remote towns. They also tend to reach fewer people than online messaging due to room capacity issues or people's availability to meet at a given time. However, because people tend to respond more positively to counter-disinformation narratives shared by trusted contacts, in-person events may be worth the effort even if they do not reach everyone in a given town, as attendees are likely to share what they learned with friends and family.

Policy Recommendations

The Western Balkans and Taiwan are victims of advanced and tireless efforts to disrupt the functioning of their democracies by Russia and the PRC, respectively. Successes and challenges in both contexts, however, offer paths forward for governments, civil society, and citizens to learn from one another and become better at understanding, identifying, and fighting disinformation narratives and foreign malign influence. The following are recommendations for parties in both contexts to consider:

- Foster online and, if possible, in-person exchanges between civil society groups and activists working to counter malign influence in the Western Balkans and Taiwan. Activists in both contexts have become creative and resourceful in fighting disinformation; however, as disinformation and foreign malign influence continuously evolve, strategies to combat them must evolve and improve in tandem. Organizations such as the Taiwan Foundation for Democracy can be good conduits between activists in both areas.

- Develop online portals or similar venues for activists to share examples of foreign malign influence narratives and share how they countered them. This would help keep dialogue between activists in the Western Balkans and Taiwan ongoing and would help activists rapidly learn from one another to counteract the speed at which new disinformation narratives are developed and deployed.

- Many governments in Central and Eastern Europe have developed civil defense guides to inform their citizens how to respond in the event of various disasters. These guides are easily readable, emphasize short and clear instructions, and utilize imagery and other easily digestible content to share large amounts of information quickly. Taiwan's government and various civil society organizations have begun studying these guides and producing their own. Governments and civil society should collaborate to produce similar guides for understanding the threat posed by foreign malign influence, ways to identify (at least the most common examples of) it, and strategies to fight it.

- In conversation with TUPP Fellows, Vice President Hsiao Bi-khim noted the need for "middle powers" who are victims of larger aggressors to collaborate in sharing strategies to counter threats. Taiwan and democratic, like-minded governments in the Western Balkans should open channels of dialogue and communication on the challenges they have faced and work together to fight back against foreign aggression. Such collaboration should expand, grow, and become regular as threats increase.

Endnotes

[1] *Emily Feng, "Taiwan Deals with Lots of Misinformation, and It's Harder to Track Down", NPR, January 11, 2024. https://www.npr.org/2024/01/11/1216340756/taiwan-election-disinformation-social-media-ptt*

[2] *Patrik Szicherle, "Shaping the Next EU Commission's Priorities: Countering Foreign Malign Influence", GLOBSEC, June 2024. https://www.globsec.org/sites/default/files/2024-08/Shaping%20the%20Next%20EU%20Commission%27s%20Priorities%20-%20Countering%20Foreign%20Malign%20Influence%20chapter.pdf*

[3] *Homeland Security Office of Intelligence and Analysis, "Homeland Threat Assessment 2025", U.S. Department of Homeland Security, October 2025. https://www.dhs.gov/sites/default/files/2024-10/24_0930_ia_24-320-ia-publication-2025-hta-final-30sep24-508.pdf*

[4] *Christopher Bodeen, "Taiwan Says China Is Redoubling Efforts to Undermine Democracy with Disinformation", Associated Press, January 3, 2025. https://apnews.com/article/taiwan-china-disinformation-3f05dac36399bf672a702100147bf8fa*

[5] *Daniel Sunter, "Disinformation in the Western Balkans", NATO Review, December 21, 2020. https://www.nato.int/docu/review/articles/2020/12/21/disinformation-in-the-western-balkans/index.html*

[6] *Jamie Condliffe, "Fake News Is Unbelievably Cheap to Produce", MIT Technology Review, June 14, 2017. https://www.technologyreview.com/2017/06/14/151233/fake-news-is-unbelievably-cheap/*

[7] *AFP, "'Brothers Forever': Many in Serbia Back Russia amid Global Outcry", France24, March 9, 2022. https://www.france24.com/en/live-news/20220309-brothers-forever-many-in-serbia-back-russia-amid-global-outcry*

[8] *Nicholas Lokker and Kate Johnston, "For Putin, the EU Is a Bigger Threat Than NATO", Foreign Policy, July 15, 2024. https://foreignpolicy.com/2024/07/15/russia-putin-nato-eu-ukraine-membership-threat-european-union/*

[9] *Helen Davidson, "China and Taiwan Are Destined for 'Reunification', Xi Tells Former President", The Guardian, April 10, 2024. https://www.theguardian.com/world/2024/apr/10/china-taiwan-destined-for-reunification-xi-jinping-tells-ma-ying-jeou*

[10] *Reuters, "Xi Says No One Can Stop China's 'reunification' with Taiwan", December 31, 2024. https://www.reuters.com/world/china/xi-says-no-one-can-stop-chinas-reunification-with-taiwan-2024-12-31/*

[11] *USCYBERCOM Public Affairs, "Russian Disinformation Campaign 'DoppelGänger' Unmasked: A Web of Deception", U.S. Cyber Command, September 3, 2024. https://www.cybercom.mil/Media/News/Article/3895345/russian-disinformation-campaign-doppelgnger-unmasked-a-web-of-deception/*

Conscription Reform Requires Structural Change

By Ben Levine

In January 2024, Taiwan lengthened its required military service from four months to one year, after years of gradually reducing the required time, signaling a significant shift in its national defense policy.[1] Faced with ever-increasing military intimidation by the People's Republic of China (PRC), Taiwanese policymakers and military planners are responding to the moment. International media reacted to this new policy by lauding Taiwan for taking a bold step to counter the growing threat emanating from the PRC.[2] However, without deeper structural reforms—such as clearer civil defense coordination, stronger incentives for conscripts, and better reserve readiness—this new policy risks remaining a halfway measure that neither deters threats nor ensures long-term national defense.

Taiwan's Conscription History: From Cold War to Today

Taiwan has had some form of required military service since 1949.[3] After the Kuomintang government fled to Taiwan and in the decades that followed during the Cold War, all men aged 18 to 36 served for two to three years; this reflected the security environment at the time.[4] During times of crisis, Taiwan's military responded effectively and resolutely defended the nation. Examples of this can be seen through the three Taiwan Straits Crises in 1954, 1958, and 1958.[5] However, starting in the 2000s, the Taiwanese government began transitioning to an all-volunteer service. By 2012, the Ma Ying-jeou administration cut mandatory service down to just four months, with the intent of relying on an all-volunteer military.[6]

This shift, while popular among the youth of Taiwan, severely weakened military preparedness and readiness. In my conversations with Taiwanese citizens, most who had participated in the compulsory military service before the lengthening of the service to one year likened it to a summer camp. The general consensus was that this brief taste of military service was not worth their time, providing neither military skills they could use if called on to fight nor experience in emergency management they could employ as civilians.

The Updated Conscription Policy

The new conscription policy, with the first batch of conscripts under the new regime finishing their service in January 2025, extends compulsory service from four months to one year for male citizens born after 2005.[7] Beyond the longer term of service, the new system is structured around a more comprehensive and intensive training program, intended to make combat-ready soldiers and create a capable reserve system. The system is broken down into five phases:

1. **Basic Training (8 weeks)**

   Focus: Military discipline, physical fitness, basic weapons training

2. **Unit Training (18 weeks)**

   Focus: Specialized skills, cyber and civil defense, disaster response

3. **Advanced Combat Training (7 weeks)**

   Focus: Tactical exercises, urban combat, live-fire drills

4. **Base Training (13 weeks)**

   Focus: Simulated wartime scenarios, joint operations

5. **Joint Military Exercises (6 weeks)**

   Focus: Large-scale national defense drills (Han Kuang, Min An exercises)

In addition to the updated training regime, the new policy also gives conscripts improved pay and benefits. For example, before the change in policy, a private earned TWD $6,510 (~$198) per month and now earns TWD $20,320 (~$667) per month. While this is a step in the right direction, better pay and benefits are needed given the opportunity costs that young people face by taking a year off from their education or work to complete the compulsory service.

Regarding benefits, the policy mentions three areas: retirement, job matching programs, and professional certifications. One year of military service now counts toward labor pension eligibility, making it more financially meaningful in the long term. To ease the transition back to civilian life, the military will also offer job placement services to connect conscripts with private-sector employers. In addition, those serving in specialized fields—such as engineering, information technology, logistics, and medicine—can earn certifications during service that are recognized in the civilian workforce. The new policy also mentions a civil defense system playing a role in military operations, disaster relief, medical aid, engineering repairs, and public safety. However, details are scant and the role that Taiwan's very capable civil society can play is seen as an afterthought.

Comparison: How Does Taiwan Stack Up?

The new, updated conscription policy is an attempt to adapt to Taiwan's current security environment. However, compared to similar countries also facing existential threats, such as Singapore, South Korea, and Israel, Taiwan falls well short in two key areas:

1. Length of service: All three countries have a significantly longer conscription period. Singapore's length of service is 24 months, South Korea's is a minimum of 18 months, up to 21 months, and Israel's is a minimum of 24 months for women and a minimum of 32 months for men.[8]

2. Reserve System: Other countries maintain strong reserve systems that keep former conscripts in training pipelines and link them to civil defense or emergency functions. Taiwan's reserves remain poorly organized and underutilized.

Will This Improve Defense Readiness?

Taiwan's new conscription policy should in theory improve defense readiness. A bigger pool of citizens with more professional military training must be a net positive for Taiwan's ability to respond to the PRC's coercive behaviors. This policy shift signals not only to the Taiwanese public but also to the international community that Taiwan is getting more serious about its own defense.

However, major problems remain. In discussions with Taiwanese military experts, I keep hearing that the new conscription policy is only a little over a year old and nothing changes that quickly, and that structural reforms will happen eventually. This lack of urgency is ill-suited to the current international environment Taiwan is facing. The United States is pulling back on its commitments to the rest of the world, and the PRC is increasingly belligerent. Taiwanese policymakers and military planners therefore need to pick up the pace and make deep structural reforms. In addition, civil–military coordination is fragmented, which is curious, given Taiwan's talented civil society and President Lai's Whole-of-Society Defense Resilience Committee.[9] Finally, while the new conscription policy enjoys societal support overall, a plurality of young Taiwanese opposes the lengthening of compulsory service.[10]

Policy Recommendations

Given the urgency of Taiwan's current security environment and the considerations mentioned above, the Taiwanese government must push convention; therefore, here are six recommendations that will improve Taiwan's military readiness:

Inclusion of women in the draft: Taiwan's security challenges are total and societal. Excluding women from the draft undermines both workforce needs and societal cohesion. Many women already serve in the military, although not in combat roles. Making service universal to include women would give a much-needed boost to the pool of conscripts and reservists and give the new policy more legitimacy in the eyes of Taiwan's youth. In addition, in Taiwan's civil defense courses that teach valuable and potentially lifesaving skills to ordinary citizens, women already comprise the majority of class participants—highlighting that Taiwanese women stand ready to serve their country today.

Alternative service pathways: Taiwan excels in many industries that are critical to national defense. Highly skilled individuals could serve in alternative ways, contributing their unique skill set through their expertise rather than taking on a combat role.

Strengthening reserve forces: Further enhancement of the reserve force structure, such as mandating annual refresher courses, holding mobilization exercises, and improving pay and benefits would set a solid foundation for a capable reserve force.

Access to firearms training for civilians: In Taiwan's current security environment, civilians need firearm skills in many potential scenarios. However, given Taiwan's strict gun control laws, any civilian firearm training program would need existing gun control laws to be loosened. This shift would require the development of a clear regulatory framework to ensure safety and responsibility. A regulated civilian firearms training program could complement Taiwan's civil defense efforts.

