

# FORUM



## CONSPIRACY OF SILENCE

Lack of Transparency  
Worsens Human, Economic Toll  
of Coronavirus

武汉市中心医院  
李文亮 7228

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### ABOUT THE COVER:

Hailed as a hero, Dr. Li Wenliang, the Wuhan eye doctor who was silenced by the Chinese government for trying to warn others about the deadly coronavirus and later succumbed to it, became emblematic of the People's Republic of China's suppression of information.

FORUM ILLUSTRATION



Dear Readers,

Welcome to *Indo-Pacific Defense FORUM's* issue on defense economics.

Globalization, technological advances, and the evolving strategic environment are several factors redefining the battlespace. To meet emerging challenges, nations and militaries in the Indo-Pacific region need to take a fresh look at the notion of what constitutes defense economics to responsibly leverage economic power to ensure national, regional, and global security.

Dr. Alfred Oehlers, a political economist with the Daniel K. Inouye Asia-Pacific Center for Security Studies, sets the stage for this edition with his essay on the evolution of the meaning of defense economics in an age of strategic competition. He argues that the field, as an instrument to marshal economic power for decisive advantage, will play a key role in preserving a Free and Open Indo-Pacific. As Dr. Oehlers explains, defense economics embraces a range of concerns, from managing contemporary defense economies, modernizing logistics, and modernizing acquisition processes to running influence operations and countering checkbook diplomacy.

Our cover feature about the People's Republic of China's suppression of information and individuals during the early stages of the 2019 coronavirus outbreak in Wuhan explores links between public health practices and defense economics. The story arc of the late Wuhan ophthalmologist and whistleblower Dr. Li Wenliang reveals how failures in health policy and governance can prove costly to societies economically and in terms of human lives and freedoms.

Next, Neil K. Watts and William J. Newcomb, former members of the United Nations Panel of Experts on sanctions against North Korea, examine the international effort to seize the North Korean vessel *Wise Honest* for illicitly transporting the regime's coal to China, Russia, and other countries. The first such seizure by the United States unveils the complexities of sanctions enforcement against North Korea and highlights the U.S. commitment to maintaining maximum pressure on the Kim Jong Un regime to abandon all nuclear weapons and existing nuclear programs in a complete, verifiable, and irreversible manner.

Additionally, Ashley Taylor, a senior collaborator at Compliance and Capacity Skills International, probes how cryptocurrencies and other innovations in the cyber sphere are creating ways for rogue actors to wage an asymmetric war to undermine conventional security measures including sanctions.

I hope these articles energize the regional conversations on defense economics. I welcome your comments. Please contact the *FORUM* staff at [ipdf@ipdefenseforum.com](mailto:ipdf@ipdefenseforum.com) with your perspectives.

All the best,

P. S. DAVIDSON  
Admiral, U.S. Navy  
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## IPD FORUM

### Defense Economics

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**NEIL K. WATTS** and **WILLIAM J. NEWCOMB** are former members of the United Nations Panel of Experts on North Korea sanctions established by U.N. Security Council Resolution 1874 in 2009. Watts is a senior research associate at Project Alpha, Kings College London. He served as the maritime expert on the U.N. Panel of Experts for North Korea for five years until 2018. He was also responsible for monitoring North Korea's navy, including the Sea Launched Ballistic Missile program. Formerly a captain with 30 years of service in the South African Navy, he specialized in surface warfare and weapons systems. Newcomb chairs the North Korea Economic Forum at the Institute of Korean Studies, Elliot School of International Affairs at George Washington University. He is a fellow at the Center for Advanced Defense Studies (C4ADS) and a member of the National Committee on North Korea. A former U.S. government economist, Newcomb

was appointed in 2011 by U.N. Secretary-General Ban Ki-moon to serve on the Panel of Experts. He was reappointed to the North Korea sanctions panel for successive mandates as the expert on finance through June 2014. He also served in the U.S. Army from 1970 to 1972. **Featured on Page 14**



**ASHLEY TAYLOR**, a senior collaborator at Compliance and Capacity Skills International, is a member of the first generation of blockchain entrepreneurs. Immersed in the intersection of digital technologies and international security, she is researching how cyberspace is weaponized, including intrusions of computer networks to steal military-grade intellectual property and hacks of technical and compliance databanks that prevent sanctions violations. She is also

analyzing national regulations for their application for U.N. sanctions implementation and leading global training for private and public sector professionals in prevention of cyber attacks. **Featured on Page 20**



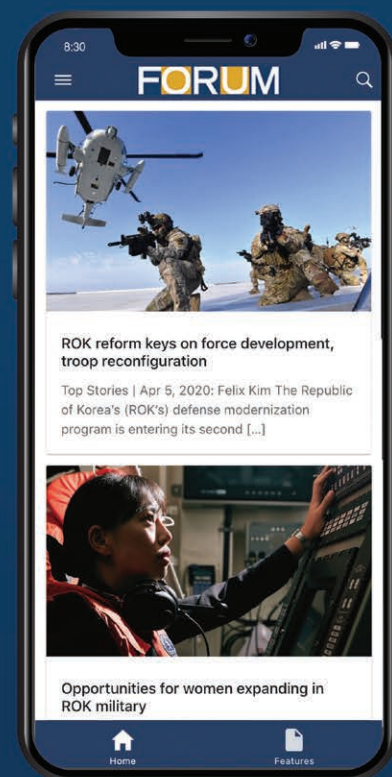
**LT. GEN. VINCENT W.F. CHEN** is deputy director-general of the National Security Bureau of Taiwan. Prior to his current position, he served as senior advisor at the Taipei Economic and Cultural Representative Office in the United States from 2016 to 2018. His distinguished military career includes appointments as director-general of the communication development office of the Taiwan Ministry of National Defense; commander of the Taipei Region

Command of the Taiwan Army; and director of the Joint Intelligence Center (J2) of the Taiwan Ministry of National Defense. Chen holds a master of national security strategy degree from the U.S. National War College of the National Defense University and an MBA from Southern Methodist University in Dallas, Texas. **Featured on Page 34**



**PHILIP J. VALENTI** is the international logistics advisor in the multinational logistics branch of the Logistics, Engineering and Security Cooperation Directorate (J4) at the U.S. Indo-Pacific Command. He is responsible for all international logistics agreements, including Acquisition and Cross-Servicing Agreements. Prior to his federal civilian career, he was a naval officer, serving in a variety of logistics and personnel assignments over a 28-year career. **Featured on Page 54**

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The U.S. State Department has approved the sale of up to 12 F-35 fighter jets, pictured, and related equipment to Singapore at an estimated cost of U.S. \$2.75 billion, pending approval from Congress, the U.S. Defense Security Cooperation Agency (DSCA) said in January 2020.

The Southeast Asian city-state said in 2019 it planned to buy an initial four F-35s from Lockheed Martin Corp., with an option for eight more, as it looks to

replace its aging F-16 fleet.

The DSCA said the sale would involve equipment from Lockheed and engine maker Pratt and Whitney. The F-35B variant of the jet can handle short takeoffs and vertical landings, attributes seen as benefiting land-scarce Singapore.

Singapore's Defense Ministry said formal terms of the purchase would be negotiated after approval from Congress.

The Pentagon in October 2019 announced F-35 jet prices for the next three years, which lowered the cost of the jet by 13%. With Southeast Asia's largest defense budget, wealthy Singapore is a key prize for global arms companies as it looks to invest in new technology and upgrade its equipment.