Stronger incentives: While the higher salary for conscripts is a welcome start, it is still below Taiwan's minimum wage. At the very least, it should match the

minimum wage. In addition, having the year of service count towards the labor pension eligibility is a good first step, but stronger benefits such as tuition waivers for higher education and preferential hiring for public sector jobs or cooperation with the private sector could turn mandatory service into a springboard for a future career, not a setback.

Greater civil–military cooperation: While President Lai's Whole-of-Society Defense Resilience Committee aims to bring together civil society groups to increase societal resilience, more direct collaboration is needed between civil society organizations and the Ministry of Defense. This would allow for the execution of joint training programs, clear assignments during emergencies, and the integration of civil society organizations' expertise into areas such as disaster response, cyber defense, and information warfare.

What Does Success Look Like?

The success of Taiwan's new policy will be measured not by the number of new conscripts and reservists, but by the impact on Taiwan's defense preparedness and readiness. This means having conscripts and reservists who are not only trained and supported well, but who share in the mission of building a strong national defense.

If Taiwan wants to have a conscription regime that is genuinely successful, then it must invest in an ambitious, long-term strategic plan: clear civil defense roles, a gender-inclusive service, a modern reservist system, and meaningful incentives that tie compulsory military service to opportunities for the conscripts who dedicate a year of their life to serving their country.

Ultimately, Taiwan's future security cannot rely primarily on extending conscription, but done right, the updated conscription policy can serve as the foundation of a whole-of-society defense resilience strategy. Done halfway, it risks becoming a symbol that neither deters threats nor ensures long-term national defense.

Endnotes

[1] *John Dotson, "Taiwan Initiates Its New One-Year Military Conscription Program", Global Taiwan Institute, February 7, 2024. https://globaltaiwan.org/2024/02/taiwan-initiates-its-new-one-year-military-conscription-program/*

[2] *Fabian Hamacher and Ann Wang, "Taiwan begins extended one-year conscription in response to China threat", Reuters, January 25, 2024. https://www.reuters.com/world/asia-pacific/taiwan-begins-extended-one-year-conscription-response-china-threat-2024-01-25/*

[3] *Sheng-mei Ma, "Forgotten Taiwanese Veteran's Memory of Compulsory Service", Journal of Veterans Studies 6 (3): 23–29, 2020. https://doi.org/10.21061/jvs.v6i3.210*

[4] *Joseph Yeh, "Number of conscripts in new military service program up 41% in 2025", Focus Taiwan, March 26, 2025. https://focustaiwan.tw/politics/202503260010*

[5] *Office of the Historian, "The Taiwan Straits Crises: 1954–55 and 1958", U.S. Department of State. https://history.state.gov/milestones/1953-1960/taiwan-strait-crises*

[6] *Rachel Chan, "Taiwan cuts compulsory military service to 4 months", Taiwan Today, January 2, 2012. https://www.taiwantoday.tw/Politics/Top-News/2137/Taiwan-cuts-compulsory-military-service-to-4-months*

[7] *Executive Yuan, "強化全民國防兵力結構調整方案" [Plan for Strengthening the National Defense Force Structure], January 18, 2023. https://www.ey.gov.tw/Page/5A8A0CB5B-41DA11E/75930814-745f-43e3-bbfe-4d39e94f8afa*

[8] *Singapore Ministry of Defense, "Discover National Service". https://www.mindef.gov.sg/national-service/discover-ns; Junwoo Hwang, "Overview of the South Korean Military Conscription (Regulations & Life in Military)", January 10, 2024. https://beginnerjunwoo.wordpress.com/2024/01/10/overview-of-the-south-korean-military-conscription-regulations-life-in-military/; Israel Defense Forces, "Our Soldiers: the Men and Women of the Israeli Defense Forces". https://www.idf.il/en/mini-sites/our-soldiers/*

[9] *Office of the President, Republic of China (Taiwan), "Whole-of-Society Defense Resilience Committee", June 19, 2024. https://english.president.gov.tw/Page/669*

[10] *Taiwan Public Opinion Foundation, "December 2022 Public Opinion Poll – English Excerpt", December 20, 2022. https://www.tpof.org/wp-content/uploads/2022/12/20221220-TPOF-December-2022-Public-Opinion-Poll-%E2%80%93-English-Excerpt.pdf*

To Visit or Not to Visit?

Crisis Prevention and Management in the Taiwan Strait

By Shuxian Luo

When viewed through the lens of crisis prevention and management, former US Speaker of the House Nancy Pelosi's visit to Taiwan on August 2–3, 2022 yields important insights. Tracing the actions of each party directly involved before, during, and after the visit makes it possible to extract useful lessons for the United States, the People's Republic of China (PRC), and Taiwan.

Leading Up to the Visit

Speaker Pelosi's visit to Taiwan was initially publicized in April 2022 but was postponed after she tested positive for COVID-19. The last visit to Taiwan by a US House Speaker had been in 1997, when Newt Gingrich traveled to Taipei. However, Gingrich's visit triggered less controversy because he was from the opposition party, visited the PRC before traveling to Taiwan, and did not fly directly to Taipei from the PRC (fulfilling a precondition set by Beijing).[1] In contrast, Pelosi was from the ruling Democratic Party and third in line to the presidency, presenting a greater perceived challenge to Beijing. Moreover, her visit came amid President Joe Biden's repeated statements that the United States was committed to the defense of Taiwan.[2] These heightened Beijing's concerns that Washington was "hollowing out" its "One China" policy through a "salami slicing" tactic that would gradually erode the unofficial nature of the policy and the United States' strategic ambiguity without formally abandoning them altogether.[3] Believing that Biden could have dissuaded Pelosi but chose not to, Beijing viewed her visit as evidence of US executive–legislative collusion to upgrade relations with Taipei.[4]

When the rescheduling of Pelosi's visit was reported, Beijing unequivocally communicated its dissatisfaction to Washington, threatening a tough response if Pelosi proceeded. On July 19, the Chinese foreign ministry voiced strong opposition to the trip, asserting that as part of the US government, Congress (and Congressmembers) should "strictly adhere to the United States' One-China policy." Beijing warned that a visit by Pelosi would be met with "strong and resolute measures." [5] In a July 28 phone call lasting over two hours, Chinese President Xi Jinping urged Biden to prevent Pelosi's visit, warning that the United States should not "play with fire" over Taiwan. Biden responded that he could not intervene, as Congress is one of three separate but equal branches of the US government.[6] However, Beijing later became aware of reports that Pelosi had said she might reconsider the trip if Biden expressed his concerns to her directly, but that Biden refrained from doing so, instead sending his staff to caution her about the potential ramifications.[7] This likely reinforced doubts in Beijing that Biden used the division of power merely as a justification for not intervening with—and even acquiescing to—Pelosi's visit.

Meanwhile, Beijing began to pressure Taipei to cancel Pelosi's visit. Although direct communication channels between Beijing and Taipei had been mostly severed since Tsai Ing-wen became president in

May 2016, messages were relayed through unofficial intermediaries such as businesspeople, scholars, and journalists, according to a former senior official in the Tsai administration with first-hand knowledge of the crisis.[8]

For its part, Taiwan faced a predicament: Proceeding with the visit risked exacerbating tensions with Beijing, while canceling it could impair relations with Pelosi and be interpreted as yielding to Beijing's pressure.[9] Pelosi's visit was particularly appealing to Taipei, as the island was becoming increasingly isolated internationally; such a demonstration of international support would boost domestic support for Tsai's government.[10] Media reports suggested that at one point Taipei considered declining the visit due to security concerns, but Pelosi reaffirmed her commitment to the trip through Taiwan's de facto embassy in Washington, the Taipei Economic and Cultural Representative Office in the United States (TECRO), and insisted that the timing was ideal. Eventually, Taipei decided to proceed.[11] The Biden administration briefed Taipei on the July 28 Xi-Biden phone call and advised Taiwan to maintain a low-profile approach toward Pelosi's visit.[12]

On the US side, the Biden administration went public about its disagreement with Pelosi regarding her trip. On July 20, Biden said that the Department of Defense was concerned that the trip could intensify regional tensions.[13] However, Pelosi dismissed such warnings, insisting that her visit was a necessary demonstration of US support for Taiwan.[14]

The Visit and PRC Response

On the evening of August 2, the US Air Force plane carrying Pelosi from Kuala Lumpur to Taipei took a circuitous route, avoiding direct transit over the South China Sea to reduce the risk of a US–China military incident.[15] Meanwhile, four US warships, including the aircraft carrier USS Ronald Reagan, were deployed to areas east of Taiwan. Washington characterized this deployment as "routine" rather than specifically tied to the Pelosi visit, signaling a cautious but firm message that the United States would "not seek and [did] not want a crisis" but was "prepared to manage what Beijing chooses to do." [16]

From August 2 to August 4, Taiwan's military raised its combat readiness level. Officially, the military remained within "regular combat readiness period" levels, which apply during peacetime, but it was raised to a higher level than usual, according to interlocutors with firsthand knowledge.[17] ("Defensive combat period" levels apply during wartime.)[18] Throughout Pelosi's visit and the following China's People's Liberation Army (PLA) military exercises, Taiwan's primary concern was not a direct PLA attack or the downing of Pelosi's plane, but rather the increased risk of accident or miscalculation. Taipei developed contingency plans for a range of scenarios, including one suggested by prominent PRC hawks of sending PLA aircraft to "escort" Pelosi's aircraft into Taiwan's airspace.[19]

Less than half an hour after Pelosi arrived in Taipei, Beijing announced large-scale military exercises around Taiwan from August 4 to 7, warning ships and aircraft to avoid the designated areas.[20] These drills commenced one day after Pelosi departed, likely to reduce the risk of accidents. In a parallel move, the United States announced that it was postponing an intercontinental ballistic missile test to signal that it had "no interest in escalating the tensions".[21]

According to an August 2 interview with US National Security Adviser Jake Sullivan, communication channels between Washington and Beijing remained open throughout Pelosi's Taiwan visit and during the

Chinese military exercises to ensure clear messaging and minimize risk of miscalculation.[22] While Beijing refused direct talks with Washington at the defense minister and Chair of Joint Chiefs of Staff levels, working level communications between the two countries' defense and foreign affairs departments were not disrupted, according to a former senior US official in the Biden administration.[23] As such, despite the heightened tensions, the two sides managed to maintain a level of predictability throughout the crisis. As US Under Secretary of Defense Colin Kahl noted during an August 8 briefing, "Nothing that China has done has surprised us."[24]

Taipei also took precautionary measures during the PLA drills, advising commercial airlines to temporarily reroute flights away from the exercise areas to ensure safety.[25]

Post-Crisis Lessons

The 2022 Pelosi visit was not the first Taiwan Strait crisis, nor is it likely to be the last. The United States, the PRC, and Taiwan can each draw useful lessons from the episode to improve crisis prevention and management in the future.

For the United States, the executive branch should articulate the US "One China" policy clearly and consistently to minimize misperceptions and misjudgments in US–China interactions. It should also caution members of Congress that Taiwan should not be used for political grandstanding, as high-profile, symbolic visits may inadvertently harm Taiwan's security by providing Beijing with a pretext to increase pressure on the island. Crisis messaging to Beijing should emphasize three points: The United States does not seek conflict with China but will respond firmly if Beijing chooses to escalate tensions in the region; how the United States calibrates its response to a Taiwan Strait crisis will be a function of China's own behavior; and Washington will leave offramps open for Beijing to de-escalate in a face-saving manner.