Singapore set aside about 30% of its total expenditure on defense, security and diplomacy efforts in its 2019 annual budget. *Reuters*

## AUSTRALIA/JAPAN



hydrogen in December 2019, the Nikkei Asian Review website reported. The ship will make its first commercial trip in 2021 to Hastings port in Victoria, Australia, where a consortium of Japanese companies are building Australia's first hydrogen liquefaction factory, according to the website of the Victoria government.

Hydrogen exports could supply about U.S. \$2.7 billion in economic benefits to Australia by 2040, according to the government's National Hydrogen Energy Strategy, released in November 2019.

Other hydrogen production projects are also in development worldwide. South Korea is interested in pursuing hydrogen fuel as well, the Australian report said.

Yet many barriers remain. "The big bottleneck is carbon capture and storage," Dr. Takeo Kikkawa, professor of management at the Tokyo University of

Science, told Bloomberg news in June 2019. "It's not that it can't be done. It's the economics."

Technology is still in development to enable large-scale capture and storage of hydrogen. Moreover, cost remains one of the largest obstacles, given the abundance of alternative energy sources that are less expensive.

The infrastructure worldwide for the hydrogen supply chain is also in its early stages, although many experimental hydrogen-refilling stations are emerging worldwide, *Forbes* reported.

Despite the challenges, hydrogen's time has come, Daniel Roberts of the Commonwealth Scientific and Industrial Research Organization, told the E&E News website in October 2018, due to a "real strong global pull here for importing low-carbon hydrogen" to Japan and South Korea, where the governments have made hydrogen-based transportation "central to their energy strategy." *FORUM Staff*

## Teaming up for a Hydrogen-Fueled Future

Japan is looking to Australia for help in becoming a nation powered mainly by hydrogen by 2050.

Australia, which hopes to move away from its dependency on coal exports, will also benefit from the clean-energy collaboration that aims to transform low-grade coal from Australian mines into hydrogen and then ship it in liquefied form to Japan, according to *Forbes* magazine.

Japan aims to have 200,000 hydrogen vehicles on the road by 2025 and 800,000 by 2030, according to the online magazine *The Diplomat*. (Pictured: Toyota Motor Corp. unveiled its hydrogen fuel cell truck in Tokyo in June 2018).

Japan launched the first carrier ship designed to transport liquid



## Seeking Investment in Disputed Waters

Indonesian President Joko Widodo in January 2020 asked Japan to step up investment in fisheries and energy in some of its South China Sea islands following a standoff with the People's Republic of China (PRC) in waters the PRC claims in the area.

Widodo made the request for Japan to consider economic opportunities in the Natuna Islands during a visit to Jakarta by Japanese Foreign Minister Toshimitsu Motegi, the president's office said. "I want to invite Japan to invest in Natuna," he told Motegi, adding that Japan was one of Indonesia's major economic partners.

Widodo visited Natuna in January 2020 to assert Indonesia's sovereignty over the cluster of islands and the waters around them, after reports that Chinese coast guard and fishing vessels had entered Indonesia's exclusive economic zone several times since December 2019. (Pictured: Japanese Foreign Minister Toshimitsu Motegi, left, shakes hands with Indonesian Foreign Minister Retno Marsudi during a meeting in Jakarta, Indonesia.)

The PRC has not claimed the Natuna Islands themselves, but it says it has nearby fishing rights within a self-proclaimed Nine-Dash Line — a line on Chinese maps that it says shows its territory and waters.

The line loops far south from China and includes most of the South China Sea, but the claim is not recognized internationally. Vietnam, the Philippines, Brunei, Malaysia and Taiwan have rival claims in the South China Sea.

Indonesian Foreign Minister Retno Marsudi told reporters Widodo had asked Japan to invest in fisheries, energy and tourism in Natuna. "We also agreed to strengthen coast guard coordination," she said.

Indonesia had stepped up air and sea patrols in the area and summoned the PRC's ambassador over the appearance of the ships. An Indonesian military spokesman said the vessels left the area after Widodo's trip.

Japan in 2019 gave Indonesia 100 billion rupiah (U.S. \$7.26 million) to build a fish market in Natuna, which will be named Tsukiji after the famous Tokyo market.

Construction of the market in Natuna and markets on other Indonesian islands will begin in 2020, Motegi said. Reuters

## SPACE AMBITION ABOUNDS WITH MOON MISSION

India approved its third lunar mission in January 2020, the latest effort in its ambitions to become a low-cost space power.

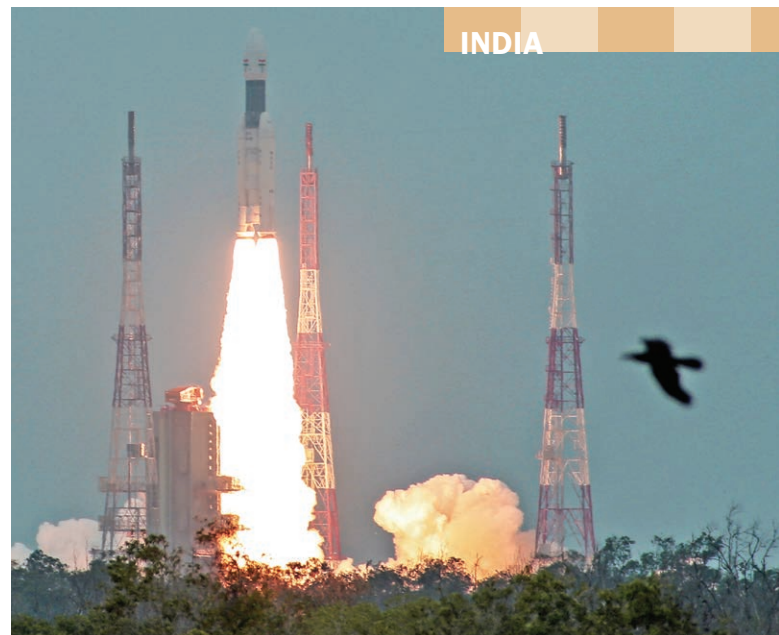
The Chandrayaan-3 mission will have a lander and a rover, but not an orbiter, Indian Space Research Organisation (ISRO) Chairman K. Sivan told reporters.

The Chandrayaan-2 mission in September 2019 successfully deployed a lunar orbiter that relays scientific data back to Earth but was unable to place a rover on the lunar surface after a hard landing.

That mission had aimed to land on the south pole of the moon, where no other lunar mission had gone before. The region is believed to contain water because craters there are largely unaffected by the high temperatures of the sun.

ISRO had hoped to confirm the presence of water in the form of ice, first detected on its mission in 2008.

Chandrayaan-3 will have a "similar configuration" as the previous mission, Sivan said. (Pictured: India's Geosynchronous Satellite Launch Vehicle Mk III-M1 blasts off carrying Chandrayaan-2 from the Satish Dhawan Space Centre at Sriharikota, India.)



Only the United States, Russia and the People's Republic of China have landed on the moon. Beijing's Chang'e-4 probe touched down on the far side of the moon in 2019. Israel made an unsuccessful attempt to land its Beresheet spacecraft on the moon in April 2019.

India's third lunar mission will likely launch in 2020 and will cost less than its previous mission, the PTI news agency reported, citing Jitendra Singh, junior minister for the Department of Space.

Sivan also said ISRO was making "good progress" on its human space flight mission slated for late 2021, adding that four astronauts had been picked for training. The project, called Gaganyaan (sky vehicle), would cost less than 100 billion rupees (U.S. \$1.4 billion), the government said in 2018.

India has developed a reputation for pioneering affordable satellite launches and space missions. Its unmanned Mars mission in 2014 cost just U.S. \$74 million, less than the budget of the Hollywood space blockbuster *Gravity*. Reuters



## CHINA'S

# 'WAR ON TERROR' *uproots families*

THE ASSOCIATED PRESS

**F**or decades, the Uighur imam was a bedrock of his farming community in China's far west. On Fridays, he preached Islam as a religion of peace. On Sundays, he treated the sick with free herbal medicine. In the winter, he bought coal for the poor.

As a Chinese government mass detention campaign engulfed Memtimin Emer's native Xinjiang region in 2017, the elderly imam was swept up and locked away, along with all three of his sons.

Now, a newly revealed database exposes in extraordinary detail the main reasons for the detentions of Emer, his three sons, and hundreds of others in Karakax County: their religion and their family ties.

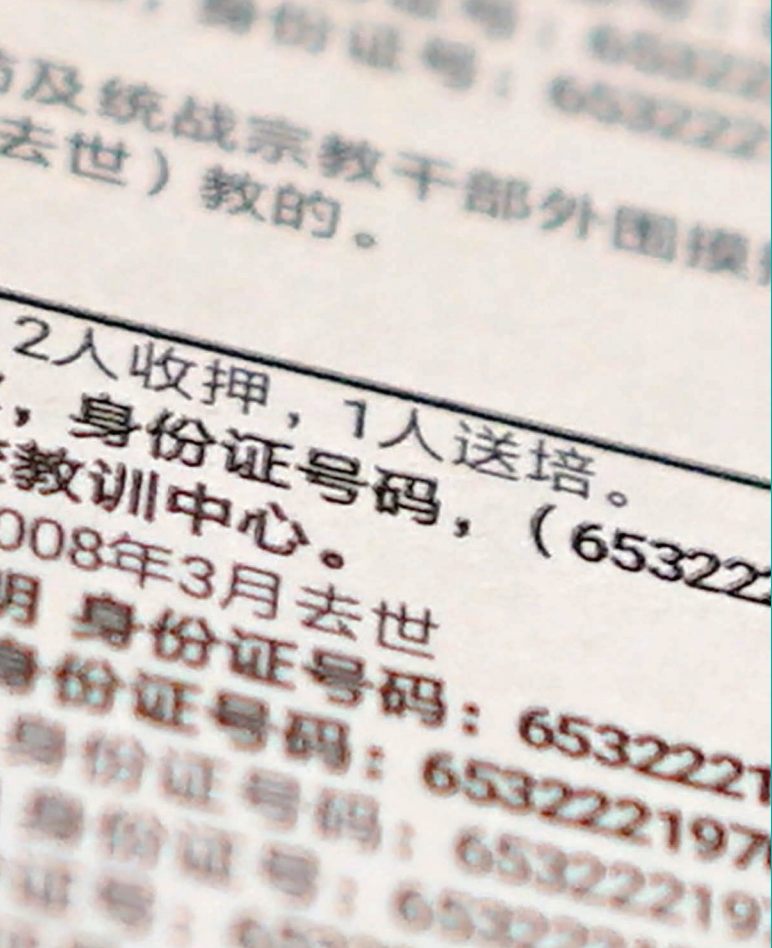
The database profiles the internment of 311 people with relatives abroad and lists information on more than 2,000 of their relatives, neighbors and friends. Each entry includes the detainee's name, address, national identity number, detention date and location, along with a detailed dossier on the detainee's family, religious and neighborhood background, the reason for detention, and a decision on whether to release them. Issued within the past year, the documents do not indicate which government department compiled them or for whom.

The information offers the fullest and most personal view yet into how People's Republic of China (PRC) officials decided who to put into and let out of detention camps as part of a massive crackdown that has locked away more than a million ethnic minorities, most of them Muslims.

The database emphasizes that the Chinese Communist Party (CCP) focused on religion as a reason for detention — not just political extremism, as authorities claim, but ordinary activities such as praying, attending a mosque or even growing a long beard. It also shows the role of family: People with detained relatives are far more likely to end up in a camp themselves, uprooting and criminalizing entire families like Emer's in the process.

Similarly, family background and attitude is a bigger factor than detainee behavior in whether they are released.

"It's very clear that religious practice is being targeted," said Darren Byler, a University of Colorado researcher studying the use of surveillance technology in Xinjiang. "They want to fragment society, to pull the families apart and make them much more vulnerable to retraining and reeducation."



**This February 2020 photo shows details from a print of a leaked database. Text reads: “Family circle: Total relatives 11, 2 imprisoned, 1 sent to training, Father: Memtimin Emer ... sentenced to 12 years, is now in the training center at the old vocational school.” The database offers the fullest and most personal view yet into how Chinese officials decided who to put into and let out of detention camps.** THE ASSOCIATED PRESS

The Xinjiang regional government did not respond to faxes requesting comment. Asked whether Xinjiang is targeting religious people and their families, Foreign Ministry spokesman Geng Shuang said, “This kind of nonsense is not worth commenting on.” Beijing has said before that the detention centers are for voluntary job training and that it does not discriminate based on religion.

The PRC has struggled for decades to control Xinjiang, where the native Uighurs have long resented Beijing’s heavy-handed rule. With the 9/11 attacks in the United States, officials began using the specter of terrorism to justify harsher religious restrictions, saying young Uighurs were susceptible to Islamic extremism. After militants set off bombs at a train station in Xinjiang’s capital in 2014, General Secretary Xi Jinping launched a so-called People’s War on Terror, transforming Xinjiang into a digital police state.

The leak of the database from sources in the Uighur exile community follows the release in November 2019 of a classified blueprint on how the mass detention system really works. The blueprint obtained by the International Consortium of Investigative Journalists, which includes The Associated Press, showed that the centers are forced ideological and behavioral reeducation camps run in secret. Another set of documents leaked to *The New York Times* newspaper revealed the historical lead-up to the mass detention.

The latest set of documents came from sources in the Uighur exile community, and the most recent date in them is March 2019. The detainees listed come from Karakax County, a traditional settlement of about 650,000 on the edge of Xinjiang’s Taklamakan desert where more than 97 percent of residents are Uighur. The list was corroborated through interviews with former Karakax residents, Chinese identity verification tools, and other lists and documents.

Detainees and their families are tracked and classified by rigid, well-defined categories. Households are designated as “trustworthy” or “not trustworthy,” and their attitudes are graded as “ordinary” or “good.” Families have “light” or “heavy” religious atmospheres, and the database keeps count of how many relatives of each detainee are locked in prison or sent to a “training center.”

Officials used these categories to determine how suspicious a person was — even if the person hadn’t committed any crimes. “It underscores the witch-hunt mindset of the government, and how the government criminalizes everything,” said Adrian Zenz, an expert on the detention centers and senior fellow at the Victims of Communism Memorial Foundation in Washington, D.C.

Reasons listed for internment include “minor religious infection,” “disturbs other persons by visiting them without reasons,” “relatives abroad,” “thinking is hard to grasp” and “untrustworthy person born in a certain decade.” The last seems to refer to younger men; about 31 percent of people considered “untrustworthy” were in the age bracket of 25 to 29 years, according to an analysis of the data by Zenz.

When former student Abdullah Muhammad spotted Emer’s name on the list of the detained, he was distraught. “He didn’t deserve this,” Muhammad said. Though Emer gave party-approved sermons, he refused to preach CCP propaganda, Muhammad said, eventually running into trouble with the authorities. He was stripped of his position as an imam and barred from teaching in 1997, amid unrest roiling the region.