For the PRC, understanding the limits of the US executive branch's influence over Congress is crucial. Viewing Congressional members' actions as part of a US "good cop, bad cop" strategy towards Taiwan misrepresents the reality of the US political system. Moreover, Beijing must recognize that its diplomatic pressure on Taiwan can be counterproductive. Taipei's willingness to host Pelosi even at the risk of damaging Taiwan's own security stemmed in part from the island's international isolation—demonstrating that heightened diplomatic pressure could prompt precisely the kind of reactions from Taipei and its supporters in Washington that Beijing seeks to deter. In addition, Beijing should refrain from ratcheting up military pressure on Taiwan. Along with diplomatic, economic, and other coercive measures, the looming military threats can alienate people in Taiwan and in turn undermine Chinese leader Xi Jinping's preferred strategy of achieving peaceful unification by winning the "hearts and minds" of the Taiwan people.[26]

For Taiwan, a sober cost-benefit analysis of high-profile symbolic visits by Western politicians is essential. Taipei could avoid giving Beijing the pretext for ramping up pressure while balancing the need for international visibility and support. Exercising discretion in inviting or accepting such visits could help mitigate Taiwan's security risks. Indeed, Taipei appears to have internalized lessons from the Pelosi visit in its response to Speaker Kevin McCarthy's expressed intention to visit Taiwan the following year.[27] Instead of hosting McCarthy in Taiwan, Taipei arranged for President Tsai Ing-wen to meet with him and other members of Congress at the Ronald Reagan Presidential Library during Tsai's US transit in April

2023. Given China's significant domestic challenges, Taiwan's most prudent strategy is to maintain a low profile and avoid becoming Beijing's immediate priority. While Taiwan's political leaders and the ruling party may, out of domestic political considerations, have legitimate reasons to view and use symbolic visits as a vital means of demonstrating consistent US support for the island, they should carefully weigh the benefits, which are short-lived, against the long-term risks of a sustained increase in PRC pressure in military and various other dimensions.

Ultimately, while the Pelosi visit underscored the volatility of the Taiwan Strait, it also highlighted the need for better crisis management. Careful policy calibration by all parties can help prevent future escalation of this dangerous geopolitical flashpoint.

Endnotes

[1] *Wenxin Fan, "China Tolerated Visit to Taiwan 25 Years Ago. It Now Sees That as Mistake", Wall Street Journal, August 2, 2022. https://www.wsj.com/livecoverage/nancy-pelosi-taiwan-visit-china-us-tensions/card/china-tolerated-a-visit-to-taiwan-25-years-ago-it-now-sees-that-as-a-mistake--VNK7ekOOP0Coch9JrB03*

[2] *In an August 2021 interview, Biden referred to Taiwan alongside Japan and South Korea as protected by an Article 5 U.S. commitment. In October, Biden again said that the United States had a commitment to protect Taiwan in the event of a PRC attack. In May 2022, Biden said during a joint press conference with Japanese Prime Minister Fumio Kishida in Tokyo that the United States was committed to defend Taiwan though military intervention. Biden's fourth and last gaffe regarding Taiwan happened in September 2022 on the heels of Pelosi's visit. "Full transcript of ABC's News George Stephanopoulos' interview with President Joe Biden", ABC News, August 19, 2021. https://abcnews.go.com/Politics/full-transcript-abc-news-george-stephanopoulos-interview-president/story?id=79535643; Kevin Liptak, "Biden vows to protect Taiwan in event of Chinese attack", CNN, October 22, 2021. https://www.cnn.com/2021/10/21/politics/taiwan-china-biden-town-hall; Kevin Liptak, Donald Judd, and Nectar Gan, "Biden says US would respond 'militarily' if China attacked Taiwan, but White House insists there's no policy change", CNN, May 23, 2022. https://www.cnn.com/2022/05/23/politics/biden-taiwan-china-japan-intl-hnk; David Brunnstrom and Trevor Hunnicutt, "Biden says U.S. forces would defend Taiwan in the event of a Chinese invasion", Reuters, September 19, 2022. https://www.reuters.com/world/biden-says-us-forces-would-defend-taiwan-event-chinese-invasion-2022-09-18/*

[3] *Ministry of Foreign Affairs of the PRC, "Wang Yi Holds Talks with US Secretary of State Antony Blinken", July 9, 2022. http://us.china-embassy.gov.cn/eng/zmgx/zxxx/202207/t20220709_10718037.html.*

[4] *"Hu Xijin: Pelosi to visit Taiwan, the PLA could 'escort' her aircraft into Taiwan [胡锡进：再传佩洛西将访台，老胡建议解放军战机 "伴飞" 进入台湾岛]", Fenghuangwang, July 19, 2022. https://i.ifeng.com/c/8HmKlJs1uc2*

[5] *Ministry of Foreign Affairs of the PRC, "Foreign Ministry Spokesperson Zhao Lijian's Regular Press Conference on July 19, 2022". https://www.mfa.gov.cn/eng/xw/fyrbt/lxjzh/202405/t20240530_11347327.html.*

[6] *Yasmeen Abutaleb and Tyler Pager, "Chinese leader asked Biden to prevent Pelosi from visiting Taiwan", Washington Post, August 20, 2022. https://www.washingtonpost.com/politics/2022/08/20/nancy-pelosi-biden-taiwan/ ; Steve Holland, Michael Martina, and Ryan Woo, "Don't 'play with fire' over Taiwan, China's Xi warns in call with Biden", Reuters, July 28, 2022. https://www.reuters.com/world/biden-looks-tamp-down-taiwan-tension-during-china-xi-call-2022-07-28/*

[7] *Ryan Hass, "How will the Biden administration's China policy be remembered?" Brookings Institution, February 3, 2025. https://www.brookings.edu/articles/how-will-the-biden-administrations-china-policy-be-remembered/.*

[8] *Author's interview, Taipei, February 2025.*

[9] *Author's interview, Taipei, February 2025.*

[10] *Office of the President of Republic of China (Taiwan), "President Tsai interviewed by BBC", May 18, 2024. https://english.president.gov.tw/NEWS/6720*

[11] *"Bi-khim Hsiao responds to information that Taiwan once revoked invitation to Pelosi [傳台灣曾撤邀裴洛西, 蕭美琴這樣說]", Yahoo, August 1, 2022. https://tw.news.yahoo.com/%E5%82%B3%E5%8F%B0%E7%81%A3%E6%9B%BE%E6%92%A4%E9%82%80%E8%A3%B4%E6%B4%9B%E8%A5%BF-%E8%95%AD%E7%BE%8E%E7%90%B4%E9%80%99%E6%A8%A3%E8%AA%AA-004830014.html*

[12] *Author's interview, Taipei, February 2025.*

[13] *Seung Min Kim, "Biden: Military say a Pelosi Taiwan trip 'not a good idea'", Associated Press, July 20, 2022. https://apnews.com/article/russia-ukraine-biden-beijing-nancy-pelosi-taiwan-c2f23ad7108853d33b6d41456eb4d0c5*

[14] *Lara Seligman and Andrew Desiderio, "White House clash with Pelosi over Taiwan spills into the open", Politico, July 22, 2022. https://www.politico.com/news/2022/07/22/white-house-pelosi-taiwan-trip-00047304*

[15] *Alexandra Stevenson, "Pelosi's widely watched flight to Taipei took a circuitous route. Here's why", New York Times, August 3, 2022. https://www.nytimes.com/2022/08/03/world/asia/pelosis-widely-watched-flight-to-taipei-took-a-circuitous-route-heres-why.html*

[16] *Greg Torode and Yimou Lee, "U.S. Navy deploys four warships east of Taiwan as Pelosi heads to Taipei", Reuters, August 2, 2022. https://www.reuters.com/world/asia-pacific/us-navy-deploys-four-warships-east-taiwan-pelosi-heads-taipei-2022-08-02/; Biden White House Archives, "Press Briefing by Press Secretary Karine Jean-Pierre and NSC Coordinator for Strategic Communications John Kirby, August 2, 2022". https://bidenwhitehouse.archives.gov/briefing-room/press-briefings/2022/08/02/press-briefing-by-press-secretary-karine-jean-pierre-and-nsc-coordinator-for-strategic-communications-john-kirby-august-2-2022/*

[17] *Author's interview, Taipei, February 2025.*

[18] *"Pelosi visits Taiwan, the PLA to conduct live-fire drills, Taiwan's military strengthens combat readiness [裴洛西擬訪台，共軍實彈演習，國軍強化戰備整備]", CNA, August 2, 2022. https://www.cna.com.tw/news/aipl/202208020024.aspx*

[19] *Author's interview, Taipei, February 2025; "Hu Xijin: Pelosi to visit Taiwan."*

[20] *Pelosi arrived in Taipei at 10:43 pm on August 2, and the Chinese defense ministry posted the military exercise announcement at 11:02. "Pelosi arrived in Taiwan at 10:43 pm, welcomed by Frank Wu and AIT Director Sandra Springer Oudkirk [裴洛西晚間10點43分抵台 吳釗燮、AIT處長孫曉雅親自接機]", Yahoo, August 2, 2022. https://tw.news.yahoo.com/%E8%A3%B4%E6%B4%9B%E8%A5%BF%E6%99%9A%E9%96%9310%E9%BB%9E43%E5%88%86%E6%8A%B5%E5%8F%B0-%E5%90%B3%E9%87%97%E7%87%AE-ait%E8%99%95%E9%95%B7%E5%AD%AB%E6%9B%89%E9%9B%85%E8%A6%AA%E8%87%AA%E6%8E%A5%E6%A9%9F-144922505.html; Ministry of National Defense of the PRC, "Authorized announcement through Xinhua [新华社受权公告]", August 2, 2022. http://www.news.cn/2022-08/02/c_1128885591.html*

[21] *Joe Gould and Stephen Losey, "Pentagon again delays nuclear missile test amid Chinese drills near Taiwan", Defense News, August 4, 2022. https://www.defensenews.com/pentagon/2022/08/04/pentagon-again-delays-nuclear-missile-test/*

[22] *Judy Woodruff, "Biden's national security adviser on Pelosi's Taiwan visit, killing of al-Qaida's leader", PBS News Hour, August 2, 2022. https://www.pbs.org/newshour/show/bidens-national-security-adviser-on-pelosis-taiwan-visit-killing-of-al-qaidas-leader*

[23] *Private conversation, Washington, DC, March 2025.*

[24] *U.S. Department of Defense, "USD (Policy) Dr. Kahl Press Conference", August 8, 2022. https://www.defense.gov/News/Transcripts/Transcript/Article/3120707/usd-policy-dr-kahl-press-conference/*

[25] *Author's interview, Taipei, February 2025.*

[26] *Simone McCarthy, "'Win hearts and minds' in Taiwan and Hong Kong, Chinese leader Xi urges Communist Party", CNN, August 1, 2022. https://www.cnn.com/2022/08/01/china/china-xi-jinping-united-front-taiwan-hong-kong-intl-hnk-mic/index.html*

[27] *Kari Lindberg and Sarah Zheng, "Congress forces Biden toward risky face-off with China over Taiwan", Japan Times, August 15, 2022. https://www.japantimes.co.jp/news/2022/08/15/asia-pacific/congress-taiwan-visits-biden-risk/*

AI, Chips, and Democracy

Taiwan's Strategic Balancing Act

By Julia Mykhailiuk

Artificial intelligence (AI), once confined to Research and Development labs and tech startups, has decidedly moved to the center of global geopolitical strategy. No longer simply a lever for innovation or economic growth, AI systems are now shaping national security, industrial resilience, and the evolution of democratic governance. As governments around the world scramble to secure strategic advantage in the face of AI-enabled disruption, Taiwan emerges as a critical nexus: a resilient, self-governing democracy, a semiconductor superpower, and a frontline actor in the contest over technological standards and political norms.[1]

To the casual observer, Taiwan's role in global technology systems is often reduced to a single entity, the Taiwan Semiconductor Manufacturing Company (TSMC). The firm's ability to produce more than 90% of the world's most advanced chips powering everything from AI models to missile systems renders it indispensable to the global economy and to the functioning of modern defense, communications, and energy infrastructures.[2] Yet Taiwan's strategic relevance runs much deeper. Its approach to AI regulation, its semiconductor diplomacy, and the alliances it chooses to nurture are shaping the global conversation on democracy and deterrence in the AI era.[3]

That conversation is becoming increasingly fragmented. In early 2025, under a returning Trump administration, the United States redefined its posture toward AI, stepping away from regulatory caution in favor of rapid innovation.[4] A sweeping executive order dismantled existing oversight structures, prioritizing fast system deployment over AI safety.[5] By February, the United States and the United Kingdom had declined to sign the Paris AI Summit Declaration, a voluntary framework supported by 58 countries and the EU pledging to develop AI systems that are transparent, safe, and trustworthy.[6] The move exposed a growing divergence among democratic powers. Where Europe frames AI governance as essential to democratic stability, Washington increasingly sees it as friction and an obstacle to technological primacy.[7] For Taiwan, this divergence raises the strategic value of closer cooperation with Europe.