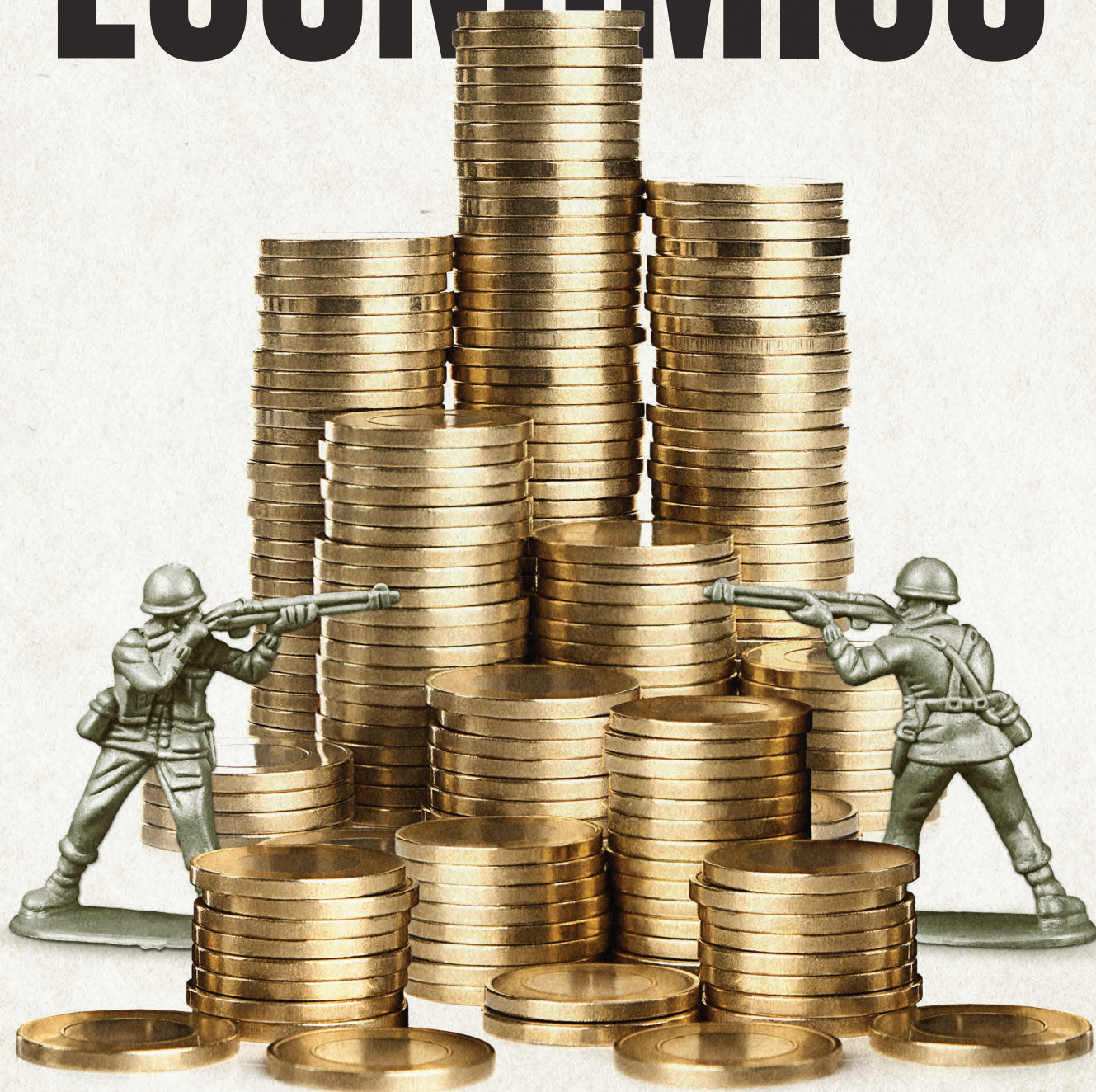
None of Emer’s three sons had been convicted of a crime. However, the database shows that over the course of 2017, all were thrown into the detention camps for having too many children, trying to travel abroad, being “untrustworthy,” “infected with religious extremism,” or going on the Hajj, the Muslim pilgrimage to the holy city of Mecca. It also shows that their relation to Emer and their religious background was enough to convince officials they were too dangerous to let out from the detention camps. Even a neighbor was tainted by living near him, with Emer’s alleged crimes and prison sentence recorded in the neighbor’s dossier.

The database indicates much of this information is collected by teams of cadres stationed at mosques, sent to visit homes and posted in communities. This information is then compiled in a dossier called the “three circles,” encompassing their relatives, community and religious background.

The database shows that Karakax officials also explicitly targeted people for activities that included going abroad, getting a passport or installing foreign software.

In the case of Emer, who is now under house arrest due to health issues, it was the imam’s courage and stubbornness that did him in, according to his former student Muhammad. Though deprived of his mosque and his right to teach, Emer quietly defied the authorities for two decades by staying true to his faith. “Unlike some other scholars, he never cared about money or anything else the Communist Party could give him,” Muhammad said. “He never bowed down to them — and that’s why they wanted to eliminate him.”

# DEFENSE ECONOMICS



FORUM ILLUSTRATION

# TIME FOR A PARADIGM SHIFT TO ADDRESS STRATEGIC COMPETITION

DR. ALFRED OEHLERS/DANIEL K. INOUE ASIA-PACIFIC CENTER FOR SECURITY STUDIES PHOTOS BY AFP/GETTY IMAGES

**T**he definition of defense economics should no longer be confined to the idea of optimizing budget allocations among competing defense priorities. In an era of strategic competition, it's time to move beyond a static framework that emphasizes choices within budget constraints. Like-minded nations should embrace a more expansive and dynamic conception, one that emphasizes the strategic alignment and leveraging of evolving economic relationships and strengths — while managing vulnerabilities — to establish competitive advantages over adversaries.

The subject hasn't always been viewed solely through the lens of budget optimization. Looking back at World War I and World War II — and perhaps even the Cold War — a wider conception of defense economics was in play. While pure economic independence was rare, the degree of convergence and integration across economic, financial and technological flows rarely approached levels seen today. Even up to the third quarter of the 20th century, it was still reasonable to posit the existence of “national” economies as relatively discrete and independent entities, with varying levels of insulation against external developments. When economists discussed strategic competition, it made sense to think about things as nation pitted against nation, drawing primarily on national assets and strengths, in a systemic contest for pre-eminence. In this model, defense economics was all about the orchestration of national economic heft to overcome adversaries.

The end of the Cold War changed everything. In a unipolar moment, budget overseers lost sight of strategic competition and the role of the economy in it. Instead, as debates ensued around cashing in the peace dividend, the fiscal debates centered on the size of defense budgets.

With increasing forays into international peacekeeping and other missions, the analyses around reorienting defense budgets to pursue these new missions grew in importance. In this setting, defense economics came to be increasingly understood as a field informing discussions at a macrolevel on budgetary decisions and the appropriate defense appropriation, but especially at a more microlevel, assisting in



A bank employee counts 100-yuan notes and U.S. \$100 bills.

decisions regarding the management of defense budgets among competing priorities. The tragic events of 9/11 and subsequent war on terror further accentuated these trends. With these urgent and competing demands, what should the right level of defense spending be? And what is the right mix of spending on humanitarian missions, peacekeeping support, nation building, counterterrorism and a myriad of other requirements?



One of the greatest symbols of the end of the Cold War was the demolition of the Berlin Wall in Germany. The Cold War's end also ushered in an era of strategic competition that connected the economies of countries that had been adversaries.