This divergence is not just abstract geopolitics; it shapes the strategic environment in which Taipei must operate. The long-standing logic underpinning Taiwan's so-called "silicon shield"—that indispensability in global supply chains would translate into strategic protection—now calls for recalibration. As the United States moves to onshore semiconductor manufacturing and reduce foreign dependencies, Taiwan's strategic leverage will inevitably have to transition into a new phase. TSMC's $165 billion investment in Arizona is often interpreted as a concession to US pressure, but it can also be seen as a hedge by Taipei, a calculated effort to integrate its strategic value within the US defense-industrial base.[8] By becoming a stakeholder rather than merely a supplier, Taiwan can raise the political and operational cost of any disruption to its autonomy.[9]

However, this strategic entanglement carries its own risks. As more countries acquire advanced domestic fabrication capabilities, Taiwan's irreplaceability may diminish.[10] The more capacity that is relocated

abroad, the less concentrated Taiwan's leverage becomes. Recognizing this potential gap, Taipei is doubling down at home, investing in next-generation technologies such as 2-nanometer chip production in Kaohsiung.[11] These efforts, though necessary, may not be sufficient to future-proof Taiwan's stability and peace. In a shifting threat landscape, semiconductors alone no longer constitute a viable modern deterrent.

AI itself is now central to national security strategy, but its role is dual-purpose. It amplifies capability across the domains of defense and surveillance while also introducing new vectors of exposure.[12] Developing AI models is only one part of the strategic advantage; securing them against sabotage and misuse is another. States must not only develop AI systems that are effective and agile, they also must ensure those systems are secure, resilient, and governed by frameworks that mitigate adversarial use and critical failures.[13] This imperative spans civilian and military domains. The objectives differ, but the principle is the same: constant calibration, testing, and robust governance frameworks are prerequisites for secure and safe AI.

Taiwan has moved quickly to internalize this duality. In early February 2025, it banned Deep Seek, a Chinese-developed general purpose AI model, from public-sector use, citing risks tied to surveillance, data exfiltration, and disinformation.[14] The measure, while technical in tone, reflects lived experience. Taiwan has spent the better part of a decade countering algorithmic coercion in the form of daily cyber intrusions, precision-targeted disinformation campaigns, and linguistic manipulation calibrated to its cultural and political landscape.[15] These are not abstract threats; they are tactical, recurring, and increasingly automated and they have forced Taiwan to adapt earlier and faster than many of its democratic peers.

Europe, too, has undergone an extensive education in digital warfare. Russia's invasion of Ukraine in 2022 produced a strategic shift in how digital threats are perceived around the continent. What was once viewed as hybrid warfare is now seen as persistent and deliberate adversarial attacks. The Kremlin's deployment of "LLM grooming"—a tactic involving the systematic insertion of state-aligned narratives into the training datasets of Western AI models—reflects a growing convergence in gray-zone strategies.[16] By compromising the reliability of model outputs, influencing what AI systems may confidently present as factual or neutral, this approach poses a subtle yet significant threat to democratic discourse.[17] In method and strategic intent, it closely parallels the China's gray-zone toolkit: it is indirect, deniable, and designed to weaponize the transparency and openness that underpin democratic systems.[18]

This convergence of threats—from China's cyber-enabled subversion and Russia's AI data poisoning—has the potential to draw Europe and Taiwan closer in terms of strategic cooperation on the governance of digital technologies and AI, albeit quietly and on technical terms. The EU's AI Act, finalized in late 2024, bans a set of AI uses such as real-time remote biometric surveillance and emotion recognition systems, while introducing a tiered regulatory framework for general-purpose AI models, calibrated to the systemic risks they pose across different use cases.[19] This European approach might be seen as less glamorous than the display of hard military power, but deliberate, tailored AI governance and regulation in this context becomes something else: a strategic enabler of long-term security.

Safe and resilient AI systems are not the product of innovation and speed alone. They are the result of consistent safety calibration and iterative testing that make them more predictable, stable, and less prone to legal, operational, or political disruption. The logic that

governs high-quality weapons development, where precision and reliability are valued higher than the speed of assembly, applies equally to national-scale AI systems. AI regulation is therefore not an obstacle to security in the current geopolitical landscape. It is its architecture. Without it, states risk adopting and deploying AI systems that are as dangerous to the user as to the adversary, due to vulnerabilities to sabotage and circumvention of security protocols.

This is where Europe can become consequential. The EU might not command global dominance through military power, but it sets standards that shape how future technologies are built and how democratic governance legitimacy is conferred. For Taiwan, closer alignment with European AI regulatory frameworks offers a path to embed itself more deeply in the normative infrastructure of AI governance in the democratic world.[20] Europe may have fewer carrier strike groups, but it wields formidable regulatory power, and since Russia's invasion of Ukraine in 2022, a growing consensus has emerged across the continent: Neutrality in the face of authoritarian pressure is neither sustainable nor strategically viable as a foreign policy of the future. As a result, from Berlin to Prague, political attitudes toward Beijing have hardened. Quiet, technical partnerships with Taiwan across academia, civil society, and multilateral forums are no longer fringe propositions. They are becoming strategically rational, and increasingly, politically feasible.

The United States, too, has something to gain from this pluralism and from Taiwan's potential closer relationship with Europe. A more distributed coalition of technologically aligned democracies reduces the burden of unilateral leadership, shares risk across partners, and elevates the collective capacity to resist coercion whether economic, informational, or technological. Closer Taiwan–Europe alignment on AI governance strengthens the connective tissue of the democratic world. It reduces the space for norm capture by authoritarian actors and increases the likelihood that emerging technologies are grounded in shared principles.[21] This is not a zero-sum shift, but a democratic reinforcement across regions, across frameworks, and across capabilities.

The timing could hardly be better, and the stakes could hardly be higher. AI is already being deployed in domains that underpin democratic legitimacy, from elections and the judiciary to critical infrastructure such as energy grids, telecommunications networks, and transportation systems. How AI systems are governed, and by whom, will shape the trajectory of democratic institutions for generations. Taiwan, uniquely positioned as a frontline democracy and a technological powerhouse, is well equipped to navigate and shape this future. Its choices on regulation, partnerships, and investment will reverberate far beyond its borders. These are not just industrial decisions, but strategic acts of geopolitical positioning. By embedding its semiconductor leadership in allied networks, establishing guardrails for AI systems, and engaging in multilateral standard-setting, Taiwan can position itself not as a mere participant in great-power AI rivalry, but as a coauthor of the rules that will define it.

Europe and Taiwan face increasing AI-enabled gray zone attacks from China and Russia—tactical, persistent, and asymmetrical threats that erode stability without crossing conventional thresholds.[22] This shared exposure creates a convergence of strategic interest. For both, setting AI guardrails is not merely a normative ambition, it is a matter of survival and defense, and knowledge exchange between the two can accelerate and catalyze this process. That is the essence of strategic leadership in the AI era. Innovation may offer a temporary advantage, and while deterrence remains vital, it guarantees only survival. To endure, one must govern, and lasting influence belongs to those who shape the rules.

Endnotes

[1] Tim Hörster, "Silicon Shield or Silicon Trap? Taiwan's Semiconductor Dominance and the Strategic Calculus of Chinese Military Aggression", ResearchGate, May 2025. https://www.researchgate.net/publication/391522122_Silicon_Shield_or_Silicon_Trap_Taiwan's_Semiconductor_Dominance_and_the_Strategic_Calculus_of_Chinese_Military_Aggression

[2] Jana Puglierin, Janka Oertel, and Camille Grand, "Taiwan's balancing act: keeping the US in, China out, and domestic technology superior", European Council on Foreign Relations, April 4, 2025. https://ecfr.eu/article/taiwans-balancing-act-keeping-the-us-in-china-out-and-domestic-technology-superior/

[3] K&L Law, "Trump Administration Early Executive Orders Signal Shift in AI Policy", K&L, February 14, 2025. https://www.kslaw.com/attachments/000/012/533/original/Trump_Administration_Early_Executive_Orders_Signal_Shift_in_AI_Policy.pdf?1739557728

[4] Camille Baird, "New Executive Orders Signal Shift in U.S. Artificial Intelligence and Science Policy", Dinsmore Legal Alerts, March 14, 2025. https://www.dinsmore.com/publications/new-executive-orders-signal-shift-in-u-s-artificial-intelligence-and-science-policy/

[5] Zoe Kleinman and Liv McMahon , "UK and US refuse to sign international AI declaration", BBC News, February 11, 2025. https://www.bbc.com/news/articles/c8edn0n58gwo

[6] John Tasioulas, Ignacio Cofone, and Caroline Green, "Expert comment: Paris AI Summit misses opportunity for global AI governance", University of Oxford News & Events, February 14, 2025. https://www.ox.ac.uk/news/2025-02-14-expert-comment-paris-ai-summit-misses-opportunity-global-ai-governance

[7] ANI, "TSMC Raises Alarm on Potential US Tariffs Threatening $165 Billion Arizona Investment", ET Telecom, May 24, 2025. https://telecom.economictimes.indiatimes.com/news/devices/tsmc-raises-alarm-on-potential-us-tariffs-threatening-165-billion-arizona-investment/121379584

[8] Associated Press, "Taiwan says chipmaker's move to invest $100 billion in the US wasn't because of US pressure", March 6, 2025. https://apnews.com/article/taiwan-us-tsmc-chips-investment-71d3aeb2bc403a92ce8eccdd8c51c0c8

[9] Claudia del Pozo and Daniela Rojas, "The role of policies on technology and AI for innovation and increased competitiveness in North America", Brookings Institution, March 5, 2025. https://www.brookings.edu/articles/the-role-of-policies-on-technology-and-ai-for-innovation-and-increased-competitiveness-in-north-america/

[10] CNA, "TSMC to celebrate 2nm production expansion in Kaohsiung on March 31", Focus Taiwan, March 21, 2025. https://focustaiwan.tw/business/202503210021

[11] Sebastian Clapp, "Defence and Artificial Intelligence" (Briefing), European Parliament Members' Research Service, April 2025. https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2025)769580

[12] Alondra Nelson, "Regulating AI in the Evolving Transatlantic Landscape", Center for American Progress, April 22, 2025. https://www.americanprogress.org/article/trade-trust-and-transition-shaping-the-next-transatlantic-chapter/regulating-ai-in-the-evolving-transatlantic-landscape/

[13] Reuters, "Taiwan bans government departments from using DeepSeek AI", February 3, 2025. https://www.reuters.com/technology/taiwan-bans-government-departments-using-deepseek-ai-2025-02-03/

[14] Reuters, "Taiwan says China using generative AI to ramp up disinformation and 'divide' the island", April 8, 2025. https://www.reuters.com/world/asia-pacific/taiwan-says-china-using-generative-ai-ramp-up-disinformation-divide-island-2025-04-08/

[15] McKenzie Sadeghi and Isis Blachez, "A Well-funded Moscow-based Global 'News' Network has Infected Western Artificial Intelligence Tools Worldwide with Russian Propaganda", NewsGuard, March 6, 2025. https://www.newsguardtech.com/special-reports/moscow-based-global-news-network-infected-western-artificial-intelligence-russian-propaganda/

[16] Annie Newport and Nina Jankowicz, "Russian networks flood the Internet with propaganda, aiming to corrupt AI chatbots", Bulletin of the Atomic Scientists, March 26, 2025. https://thebulletin.org/2025/03/russian-networks-flood-the-internet-with-propaganda-aiming-to-corrupt-ai-chatbots/

[17] Kevin Zhang, "Taiwan's Shortage of Chipmakers: A Major Threat to the Industry's Long-Term Growth", Global Taiwan Institute, March 5, 2025. https://globaltaiwan.org/2025/03/taiwans-shortage-of-chipmakers-a-major-threat-to-the-industrys-long-term-growth/

[18] Kirk J. Nahra, Arianna Evers, Ali A. Jessani, Martin Braun, Anne Vallery, and Itzik Benizri, "The European Parliament Adopts the AI Act", WilmerHale Privacy and Cybersecurity Law Blog, March 14, 2024. https://www.wilmerhale.com/en/insights/blogs/wilmerhale-privacy-and-cybersecurity-law/20240314-the-european-parliament-adopts-the-ai-act

[19] Simona Grano, "EU-Taiwan Relations: Navigating PRC Pressure, US-China Competition, and Trump's Foreign Policy", Asia Society Policy Institute, March 19, 2025. https://asiasociety.org/policy-institute/eu-taiwan-relations-navigating-prc-pressure-us-china-competition-and-trumps-foreign-policy

[20] Alex Engler, "The EU and U.S. diverge on AI regulation: A transatlantic comparison and steps to alignment", Brookings Institution, April 25, 2023. https://www.brookings.edu/articles/the-eu-and-us-diverge-on-ai-regulation-a-transatlantic-comparison-and-steps-to-alignment/

[21] Reuters, "Taiwan urges its firms to boost cybersecurity as attacks jump amid China tensions", August 4, 2022. https://www.reuters.com/world/asia-pacific/taiwan-urges-its-firms-boost-cybersecurity-attacks-jump-amid-china-tensions-2022-08-04/

[22] Reuters, "Taiwan urges its firms to boost cybersecurity as attacks jump amid China tensions", August 4, 2022. https://www.reuters.com/world/asia-pacific/taiwan-urges-its-firms-boost-cybersecurity-attacks-jump-amid-china-tensions-2022-08-04/

New Frontiers: Taiwan's Space Industry

Advancing National Interests through International Space Cooperation

By Kayla Orta

At a global scale, national governments are increasingly calling attention to the future promise of today's rapidly expanding international space industry. With the global space economy expected to reach upwards of $1.8 trillion by 2035,[1] many nations are looking to secure an early seat at the table. Taiwan—internationally renowned for Taiwan Semiconductor Manufacturing Company's (TSMC) advanced semiconductor industry—is no exception.

Taiwan's Rising Space Industry

In recent years, the Taiwanese government has instituted policies aimed at expanding Taiwan's role in the global civil space industry ecosystem. While previously targeting satellite technology for scientific research purposes, Taiwan now seeks to enhance its national and economic security through the indigenous development of advanced, high-resolution optical remote sensing satellites (FORMOSAT-8), Synthetic Aperture Radar (SAR) satellites (FORMOSAT-9), and, in the long term, establishment of its own low Earth orbit (LEO) satellite communications constellation.

Additionally, Taiwan is working to shore up close partnerships for international collaboration in space-industry establishment and development. While many nations are highlighting space autonomy—aiming to secure indigenous supply chains—regional and cross-regional partnerships will be increasingly important in a high-demand and crowded industry. To seize new opportunities in the civilian space sector, Taiwan must move smartly to expand its nascent space initiatives. Lessons learned from South Korea's and Japan's space industry trajectories will be pivotal for in-region comparisons; and, globally, renewed cooperation with the United States and European nations will be key.

From Then to Now: Taiwan's Industry Landscape

Since the 1990s, Taiwan's government has aimed to establish its space technology industry by fostering the local talent and skills needed to push its domestic science and technology industry forward. Unlike other nations, which operate under UN collective policy initiatives for critical and emerging technology, Taiwan—due to its historic and political isolation—sought avenues of space development independently or in bilateral coordination with trusted, likeminded partner nations.

On October 3, 1991, the Executive Yuan approved the "Space Technology Long-term (15 years) Developmental Program", creating the National Space Program Office (NSPO).[2] Into the early 2000s, NSPO demonstrated early collaborative scientific research capacity-building through the successful completion of the Formosa Satellite (FORMOSAT) series 1, 2, and 3 programs. These early LEO satellite programs mainly supported scientific experiments, remote sensing, communication, and climate/weather analysis.[3]

During this period, Taiwan's space programs relied heavily on technology transfers with the United States and France. Launched in April 2006, the FORMOSAT-3, also knowns as the Constellation Observing System for Meteorology, Ionosphere and Climate (COSMIC), was the first joint US-Taiwan program consisting of a six-microsatellite LEO constellation.[4] Within 30 years of its establishment, Taiwan's space industry demonstrated its first indigenously designed and manufactured satellite[5] in the successful launch of FORMOSAT-5 and worked jointly with US industry for the FORMOSAT-7/COSMIC-2 mission, which was the world's first operational radio occultation satellite constellation for global weather and atmospheric data collection.[6]

In May 2021, the Legislative Yuan passed the Space Development Act, marking Taiwan's most recent phase in developing its national space capacity.[7] The act reestablished Taiwan's leading space agency, formerly the NSPO, as the Taiwan Space Agency (TASA) in 2023.[8] In order to further national security and industry imperatives, Taiwan's government called upon TASA to rapidly develop new space technology, including Taiwan's first LEO communication satellite initiative, the Beyond 5G LEO Satellite (B5G), and advancements in its remote sensing satellites, the FORMOSAT-8 and 9 programs.[9]

Looking to the future, there are both opportunities and challenges ahead for Taiwan's burgeoning space program. Importantly, Taiwan will need to balance its internal policy-driven advancements in light of ongoing debates regarding trade-offs in interdependency versus collaboration in space technology supply chains.[10]

Indo-Pacific Middle Power Players: South Korea and Japan

A domain of both economic and security competition, the space sector represents a difficult breakthrough industry for late-developing nations looking to rapidly expand their civil space industries. As Taiwan aims to ensure strengthened autonomy for its local space industry, Taipei should look to US partners and regional players—South Korea and Japan—as useful examples of space advancements and potential avenues for cooperation.

South Korea

South Korea's pursuits in space science and technology began in the 1980s, though with limited industry success. Recently, however, the Korea Aerospace Research Institute (KARI) is making great strides in developing the nation's own indigenous satellites and launch vehicles. Following a failed test in October 2021, South Korea's three-stage KSLV-II Nuri rocket, carrying a 162.5-kg (358 lbs.) payload, successfully placed multiple satellites into orbit in June 2022. The successful launch marked South Korea as the seventh country in the world—after Russia, the United States, France, China, Japan, and India—to develop an space launch vehicle for over 1-ton satellite payloads.[11]

Upscaling domestic space initiatives, on May 27, 2024, South Korean President Yoon Suk Yeol announced the establishment of the Korea AeroSpace Administration (KASA), alongside plans to invest upwards of $72.5 billion (KRW 100 trillion) by 2045.[12] Moving forward, South Korea aims to further establish its domestic space industry through investing in reusable launch vehicle technology (KSLV-III), domestic launch facilities, new high-resolution imaging satellites, and future lunar and Martian landers by 2032 and 2045 respectively.[13]

Japan

From its origins in the 1950s, Japan's space program has focused on science and technology research and the peaceful, non-military advancement of its space technology, including satellites, probes, and a joint US-Japan lunar rover. On February 11, 1970, Japan successfully launched its first satellite, Ohsumi, signifying significant technical advancements in US-Japan space cooperation. After a series of failed programs in the 1990s and early 2000s, Japan reorganized its internal agencies, consolidating three pre-existing agencies to create the Japan Aerospace Exploration Agency (JAXA) in October 2003.[14]

Today, Japan's well-established space industry is internationally recognized. Its government spending on space programs is ranked third highest in the world—surpassed only by the United States and China—at $9.8 billion in 2024. In January 2024, Japan, with its Smart Lander for Investigating Moon (SLIM),[15] became the fifth country globally to place a lander on the moon. In April 2024, the United States' NASA and Japan's JAXA announced a joint agenda for the development of a pressurized lunar rover by approximately 2031.

South Korea and Japan are exploring avenues for bilateral partnerships in advancing satellite navigation systems. In March 2024, the two nations agreed to collaborate on developing South Korea's Korean Positioning System (KPS) and Japan's Quasi-Zenith Satellite System (QZSS).[16] While Taiwan's Global Navigation Satellite System-reflectometry (GNSS-R) is still early in its design and implementation,[17] Taiwan's interest in this area presents an opportunity for South Korea-Japan-Taiwan trilateral collaboration on research toward enhancing satellite designs for precision positioning, navigation, and timing (PNT) for civilian use.

Partnering on Space: Collaboration Opportunities

Amid US-China competition, the civil space market is shifting. For Taiwan, there are opportunities for increased collaboration with the United States and European nations—especially as Taipei aims to demonstrate industry capabilities and signal its potential within the international space technology supply chain.

United States

Since the United States does not recognize Taiwan as a sovereign state and lacks formal diplomatic relations with Taipei, the National Aeronautics and Space Administration (NASA) does not have authority to enter into formalized bilateral partner programs with Taiwan. However, NASA has partnered with TASA on localized space technology testing over the years. Recently, the US legislature has shown interest in establishing avenues for bilateral partnerships and industry-to-industry support for Taiwan's rising space program, to bypass the obstacles to formalized space partnerships.[18] In March 2024, a bipartisan, bicameral bill, titled the "Taiwan and American Space Assistance (TASA) Act", was introduced in the US Congress.[19] Aimed at expanding cooperation in US-Taiwan civilian space activities, the bill outlines areas of possible cooperation in satellites, space exploration, and atmospheric and weather technology. While this bill remains in review, the introduction of bipartisan legislation suggests there may be room for future and further US-Taiwan cooperation in the space economy moving forward.

European Nations—France and Poland

Additionally, there are opportunities for Taiwan to expand its partnerships with European nations. The European Space Agency (ESA), convening 23 member

states, leads Europe's growing space industry, and represented 11 percent of global civil space budgets in 2023.[20] While Taipei does not hold diplomatic relations with the EU, there are recent openings for Taiwan's bilateral partnership on space technology development, most specifically with the well-established French and emerging Polish industries.