A different debate needed to occur following the end of the Cold War. The phenomenon of globalization was emerging, and the era was marked by rapidly escalating economic, financial and technological flows and the increasing exposure of national economies to external influences as layers of insulation were progressively stripped away. The Peterson Institute for International Economics defines globalization as the “growing interdependence of the world’s economies, cultures and populations, brought about by cross-border trade in goods and services, technology, and flows of investment, people and information.” At a more concrete level, consider big corporate names such as Apple, Amazon and Walmart.

Indeed, revolutions in technology, transportation and logistics were all rendering the notion of a national economy obsolete. If there was an opportune time to question what strategic competition — and as a corollary, defense economics — might look like in the future, this was probably it. How do nations strategically compete when their national economic power is increasingly acquiring a qualitatively different form? And how do they evolve the way they think of defense economics to marshal such power for decisive competitive advantage?

That opportunity was lost following the end of the Cold War, but the world now stands on the threshold of the Fourth Industrial Revolution, where what used to seem like futuristic technologies are now poised to revolutionize the way we live. Partners in the Indo-Pacific region and around the world are working to catch up, especially in light of the accelerating changes occurring in economic, financial and technological relationships. As partner nations turn their attention toward strategic competition, they should rethink the challenges ahead. As the prestigious British economist John Maynard Keynes once put it, “Practical men [and women] who believe themselves to be quite exempt from any intellectual influence are usually the slaves of some defunct economist.”

So, what might a reconfigured vision for defense economics look like? Perhaps World War II and the Cold War provide hints. For the United States, these two events came closest to representing an existential challenge. Answering those challenges requires an extraordinary effort in planning, coordination and mobilization to defend the nation. Guiding these efforts were important analytical frameworks that recognized the pivotal role of economic heft in conferring strategic advantage. It’s important to revisit those



A trading room at KEB Hana Bank in Seoul, South Korea, shows the international links of the world's economies.

THE FULCRUM  
OF ECONOMIC  
POWER NOW  
RESTS LESS  
WITH STATES  
AND MORE  
WITH AN  
INCREASINGLY  
DIVERSE CAST  
OF NONSTATE  
ACTORS  
ACROSS ENTIRE  
ECONOMIES.

discussions, frameworks, concepts and broader modes of thinking that were purposefully directed toward marshaling that economic heft to create strategic advantage.

Those discussions should happen with caution and an eye sensitive to the fact that these artifacts are not necessarily transferable to current challenges and future circumstances. The contexts, for instance, are entirely different. Economies — even among adversaries — are often deeply integrated as opposed to the greater insularity of the past. Bases of power have changed and are less centered on industry and more connected to technology and intellectual intangibles. Last, but not least, the fulcrum of economic power now rests less with states and more with an increasingly diverse cast of nonstate actors across entire economies. Indeed, this cast is rendered even more complex because it is international in nature, implying the essential task of working with allies and partners in this reconceptualization of defense economics. Now, keeping all of this in mind, how do partner nations string these things together, making the sum of these sectors, actors, strengths and capabilities greater than their whole to project decisive influence? This must be the challenge of defense economics.

This articulation of defense economics could make some feel uncomfortable. Doesn't it sound suspiciously like a war-time, state-controlled economy? Aren't we simply replicating the kind of command economy practiced by many adversaries? These reservations are well-founded and must play an important role going forward to provide balance. Partners and allies must uphold their liberal and democratic values in this redefinition, maintaining a commitment to the rule of law in national and international contexts. In so doing, this might be one of the more important contributions that a redefinition of defense economics could bring to the strategic competition. Conceptualized less as a tool of budgetary management and more as economic gravitas underpinned by liberal-democratic ideals, this view of defense economics offers a powerful point of differentiation to alternatives based on more brittle autocratic bases. As an instrument to marshal economic power for decisive advantage in our present strategic competition, a revitalized view of defense economics will play an integral role in contributing to the preservation of a Free and Open Indo-Pacific. □

Dr. Alfred Oehlers is an economics professor at the Daniel K. Inouye Asia-Pacific Center for Security Studies who specializes in Southeast Asia and the Pacific islands.

# COUNTERING NORTH KOREAN SANCTIONS EVASION

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# International Cooperation Remains Key to Maximum Pressure Campaign

NEIL K. WATTS AND WILLIAM J. NEWCOMB

**T**he story of the international effort to seize the North Korean vessel *Wise Honest* for illicitly transporting the regime's coal to China, Russia and other countries reads like a spy novel, with many twists and turns. The case shows how the Kim Jong Un regime, aided by a network of complicit actors and sanctions profiteers, applies sophisticated, interwoven strategies and obfuscation techniques to circumvent multiple sanctions across multiple jurisdictions and undermine sanctions implementation and enforcement in the Indo-Pacific region.

The *Wise Honest* case culminated, after a multinational enforcement operation with support from Indonesia, Malaysia, Vietnam and others, with the U.S. federal court-ordered sale of the vessel in September 2019 to compensate the families of two victims of North Korean torture; the most recent was Otto Warmbier, the U.S. student who died in 2017 after Kim's regime released him in a vegetative state after detaining and torturing him for allegedly attempting to steal a propaganda poster, the *Navy Times* newspaper reported.

The first such seizure by the United States not only sheds light on the complexities of sanctions enforcement against North Korea but also exemplifies the U.S. commitment to maintaining maximum pressure on the Kim regime to abandon all nuclear weapons and existing nuclear programs in a complete, verifiable and irreversible manner.

Despite the successful forfeiture of the 177-meter *Wise Honest*, one of North Korea's largest sanctions-busting vessels, North Korea's illicit ship-to-ship transfers

of coal and petroleum continued unabated in mid-2019, according to the August 2019 United Nations Panel of Experts report on North Korea. Instead of declining, the illegal transfers increased in "scope, scale, and sophistication," after already ramping up in 2018, the report said. Moreover, North Korea continued to access the international financial system through its banking agents and front companies operating abroad, the report found.

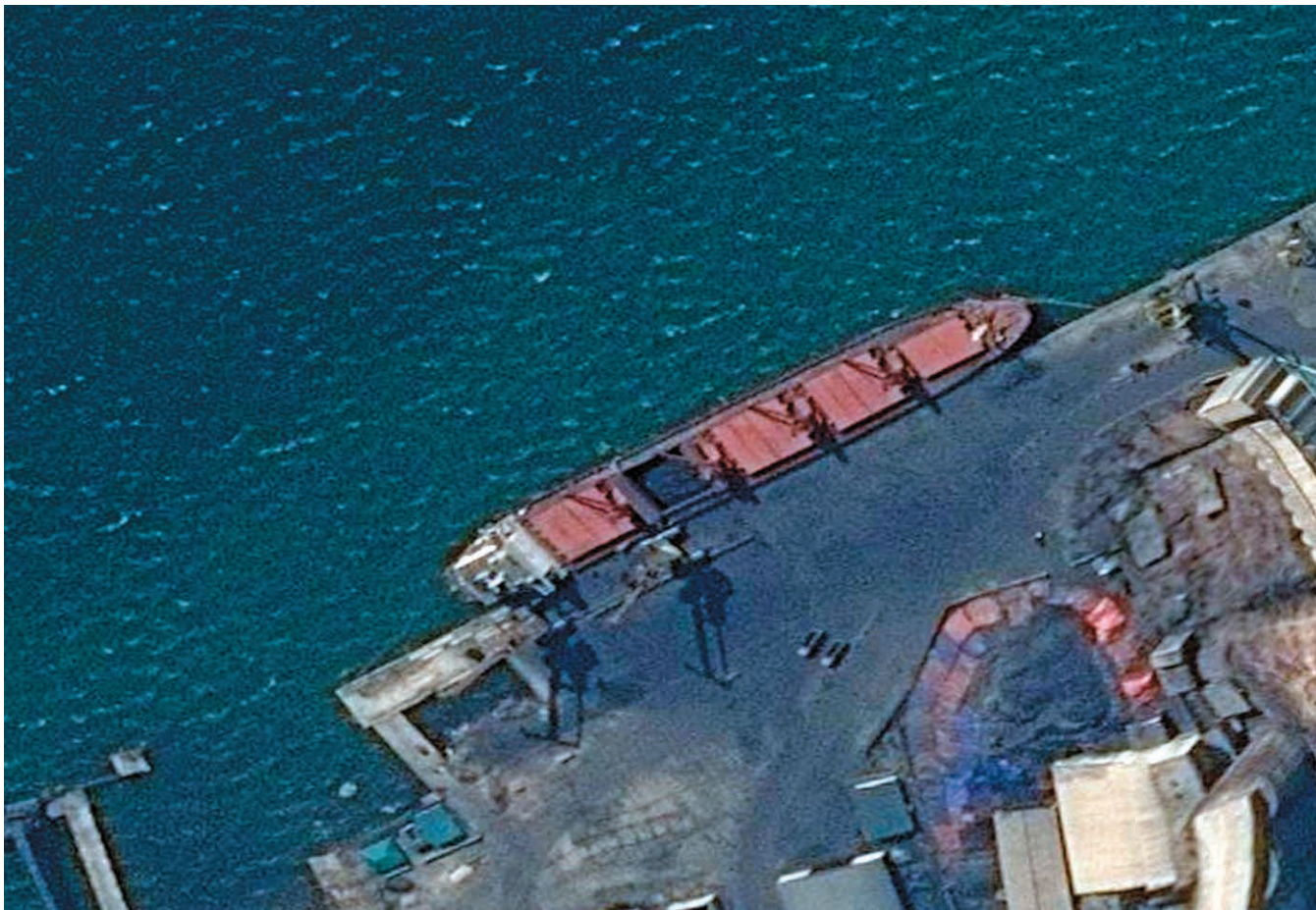
Another China-based company, Weihai World Shipping Freight, despite being added to the U.N. Security Council's sanctions list in March 2018, continued to operate a fleet of six to seven vessels and use its network involving United Kingdom front companies to smuggle North Korean coal to China and Vietnam, according to a 2019 Royal United Services Institute report.

The international community must stop North Korea from winning the ongoing contest of action-reaction.

**North Korean coal is piled on a dockside at the port of Rason near the borders of China and Russia.**

AFP/GETTY IMAGES





**This U.S. Department of Justice satellite image shows the North Korean cargo ship Wise Honest docked at an unidentified port. The U.S. seized the ship in May 2019 for violating international sanctions.**

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### **PRESSURE CAMPAIGN**

In recent years, North Korea resumed testing nuclear weapons and ballistic missiles, once again defying the U.N. Security Council's determination that such actions threatened international peace and security. In response, the Security Council in 2016 and 2017 adopted a much more aggressive stance to put significantly more pressure on North Korean authorities to halt prohibited programs and push them to seek a diplomatic solution.

The People's Republic of China (PRC) and Russia, usually cautious about imposing tough sanctions, agreed to these measures. The sanctions included banning North Korean exports of its main hard currency earners, such as precious metals, ferrous and nonferrous metals, coal, agricultural products, seafood and textiles, all predominantly destined for Chinese markets. Additionally, the U.N. Security Council banned imports of machinery, vehicles, certain metals and oil. Sanctions also ramped up in the areas of shipping, including prohibitions on ship-to-ship transfers, and finance to better tackle North Korean evasion practices and further cripple its ability to fund nuclear and missile programs.

Increases in the breadth and depth of sanctions implicitly show that the approach taken by the Security Council shifted from a focus on narrowly targeted measures back toward the former reliance on comprehensive sanctions. However, the broader measures also included carefully crafted exemptions for coal and oil and an expressed willingness to consider, case by case, humanitarian exemptions to avoid unintended consequences that plagued earlier sanctions programs, such as those against Iraq, and undermined international support.

### **TRANSFERS AT SEA**

The U.N. resolutions specifically prohibit ship-to-ship transfers, regardless of whether they are to or from North Korean vessels, of any goods or items that are being supplied, sold or transferred to or from North Korea, even if indirectly. A ship-to-ship transfer involves a vessel going alongside another to transfer its cargo at sea, without having to disembark the cargo in a port.

In addition to the total coal ban, refined petroleum product transfers are also prohibited but are subject to certain

exemptions. These ship-to-ship transfers, which constitute the primary means of importing refined petroleum, nearly always take place in international waters and are intended to circumvent sanctions compliance controls at ports and to conceal the destination or origin of the transferred cargo. Vessels conducting these illicit ship-to-ship transfers typically switch off their automatic identification system (AIS) prior to and during the transfer to evade detection.

While these types of transfers at sea are not illegal per se, North Korea specifically exploits this method to evade scrutiny by port authorities, to avoid export controls and circumvent export accounting and reporting to undermine the resolutions, which impose an annual cap of 500,000 barrels on North Korean imports of refined petroleum. Experts calculated that the annual cap was breached within four to five months of 2018 and 2019, on the basis of the detected number of illicit transfers, according to the March and August 2019 U.N. Panel of Experts reports.

The first two of 11 planned illicit transfers of refined petroleum by Chen Shih-hsien, a Taiwan-based operative, were worth U.S. \$4.5 million and U.S. \$8.5 million, respectively. South Korean and U.S. authorities detected in 2017 that the tanker vessel Lighthouse Winmore, registered in Hong Kong and operated by the Billions Bunker Group, which Chen owned, violated sanctions by providing fuel to North Korea, the *Taiwan News* newspaper reported. Chen committed suicide in June 2019 by jumping from the sixth story of a building after being indicted by Taiwan authorities, the website reported.

North Korean coal exports are estimated to generate more than U.S. \$1 billion in foreign revenue annually. The average illicit transfer is worth millions of dollars and must be paid for in U.S. dollars with funds confirmed by the broker to be available before the transfer at sea. North Korea relies on its coal trade to fund its nuclear weapons and ballistic missiles programs, experts believe.

Investigators valued the 26,500 million tons of coal carried on board the *Wise Honest* at the time of its detainment in 2018 by Indonesia at about U.S. \$3 million, the August 2019 U.N. Panel of Experts report said. The *Wise Honest*, which was registered to North Korea but falsely claimed to be sailing under the Sierra Leone flag, had on a previous voyage illegally transported heavy machinery to North Korea, also in violation of U.N. and U.S. sanctions.

Funds to facilitate the illicit coal transfer, via ship-to-ship transfer to a Russian vessel near Balikpapan, Indonesia, were transferred by a complicit Chinese company, Huitong Minerals, from North Korea's Jinmyong Joint Bank to an Indonesian bank. Jinmyong is part of the Korea Songi network that includes Korea Songi General Trading; the *Wise Honest's* owner, Songi Shipping; and Korea Yin Myong Trading. This

## 2019 U.N. PANEL OF EXPERTS ON NORTH KOREA CITES 56 COUNTRIES

The report, covering the period from February 2018 to February 2019, detailed more than 100 new, continuing, or unresolved proven or alleged violations of the 10 U.N. resolutions on North Korea that have been passed since 2006. Thirty-one of the 56 countries, territories and entities listed plus North Korea were allegedly responsible for multiple sanctions violations.