Most recently, TASA and the French National Space Agency (Centre national d'études spatiales, CNES) signed a Memorandum of Cooperation in 2023, renewing the well-established partnership. As part of Taiwan's ridesharing plans for FORMOSAT-9, CNES won TASA's scientific payload bid and will provide a space weather monitoring system.[21]

In December 2024, TASA and the Polish Space Agency (POLSA) signed their first bilateral Memorandum of Understanding, which aims to target collaboration in "space transportation systems, space situational awareness (SSA) technologies, and remote sensing technologies".[22] As newcomers to the space industry, Poland and Taiwan could work jointly to achieve advancements in telecommunication satellites and the application of SSA monitoring technology to detect space debris.

Overall, the United States, France, and Poland can serve as both continuing and new opportunities for Taiwan's growing space industry.

Policy Recommendations

In its pursuit of space autonomy, Taiwan will need to look closely at domestic industries' strengths and critically judge where to build up locally and where to incorporate foreign supply chains.

Where possible, Taipei should lean into local, regional, and cross-regional avenues for expansion, collaboration, and partnerships.

Domestic Public-Private Policy:

- Under the Space Development Act, Taiwan's government should collaborate closely with civil industry to build localized autonomy and secure early footholds in satellite design, manufacturing, and launch vehicle development.
- Taiwan's space policy development should prioritize a unified, multi-stakeholder approach—linking government, academia, and leading industry—and ensure cross-sector resources and knowledge-sharing.
- Taiwan should invest in upscaling satellite production, enhancing earth observation and remote sensing technologies, and evaluating the long-term viability of launch vehicle programs and testing sites.

Regional Engagement:

- Collaboration with like-minded middle powers—such as South Korea, Japan, and potentially India—can support joint science and technology development. The door should remain open for other newly developing space nations, including Indonesia, the Philippines, and Singapore.
- Specifically, Taiwan's TASA should pursue trilateral cooperation with KASA and JAXA to advance research in GNSS technology.
- Building regional research networks with key academic institutions like Korea Advanced

Institute for Science and Technology, the University of Tokyo, and the National University of Singapore will help cultivate next-generation space talent in the Indo-Pacific region.

Cross-Regional Collaboration:

- International collaboration should continue to play a critical and central role in Taiwan's advancing civil space industry development.
- Taipei should lean into pre-existing and new cross-regional space partners, including strengthening collaborative projects with NASA, the EU's ESA, and, in particular, France's CNES and Poland's POLSA.
- Moving forward, Taipei should pursue avenues to publicly demonstrate its technical advancements in the space sector, including participation in and hosting of international public–private civilian space summits.

Overall, Taiwan's policy-driven initiatives in the civilian space domain, though nascent, present windows of opportunity. As concerns grow over China's influence, countries may turn to partners like Taiwan for supply chain collaboration. Looking forward, Taiwan will need to leverage national strengths, recognize inherent industry weaknesses, and enhance international cooperation both within and beyond the Indo-Pacific region to attain a foothold in the international space ecosystem.

Endnotes

[1] *World Economic Forum, "Space: The $1.8 Trillion Opportunity for Global Economic Growth", April 2024. https://www3.weforum.org/docs/WEF_Space_2024.pdf*

[2] *Taiwan Space Agency (TASA), "Important Events". https://www.tasa.org.tw/en-US/about-tasa/important-events*

[3] *Jann-Yenq Liu, "Taiwan Space Programs", 37th COSPAR Scientific Assembly, July 2008. https://ui.adsabs.harvard.edu/abs/2008cosp...37.1798L/abstract*

[4] *Chen-Joe Fong et al., "FORMOSAT-3/COSMIC Constellation Spacecraft System Performance: After One Year in Orbit", IEEE Transactions on Geoscience and Remote Sensing, October 2008. https://ir.lib.nycu.edu.tw/bitstream/11536/8180/1/000261309100003.pdf*

[5] *Aurélie Gillet, "Taiwan: A Serious Up-and-Coming Player in the Space Industry", Satellite Markets & Research. https://satellite-markets.com/news-analysis/taiwan-serious-and-coming-player-space-industry*

[6] *Jiun-Ru Chiang, Fen Su, and Jie-Yun Hung, "Commencing Countdown: Taiwan's Journey in Space Development", Taiwan Insight, February 2025. https://taiwaninsight.org/2025/02/28/commencing-countdown-taiwans-journey-in-space-development/*

[7] *Legislative Yuan, "Space Development Act", implemented on January 2022; amended on June 2003. Law & Regulations Database. https://law.moj.gov.tw/ENG/LawClass/LawHistory.aspx?pcode=H0160078*

[8] *Taiwan Space Agency (TASA), "Introduction", n.d. https://www.tasa.org.tw/en-US/about-tasa/introduction*

[9] *Chiang et al., "Commencing Countdown".*

[10] *For discussion on space nations' debates on economic nationalism versus supply chain interdependency, see Kun-Chin Lin, William Matthews, and Sam Olsen, "Middle Spacepowers' Integration with the Global Supply Chain for the Space Industry: Taiwan and Thailand", Business and Politics, 2024. https://www.cambridge.org/core/services/aop-cambridge-core/content/view/2E85014CB0CC39C92536D376E1C2D78A/S1469356924000181a.pdf/middle-spacepowers-integration-with-the-global-supply-chain-for-the-space-industry-taiwan-and-thailand.pdf*

[11] *Ibid.*

[12] *The Korea Times, "Yoon Unveils Ambitious Space Exploration Goals", May 30, 2024. https://www.koreatimes.co.kr/southkorea/health/20240530/yoon-unveils-ambitious-space-exploration-goals*

[13] *Voice of America (VOA), "South Korea Establishes Space Agency, Targets Mars Landing", June 2024. https://learningenglish.voanews.com/a/south-korea-establishes-space-agency-targets-mars-landing/7644502.html*

[14] *Japan Aerospace Exploration Agency (JAXA), "JAXA History". https://global.jaxa.jp/about/history/index.html*

[15] *JAXA, "Smart Lander for Investigating Moon (SLIM)". https://global.jaxa.jp/projects/sas/slim/*

[16] *The Korea Times, "Korea, Japan to Cooperate in Developing Satellite Navigation System", March 26, 2024. https://www.koreatimes.co.kr/foreignaffairs/20240326/korea-and-japan-forge-partnership-in-satellite-navigation-system-development*

[17] *Jyh-Ching Juang, Yung-Fu Tsai, and Chen-Tsung Lin, "TRITON GNSS-R Mission: Preliminary Results and Perspectives", IEEE Geoscience and Remote Sensing Symposium, July 2024. https://ieeexplore.ieee.org/document/10642499*

[18] *"Senators Schmitt, Duckworth and Reps. Hill, Caraveo Introduce the Taiwan and America Space Assistance Act of 2024", March 14, 2024. https://www.schmitt.senate.gov/media/press-releases/senators-schmitt-duckworth-and-reps-hill-caraveo-introduce-the-taiwan-and-america-space-assistance-act-of-2024/*

[19] *US Congress, "S.3936 - Taiwan and American Space Assistance Act of 2024", under review as of March 2024. https://www.congress.gov/bill/118th-congress/senate-bill/3936/all-actions*

[20] *European Space Agency (ESA), "Report on the Space Economy", December 2024. https://space-economy.esa.int/documents/b61bt-vmeaf6Tz2osXPu712bL0dwO3uqdOrFAwNTQ.pdf*

[21] *TASA, "Taiwan and France Strengthen Space Cooperation with FORMOSAT-9 Payload Partnership", December 2024. https://www.tasa.org.tw/en-US/announcements/detail/57c6a9ed-ab5f-4a3b-8297-441b721b6af1*

[22] *TASA, "TASA and POLSA Sign First MoU to Advance Space Transportation, Situational Aware", December 2024. https://www.tasa.org.tw/en-US/announcements/detail/4c7c15ae-317b-4403-8b99-1c1adf211ecf*

Cybersecurity Assistance

An Opportunity for Europe to Step Up

By Benjamin Read

The Trump administration's cuts to US cybersecurity agencies and foreign aid mean a diminished role for the United States in the provision of cybersecurity assistance to Taiwan and present Europe with an opportunity to step into the vacuum. China's use of cyber operations against Taiwan is a serious threat, and while Taiwan has prioritized securing its critical infrastructure, assistance from friendly countries is vital to the successful defense of the island.

The United States has historically been the biggest provider of cybersecurity assistance to Taiwan; European countries should now help fill this gap. Increased cybersecurity cooperation between Europe and Taiwan would bolster a key aspect of Taiwan's security and allow Europe to learn from Taiwan's experiences to secure their own critical infrastructure.

China's Cyber Threat to Taiwan

China presents a tremendous cyber threat to Taiwan that would be extremely difficult for Taiwan to defend against alone. Offensive cyber operations are a key tool of the People's Republic of China's (PRC) statecraft and a significant and ongoing threat to Taiwan's critical infrastructure. Cyber operations can enable the PRC to pressure Taiwan's government, disrupt the lives of its citizens, sow political discord, and even impede the government's response to a military action. China is investing heavily in its cyber capabilities, and they are likely to be central to efforts to drive unification with Taiwan.

China uses cyber operations to intimidate Taiwan's citizens by conducting cyber-enabled information operations via critical communications infrastructure. These can be especially powerful because they hijack legitimate communication channels to reach large audiences where they expect to get trusted information. This was prominently demonstrated with an attack during former Speaker Pelosi's visit to the island: video screens at 7/11 convenience stores around Taiwan were made to display "戰爭販子裴洛西滾出台灣" [Warmonger Pelosi, get out of Taiwan].[1] While this instance had only a superficial impact, it demonstrates the power and reach that these types of operations can have. The PRC likely retains the capability to conduct operations on this scale or larger at a time of its choosing and would likely employ this type of information operation during a crisis or invasion scenario.

Yet the use of cyber operations to intimidate or misinform Taiwan's citizens is not the most severe threat posed by China. While China, unlike the other major cyberpowers such as Iran, Russia, and the United States, has not conducted large-scale disruptive cyberattacks, it certainly maintains the technical capability to do so. Further, Taiwan is the location in which the PRC has shown the greatest willingness to cause disruptions. Europe should help Taiwan prepare in anticipation of future escalations.

The most severe threat to Taiwan is a cyber operation by China that aims to disrupt critical, life-sustaining infrastructure in Taiwan. An attack like this could be used to pressure Taiwan's government during a blockade, for instance by exacerbating power issues created by a disruption in the supply of natural gas or disabling key infrastructure to hamper Taiwanese resistance to an invasion. In 2020, Taiwan's Ministry of Justice Investigation Bureau (MJIB) released a statement[2] saying that "Winnti", a moniker for a cluster of cyber intrusion activity that acts in support of PRC goals, had conducted a ransomware attack on CPC Corp, a Taiwanese energy company.[3] This attack represents only a fraction of what China's cyber forces could bring to bear against Taiwan in a crisis, making cyber defense key to societal resilience.

The Current Status of Taiwan's Cyber Defense

At present, Taiwan faces key challenges in enhancing its cybersecurity, particularly in securing critical infrastructure. It is in this area that it would most benefit from European assistance.

While Taiwan is home to numerous cutting-edge technology companies, investments in cybersecurity have historically lagged, with a particular deficit in protecting operational technology (OT).[4] Taiwanese firms' emphasis on hardware rather than software has led to a shortage of cybersecurity professionals. The Information Security Agency's 2024 budget said that "domestic information security talents are in short supply" and identified many cybersecurity job classifications with only 55% to 75% of the required positions filled, often due to competition for scarce talent between the public and private sectors.[5]

Coordination between the various parts of the government responsible for cybersecurity also is inadequate. The development of cybersecurity policy is led by the Administration for Cyber Security (ACS)[6] and the National Institute of Cyber Security (NICS), both of which sit under the Ministry of Digital Affairs (MODA). While the ACS has statutory responsibility for creating regulations about how entities should respond to cybersecurity incidents, the responses themselves are handled by the MJIB[7] in coordination with the National Security Bureau (NSB).[8] In addition to these civilian agencies, the military is responsible for securing its own networks and sharing information with civilian agencies.[9] While structures like the Joint Intelligence Operations Center (情次室聯合情研中心)[10] can facilitate this, sharing of threat information is often limited by operational security concerns.

In addition to the cybersecurity agencies within the government, much of the day-to-day network defense of the life-sustaining systems in Taiwan is carried out by the state monopolies, Taiwan Power Company (Taipower) and Taiwan Water Corp (Taiwater). These state monopolies are chronically underfunded, with Taiwater running with a deficit of TWD 3.94 billion in 2024 and Taipower facing a TWD 422.9 billion shortfall.[11]

Lai Ching-te's administration is attempting to overcome these difficulties. In April 2025, Taiwan's National Security Council (NSC) published its updated information security strategy.[12] Homeland Defense and Critical Infrastructure (國土防衛與關鍵基礎設施) is the second of four pillars of this strategy.[13] The strategy also identifies cooperation with strategic partners as both depending on information security and crucial to it. Successful implementation of this strategy will not be easy and will require addressing the workforce and expertise gaps presently facing Taiwan.

An Opportunity for Europe

European countries can and should play a vital role in helping Taiwan secure its critical infrastructure from cyber attacks and this is doubly true in the wake of the United States' reduced engagement. Historically, the United States has been Taiwan's primary cybersecurity partner, but support from the United States is likely to decline in the near term. The Trump administration has enacted deep cuts to foreign assistance and US cybersecurity agencies.[14] This creates a vacuum that European countries are well positioned to fill. [15] Ensuring Taiwan's ability to defend against cyber attacks is key to the EU's stated goal of preserving the status quo in the Taiwan Strait.[16]

Increasing assistance and engagement would not just help Taiwan but would also make Europe more secure. Dutch Military Intelligence recently called the threat from Chinese cyber operations "more threatening than Russia".[17] Capacity building and information sharing would bring significant benefits for the donor countries. Because Taiwan is China's top cyber target, it is where the PRC often first implements new tactics. Cybersecurity links between Taiwan and European governments can give those partner states insights into the types of operations that may target them in the future. This feedback loop would build important ties between Taiwan and collaborating countries and make all parties more secure.

Defensive cybersecurity assistance to Taiwan should also be an attractive option for European countries who want to do more to support Taiwan, but do not want to risk retaliation from China. Defensive cybersecurity assistance is less provocative than sales of military equipment, and so runs less of a risk of Chinese retaliation. Cybersecurity assistance can also be framed as hardening systems against ransomware and other forms of cyber crime, rather than being aimed at countering China. In contrast to weapons systems, cybersecurity assistance cannot be used to support offensive operations. While the PRC may object to any support to Taiwan by outside countries, cybersecurity assistance is less inflammatory than conventional military assistance.

Further, European countries that do not want to partner directly with the Taiwanese government may nevertheless contribute to Taiwan's cybersecurity by encouraging private-sector partnerships. To date, publicly-acknowledged European cybersecurity collaboration with Taiwan has focused on the promotion of commercial ties and digital commerce.[18] This includes events like the second Taiwan-EU Dialogue on Digital Economy (DDE)[19] and memoranda of understanding such as the 2023 MOU on digital cooperation with Lithuania.[20] Countries that prefer to support Taiwan through the private sector can fund private cybersecurity companies to support Taiwan's defense and facilitate partnerships between European utilities and their Taiwanese counterparts on best practices.

Making the Most of the Aid

Assuming that European countries take up the mantle of cybersecurity assistance to Taiwan, Taipei must utilize a coordinated approach to maximize the benefits from this potential increase in cybersecurity assistance from abroad. While the MODA has the lead in coordinating regulation and government response, important tactical roles are played by the MJIB and the military. The Executive Yuan needs to ensure that the drive for more cybersecurity assistance for Taipei is coordinated so that multiple countries are not asked for the same type of assistance. Once a partnership with a country has been formed, coordination among the various parts of Taiwan's government needs to ensure that everyone benefits from these

partnerships, including private industry when appropriate. The lead agency will vary by program, but transparency and inclusion are needed to spread the lessons learned to everyone who could benefit.

Taiwan should also talk more publicly and in greater detail about the intrusions that it discovers. This now happens in a limited fashion, but more regularity and technical detail would have a multitude of benefits for Taiwan's national security. PRC cyber campaigns targeting Taiwan are regularly identified by private cybersecurity companies, and likely also by the Taiwanese government itself. While public reports are issued sporadically, such as the NSB's "Analysis on China's Cyberattack Techniques in 2024",[21] these contain limited detail. The highest-profile report on PRC cyber activity in 2025 was legislator Puma Shen's identification of a watering hole attack from the PRC-linked group APT24 during a session of the Legislative Yuan.[22] This operation compromised multiple Taiwanese websites with a goal of infecting their visitors with malware. MODA's Administration for Cyber Security publishes a "Cyber Security Monthly Report"[23] that provides high level statistics and anecdotes; however, these publications do not provide indicators of compromise (IOCs) that would allow security teams to hunt for the identified activity within their environments. The high-level statistics do not have enough context to help companies make strategic investments, limiting the usefulness of this publication.

Taiwan could gain significant benefits from following the model set forth by the Governmental Computer Emergency Response Team of Ukraine (CERT-UA), which regularly publishes technical details on the criminal- and state-backed threats affecting the Government of Ukraine.[24] Public reports such as this with high levels of detail accomplish multiple goals across different audiences. For private and public sector entities in a country, these reports can educate senior officials about the severity of the threat and give network defenders sufficient data to respond effectively. They also can tell international audiences a detailed story that highlights a country's plight in a way that meaningless counts of "attempted hacks per day" cited in the "Cyber Security Monthly Report" mentioned above cannot. Finally, such reports can build credibility for a government's cybersecurity analysis capabilities. If other countries see Taiwan as knowledgeable, it will motivate them to reach out and collaborate with the threatened country.

In the past, concerns about raising cross-Strait tensions may have held Taiwan back from making public statements about PRC hacking, but the environment has shifted in 2025. The PRC has issued multiple reports on alleged Taiwan-based hackers, in one case public identifying individuals and releasing their photographs,[25] and in another publicly blaming the DPP for sponsoring the hacking.[26] These reports are attention-grabbing, but do not contain supporting technical evidence. This gives Taiwan an opportunity to release their own, substantial reporting detailing China's activities and so ensure that the international community understands that the PRC's cyber operations are much more aggressive and destabilizing.

Conclusion

Europe has an opportunity to help Taiwan blunt the impact of one of China's favored tools of coercion while improving its own security—and should take it. Success will require Taiwan's government to coordinate internally to ensure that any assistance is effectively utilized; but international partnerships and information sharing have the potential to deliver real benefits for both sides and can help mitigate the likely decrease in US assistance.

Endnotes

[1] 陳昀蓁 (Chen Xunzhen), "獨／台灣成駭客攻擊熱區！「關鍵基礎設施」一旦遭駭後果慘" [Exclusive/Taiwan Becomes a Hot Zone for Hacker Attacks! The Consequences of Hacking "Critical Infrastructure" Are Tragic], TVBS新聞網 [TVBS News Network], August 3, 2022. https://news.tvbs.com.tw/life/1866265

[2] 法務部調查局 (Ministry of Justice Investigation Bureau), "調查局破獲油品、高科技、金融等產業營業秘密遭竊案" [Investigation Bureau Cracks Cases of Theft of Trade Secrets in Oil, High-Tech, Finance and Other Industries], 法務部調查局 [Ministry of Justice Investigation Bureau], May 21, 2020. archived May 31, 2020. https://web.archive.org/web/20200531005757/https://www.mjib.gov.tw/news/Details/1/607

[3] Sean Lyngaas, "Taiwan's state-owned energy company suffers ransomware attack", CyberScoop, May 5, 2020. https://cyberscoop.com/cpc-corp-ransomware-attack-taiwan-trend-micro/

[4] Alex Myslinski, "The Role of Taiwan's National Institute of Cyber Security", Taiwan Business TOPICS, February 10, 2025. https://topics.amcham.com.tw/2025/02/the-role-of-taiwans-national-institute-of-cyber-security/

[5] 數位發展部資通安全署 (Ministry of Digital Affairs, Administration for Cyber Security), 112年國家資通安全情勢報告 [2023 National Information and Communication Security Situation Report], December 2023. https://www-api.moda.gov.tw/File/Get/acs/zh-tw/CTJFP6xMKMkF0fB

[6] Ministry of Digital Affairs, Administration for Cyber Security, "About Us: Functions", 2025. https://moda.gov.tw/en/ACS/aboutus/functions/924

[7] Ministry of Justice Investigation Bureau, „Cyber Crime Prevention", last modified June 1, 2022. https://www.mjib.gov.tw/EditPage/?PageID=cccf1206-a941-466d-84c0-5b505a3c4acb

[8] Jason Pan, "NSB employing 'hackers' for new cybersecurity unit," Taipei Times, March 28, 2015. https://www.taipeitimes.com/News/front/archives/2015/03/28/2003614569

[9] Chen Chih-cheng, Aaron Tu and Jonathan Chin, „MND to harden cybersecurity ahead of drills," Taipei Times, June 12, 2024. https://www.taipeitimes.com/News/taiwan/archives/2024/06/12/2003819234

[10] Russell Hsiao, "Taiwan's Military Intelligence Undergoing Reforms Amid Growing Threats from the PLA", Global Taiwan Brief 8, no. 15, August 9, 2023. https://globaltaiwan.org/2023/08/taiwans-military-intelligence-undergoing-reforms-amid-growing-threats-from-the-pla/

[11] Jeanny Kao and Ben Blanchard, "Taiwan freezes electricity prices, reports power utility losses of $1.3 bln", Reuters, March 28, 2025. https://www.reuters.com/business/energy/taiwan-freezes-electricity-prices-reports-power-utility-losses-13-bln-2025-03-28/

[12] National Cyber Security Office, "National Cyber Security Strategy 2025", April 2025. https://www.president.gov.tw/File/Doc/9d056651-e4a0-4d51-adeb-5fee5ee71299.