The 56 countries include:

- |                                    |                          |
|------------------------------------|--------------------------|
| • Algeria*                         | • Mexico                 |
| • Belize                           | • Mozambique             |
| • Bolivia                          | • Namibia                |
| • Botswana                         | • New Zealand*           |
| • British Virgin Islands           | • Nicaragua              |
| • Burma                            | • Nigeria                |
| • Cambodia                         | • Panama                 |
| • China                            | • Philippines            |
| • Comoros                          | • Poland                 |
| • Côte d'Ivoire                    | • Russia                 |
| • Democratic Republic of the Congo | • Serbia                 |
| • El Salvador                      | • Seychelles             |
| • Equatorial Guinea                | • Sierra Leone           |
| • Eritrea                          | • Singapore*             |
| • France                           | • South Africa           |
| • Georgia                          | • Sudan                  |
| • Ghana                            | • Syria                  |
| • Guinea                           | • Taiwan                 |
| • Honduras                         | • Tanzania               |
| • Hong Kong                        | • Thailand               |
| • India                            | • Togo                   |
| • Indonesia                        | • Tunisia                |
| • Iran                             | • Uganda                 |
| • Laos                             | • United Arab Emirates   |
| • Lebanon                          | • Vietnam                |
| • Libya                            | • Yemen (Houthi faction) |
| • Madagascar                       | • Zambia                 |
| • Malaysia                         |                          |
| • Malta                            |                          |

\*Indicates that a country took remedial, prosecutorial action during the reporting period to rectify or penalize one or several alleged sanctions violations.

network falls under the aegis of the Kim-controlled Korean People's Army, court documents revealed in July 2019.

A man named Jong Song Ho, who claimed to be president of Jinmyong, orchestrated the 2018 shipment during meetings at North Korea's embassy in Jakarta. He arranged payment of U.S. \$760,000 to Huitong Minerals via an Indonesia broker through bank transfers facilitated by JPMorgan Chase, according to bank and other records, *The Washington Post* newspaper reported in April 2019. Indonesia said Enermax, a South Korean company, was the intended recipient of the Wise Honest's coal, *The Associated Press* reported. Enermax denied it had imported the coal but acknowledged it had received an offer for coal from "someone who seemed to be a local broker in Indonesia," the wire service reported. However, in July 2019 *The New York Times* reported that Enermax was also implicated in the illegal shipping of Mercedes Benz limousines to North Korea, which transport Kim Jong Un at parades and summits.

The advantages of using a Chinese company include giving North Korean front companies access to the banking system; the ability to launder renminbi, the PRC's

official currency, into U.S. dollars; and use of alternative financial routes, such as ledger transactions and barter arrangements, to repatriate profits. A combination of these complicit companies, using split payments, funds activities of local facilitators.

### DISRUPTING ILLICIT TRANSFERS

North Korea is constantly evolving the scope and sophistication of its deception and evasion tactics. Its schemes involve multiple levels of front companies, offshore jurisdictions and fragmentary financial transactions. The vessels are physically and electronically disguised through AIS manipulation and so-called identity spoofing — assuming the identity of another vessel. Further, the vessels undertake circuitous, uneconomical voyages and loiter off foreign ports to support falsified documents indicating a foreign port of loading and origin. North Korea favors using ports in the Russian Far East because the region is a big coal exporter in East Asia.

The case of the Wise Honest reveals the complexities of techniques North Korea employs to circumvent U.N. and U.S. sanctions. It also demonstrates successful disruption of illicit transfers but, conversely, how effective implementation of sanctions

**The North Korean cargo ship Wise Honest, center, is towed into port in Pago Pago, American Samoa, in May 2019 after the U.S. Coast Guard seized the ship from Indonesia, which detained it in 2018.**

THE ASSOCIATED PRESS





is being undermined by shortcomings in legal frameworks that North Korea targets and exploits.

Indonesian authorities intercepted and seized the *Wise Honest*, a more than 17,600-ton, single-hull bulk carrier ship, in its waters for illicitly smuggling North Korean coal in April 2018, a month after it was photographed at the port of Nampo, North Korea, where a load of coal was placed on board, according to CBS News. The captain of the ship was charged in Indonesia with violating Indonesia's maritime laws and convicted.

The District Court in Balikpapan, Indonesia, in sentencing the captain for false declarations overreached by ruling that the illicit North Korean coal shipment be returned to the local facilitator/broker. Then, adding insult to injury, it authorized the coal's reexport. The complicit broker, Eko Setyamoko, promptly arranged for the illicit coal (later documented as of Indonesian origin) to be transferred to another vessel linked to the first transgression, the Panama-flagged *Dong Thanh*. However, upon arrival at a Malaysian port, the ship was refused entry by authorities; subsequently, the vessel and its illicit coal were interdicted by Vietnam in June 2019. Both actions were consistent with the effective implementation of the resolutions, according to the 2019 U.N. Panel of Experts report.

In May 2019, Indonesian authorities surrendered the *Wise Honest* over to the United States, which towed it to American Samoa. The event marked the first time the U.S. has seized a North Korean cargo ship for international sanctions violations, the U.S. Justice Department said. A U.S. federal court distributed proceeds from the sale of the *Wise Honest* in September 2019 to the parents of Otto Warmbier as well as the

brother and son of the Rev. Dong Shik Kim, who was kidnapped, tortured and executed by North Korean agents in 2000, the *Navy Times* reported.

### INTERNATIONAL COOPERATION

The *Wise Honest* and *Dong Thanh* cases demonstrate that international cooperation is crucial to effectively disrupt North Korean networks that operate in multiple jurisdictions and evolve daily. Detractors would say such cases are indicative of a failure of sanctions. Yet, closer examination reveals that the costs and risks of doing business with North Korea are steadily being driven upward and the pressure is taking effect. Prior to 2019, sanctions were not even acknowledged, but recently North Korea is for the first time talking of sanctions relief and seeking engagement.

There were some signs that the PRC in 2019 was not enforcing all the U.N. measures as rigorously as it did in 2018. Even so in 2019, North Korea exports and imports with China remained far short of, and the bilateral trade deficit much higher than, levels attained prior to the imposition of tougher measures, according to PRC customs statistics.

Hard work lies ahead in getting more countries to implement and rigorously enforce sanctions, as demonstrated by various judicial failings and complicit support of North Korea provided by some governments in Africa and elsewhere. Nonetheless, progress is being made, and patience plus persistence along with avoidance of sanctions fatigue may ultimately exhaust North Korea in this marathon contest. □

Neil K. Watts and William J. Newcomb are former members of the United Nations Panel of Experts on North Korea sanctions established by UNSCR 1874 (2009).

**U.S. Treasury Secretary Steven Mnuchin announces tougher North Korea-related sanctions at the White House in a February 2018 bid to disrupt North Korean shipping and trading companies and vessels.**

**Wu Haitao, the People's Republic of China's deputy ambassador to the United Nations, attends the U.N. Security Council session on imposing new sanctions against North Korea on December 22, 2017, in New York.**

REUTERS



# CRYPTOCURRENCY CHALLENGES



Countering the Weaponization of  
Financial Technologies that Threaten  
Security, Undermine Sanctions

ASHLEY TAYLOR

FORUM ILLUSTRATION

**M**any companies operate in the cyber sphere without ever connecting with the traditional banking system, making them impervious to government regulators. Instead, they use cryptocurrencies based on blockchain or distributed ledger and other anonymizing technologies, smart contracts and online trading. This emerging virtual but opaque business world is not only cost- and time-effective for legitimate users but also ideal for aspiring cyber criminals and rogue actors and states.