[13] Wu Che-yu and Sam Garcia, "Infrastructure at core of NSC strategy", Taipei Times, April 14, 2025. https://www.taipeitimes.com/News/front/archives/2025/04/14/2003835133

[14] Dana Nickel, "CISA cuts: 'Open season' for US?", Weekly Cybersecurity (Politico newsletter), April 14, 2025. https://www.politico.com/newsletters/weekly-cybersecurity/2025/04/14/cisa-cuts-open-season-for-us-00288451

[15] Alan Charlish and Pawel Florkiewicz, "Poland to spend 3 bln zlotys on cybersecurity after attack on news agency", Reuters, June 3, 2024. https://www.reuters.com/technology/cybersecurity/poland-spend-3-bln-zlotys-cybersecurity-after-attack-news-agency-2024-06-03/

[16] EEAS Press Team, "Taiwan: Statement by the Spokesperson on China's military drills", January 4, 2025. https://www.eeas.europa.eu/eeas/taiwan-statement-spokesperson-china%E2%80%99s-military-drills-0_en

[17] Elena Giordano, "Chinese Cyber Menace More Threatening than Russia, Warns Dutch Spy Chief", POLITICO, May 8, 2025. https://www.politico.eu/article/china-cyber-menace-more-threatening-russia-warns-dutch-spy-chief/

[18] European Commission, Directorate-General for Trade and Economic Security, "EU and Taiwan hold third Trade and Investment Dialogue", Trade and Economic Security News, December 17, 2024. https://policy.trade.ec.europa.eu/news/eu-and-taiwan-hold-third-trade-and-investment-dialogue-2024-12-17_en

[19] National Development Council, R.O.C. (Taiwan), "The 2nd Taiwan-EU Dialogue on Digital Economy (DDE) Successfully Concluded; Taiwan-EU Cooperation Moving Forward toward a New Frontier", December 9, 2020. https://www.ndc.gov.tw/en/nc_8455_34617

[20] Ministry of Digital Affairs, "Minister Tang takes part in 1st e-signing of Taiwan-Lithuania cooperation pact", Press Release, June 1, 2023. https://moda.gov.tw/en/press/press-releases/5309

[21] National Security Bureau, R.O.C. (Taiwan), "Analysis on China's Cyberattack Techniques in 2024". January 5, 2025. https://www.nsb.gov.tw/en/assets/documents/%E6%96%B0%E8%81%9E%E7%A8%BF/7d-118bec-6a18-4e95-ad85-4055fc48cc31.pdf

[22] 鄭佑漢 (Zheng Youhan), "揭弊者網站成資安漏洞？ 沈伯洋爆「類似中國APT24 駭客組織」" [Whistleblower Website Becomes a Security Vulnerability? Puma Shen Reveals 'Similar to China's APT24 Hacker Group'], 中央廣播電台 (Radio Taiwan International), March 18, 2025, via Yahoo奇摩新聞 (Yahoo News Taiwan). https://tw.news.yahoo.com/%E6%8F%AD%E5%BC%8A%E8%80%85%E7%B6%B2%E7%AB%99%E6%88%90%E8%B3%87%E5%AE%89%E6%BC%8F%E6%B4%9E-%E6%B2%88%E4%BC%AF%E6%B4%8B%E7%88%86-%E9%A1%9E%E4%BC%BC%E4%B8%AD%E5%9C%8Bapt24-%E9%A7%AD%E5%AE%A2%E7%B5%84%E7%B9%94-101658368.html

[23] Ministry of Digital Affairs, Administration for Cyber Security, "Cybersecurity Monthly Report (March 2025)", April 18, 2025. https://moda.gov.tw/en/ACS/press/report/15860

[24] Computer Emergency Response Team of Ukraine (CERT-UA), "Кібератаки UAC-0102 з метою викрадення автентифікаційних даних облікових записів користувачів UKR.NET (CERT-UA#10381)» [UAC-0102 cyberattacks aimed at stealing authentication data of UKR.NET user accounts (CERT-UA#10381)], July 24, 2024. https://cert.gov.ua/article/6282946

[25] Guo Yuandan, "Taiwan-based hacking group engages in persistent cyberattacks against Chinese mainland: cybersecurity firm," Global Times, March 18, 2025. https://www.globaltimes.cn/page/202503/1330311.shtml

[26] Cao Yin, "Cyberattack on Guangzhou tech firm linked to DPP," China Daily, May 27, 2025. https://www.chinadaily.com.cn/a/202505/27/WS68350f1ea310a04af22c1a52.html

About the Authors

Bonnie S. Glaser

Bonnie S. Glaser is managing director of GMF's Indo-Pacific program. She is also a nonresident fellow with the Lowy Institute in Sydney, Australia, and a senior associate with the Pacific Forum. She is a co-author of US-Taiwan Relations: Will China's Challenge Lead to a Crisis (Brookings Press, April 2023). She was previously senior adviser for Asia and the director of the China Power Project at the Center for Strategic and International Studies. Glaser has worked at the intersection of Asia-Pacific geopolitics and US policy for more than three decades.

Michal Bokša

Michal Boksa works as an International Affairs Analyst at NATO's Joint Force Command in Naples (Italy). In the past, he worked as an Analyst at NATO's Reach-back Analytical Cell, NATO's Supreme Headquarters Allied Powers Europe, and at NATO Defence College. Michal holds a Master's degree in International Relations and Politics from the University of Cambridge.

Philipp Buschmann

Philipp Buschmann is a Japan Hand based in Washington, D.C. In 2020-'23, he served as Policy Advisor under then-Chairman of the Japanese Foreign Affairs Committee and current Minister for Economic Security Minoru Kiuchi, handling his foreign affairs and defense portfolios. Buschmann hails from Vienna, Austria, and is fluent in English, German, and Japanese.

Johanna M. Costigan

Johanna M. Costigan is Associate Director of Research at the Paulson Institute. In this role, she works on research and writing spanning global policy developments across technology, green finance, and economic relations. Previously, she held editorial and research roles at Trivium China, the United Nations, the Asia Society Policy Institute, Stanford University's DigiChina, the National Committee on US-China Relations, and other organizations. She has an MsC in Contemporary Chinese Studies from the University of Oxford and a BA from Bard College, where she double majored in East Asian Studies with a focus on Chinese language and literature and Written Arts. Her work has been published in Forbes, WIRED, Los Angeles Review of Books, Foreign Policy, China Books Review, Rest of World, Project Syndicate, ChinaFile, Nikkei Asia, and others.

Natalie Ivanov

Natalie Ivanov is a Senior Officer for Special Initiatives in the Bill and Melinda Gates Foundation's Global Policy & Advocacy (GPA) division. In this role, she supports the GPA president, chief of staff, and division by managing special initiatives that span programmatic and operational domains. Her work has included developing a cross-foundation climate advocacy strategy and overseeing the foundation's engagement with the G20. Prior to joining the foundation, Natalie served as Program Director for North Carolina's COVID-19 response, leading strategy and operations for testing, vaccinations, and therapeutics in partnership with the CDC Foundation COVID-19 Corps. In this role, she launched and expanded the state's COVID-19 testing program to include vaccine and antibody access for historically marginalized communities. Natalie holds a BA in Political Science and Bioethics from Yale University and an MPH from Johns Hopkins University.

Thomas König

Thomas König is Director China at the German Chamber of Industry & Commerce (DIHK), co-author of the book "How to manage China" (now in its third edition) and "China - Mastering business and everyday life." He is concurrently a McCloy Fellow on Global Trends at the American Council on Germany and has a teaching position at the TU Berlin in the winter semester 2024/2025. König has many years of experience in China, including at the world's largest German Chamber of Commerce (AHK) in Shanghai, which serves over 1,600 member companies. He studied at Yale, LSE and SOAS with an English-Chinese semester at Peking University, and worked at the European Council on Foreign Relations in London and Paris. König developed training programs for future Chinese UN diplomats the United Nations Institute of Training and Research (UNITAR) in Geneva. König was voted one of the top 100 decision-makers in German-Chinese relations by Table.Media Professional Briefings in 2024.

Jacob Kostrzewski

Jacob Kostrzewski is the Events Manager at Princeton University's School of Public and International Affairs in Washington, DC. Previously, he was a Program Manager on the Central and Eastern Europe team at the National Democratic Institute (NDI), where he supports the Institute's programming in Serbia, along with countering disinformation narratives in the Western Balkans and supporting political party integrity in the region. Prior to his time at NDI, Jacob served as a program coordinator at Arizona State University's International Rule of Law and Security program, where he helped manage the program's international development portfolio and its law program in Washington, DC. Jacob holds a master's degree in Foreign Service from Georgetown University and a bachelor's in Economics and International Relations from Northeastern University. In addition to English, Jacob speaks fluent Polish, advanced French, and beginner Serbo-Croatian.

Ben Levine

Ben Levine is a program coordinator at the Global Taiwan Institute. He graduated from George Washington University with a MA in Chinese Language and Culture. Ben received his BA from Boston University majoring in international relations, with a functional concentration in international economics and a regional concentration in Asia. Previously, Ben was awarded a fellowship from the Taiwan Education and Research Program at GWU to research Taiwanese defense policy and hypothetical US responses. He also was awarded a Huayu Enrichment Scholarship in August 2022, allowing him to spend 9 months in Taipei at National Chengchi University studying Mandarin. His research focuses on Taiwan's defense policy and various social and economic issues in Taiwan.

Shuxian Luo

Shuxian Luo is an assistant professor (tenure-track) in the Department of Asian Studies at the University of Hawaii, Mānoa, and a Stanton Nuclear Security Fellow at the Council on Foreign Relations (CFR). She previously held academic appointments at the U.S. Naval War College, Brookings Institution, Johns Hopkins University School of Advanced International Studies (SAIS), the Notre Dame International Security Center, and the Woodrow Wilson International Center for Scholars. Dr. Luo's research interests include maritime security in the Indo-Pacific, Chinese foreign policy, and U.S.-China relations, especially crisis management. She received a Ph.D. in International Relations from Johns Hopkins SAIS, an M.A. in China Studies and International Economics with a minor in Japan Studies from SAIS, an M.A. in

Political Science from Columbia University, and a B.A. in English Literature from Peking University.

Julia Mykhailiuk

Julia Mykhailiuk is the EU AI Policy Co-Lead at Pour Demain in Brussels, where she advises EU policymakers on the governance of general-purpose AI (GPAI) models. She is also a Research Fellow at FP21 in Washington D.C, where her work explores the intersection of international AI governance, democracy, and US foreign policy. Julia has contributed to the European Commission, the EU AI Office, OECD, and UNESCO on developing frameworks for risk identification, management, and oversight of GPAI models. Her focus lies in shaping governance safeguards and mitigating systemic risks to ensure the responsible deployment of AI across democratic institutions, national security agencies, and critical infrastructure. She has over a decade of international experience across the UK, US, EU, Ukraine, and Norway, and is fluent in multiple languages.

Kayla Orta

Kayla T. Orta is a Nonresident Fellow in the Indo-Pacific Security Initiative at the Atlantic Council's Scowcroft Center for Strategy and Security. Formerly a US Department of Defense NSEP Boren Scholar to South Korea, her expertise lies in US-Indo-Pacific and US-South Korean foreign relations, specifically at the intersection of security and technology policy. Previously, she was the Senior Associate for the Hyundai Motor-Korea Foundation Center for Korean History and Public Policy at the Wilson Center, where she oversaw the Korea Center's programmatic and strategic engagement, expanding conversations on US-Korean cooperation on security, trade, technology, and energy. Recently, Orta led the Wilson Center's inaugural NextGen US-ROK Leadership Initiative for science, technology, and industry. Professionally fluent in Korean, her most recent book, titled Avoiding Meltdowns & Blackouts: Confidence-Building in Inter-Korean Engagement on Nuclear Safety and Energy Development (Wilson Center, 2023), features insights from US and South Korean S&T policy experts.

Benjamin Read

Ben Read is an Adjunct Lecturer at the Alperovitch Institute at Johns Hopkins and is a leading cyber espionage researcher. He spent eight years leading Mandiant's Cyber Espionage Analysis team, which tracked and reported on state backed hackers from China, Russia, North Korea, Iran and many other countries. Prior to Mandiant, Mr. Read worked as a special assistant at the National Security Council's European Affairs Directorate. Mr. Read holds a Masters in International Affairs from Columbia University's School of International and Public Affairs, where he specialized in International Security Policy, and a bachelor's degree in Political Science and German Studies from Amherst College.

G | M | F