United Nations investigators first saw the potential nefarious applications of digital tools more than 20 years ago during Angola's civil war, when procurement agents of the National Union for the Total Independence of Angola (UNITA) used email to acquire weapons and arrange the logistics for deliveries to their camp sites. Since then, the threats have only become more sophisticated and severe. For example, Iranians in recent years acquired restricted projectile software and other intellectual property by hacking into defense companies. The Islamic State of Iraq and Syria used cryptocurrencies to raise money for weapons and to coordinate the Easter attacks in Sri Lanka in April 2019. Meanwhile, Venezuela, which is yet to face U.N. sanctions, has been collecting aeronautical taxes using an app that converts foreign currencies to bitcoin.

The cyber sphere continues to produce novel ways for rogue actors to threaten national, regional and international security. In fact, illicit uses of digital technologies are outpacing the advancements of licit technologists, who generally do not prioritize international security in their business models. Bad actors are using their technological prowess to wage an asymmetric war to undermine conventional security measures. The front lines of this war cut through global communications and commerce and enable circumvention of sanctions, with many of the most subversive elements emanating from the Indo-Pacific.

## Origins of Cryptocurrencies

Cryptocurrencies emerged with a 2008 white paper in which its author, Satoshi Nakamoto (a pseudonym), described the algorithm now in use for bitcoin. It represented a preliminary culmination of computer scientists' research on digital money programs. That research began in the early days of the internet, mostly driven by libertarians seeking to maximize individual liberties and reduce the role of governments, including its dominance of sovereign currencies.

Over the past 11 years, the successes and failures of bitcoin spurred new developers and financiers to create many other cryptocurrencies.

Today, thousands of different cryptocurrencies exist.

Cryptocurrencies group together transactions into "blocks" that are recorded in chronographic order as a chain, thus called the "blockchain." Once these blocks are recorded, they are difficult and costly to change. Each transaction is forever visible to the entire network, making the technology useful to establish "trusted" data. These blockchain networks and their currencies can be public, such as bitcoin, or private, only accessible to a select group. Each cryptocurrency has rules for how new coins can be earned,

called "mining," which often requires using specialized computers. Mining can require lots of computing power to process data constantly as computers compete to solve difficult math problems to win new coins released periodically.

Cryptocurrencies also use encryption, a technology to make information and transactions only decipherable by people with the right passcodes. This feature makes the coins even harder to counterfeit and provides anonymity to the users, meaning real world identity is not necessary to acquire or trade them.

# Cryptocurrency Transactions

## TRADITIONAL FINANCE TRANSACTIONS

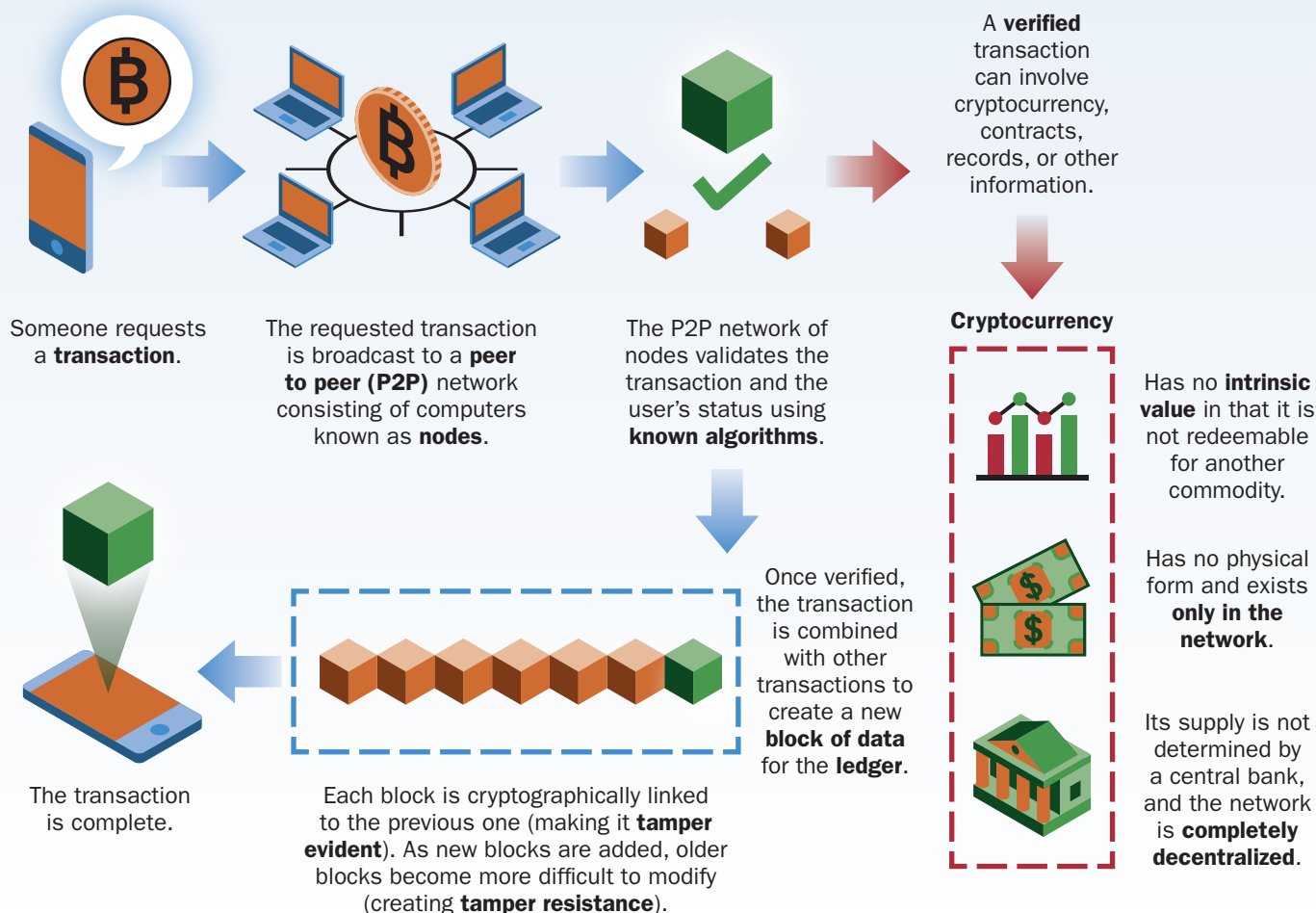
Regulated financial institutions guarantee integrity of transaction.

- Guarantees signature of sender.
- Guarantees validity of receiver.

## BLOCKCHAIN TRANSACTIONS

Rather than a bank, a network of computers processes transactions/agreements and adds them to a shared ledger.

Sources: Blockgeeks, Louisa Durkin/Compliance & Capacity Skills International



Sanctions violators use cryptocurrencies to obfuscate their online identities and to support proliferation financing and logistics. As applications of this technology have been rapidly evolving, regulatory frameworks and security provisions have lagged behind. Digitally adept sanctions violators prey upon the legal gaps and loopholes to remain unrecognized when they move financial resources, steal intellectual property for proliferation technologies or perpetrate a host of other illegal acts.

The magnitude of the threat posed by the nascent industry of cryptocurrencies is potentially immense, given the total market value for all coins hitting an all-time high of U.S. \$818.1 billion in 2018 and fluctuating between U.S. \$103 billion and U.S. \$338 billion in 2019, according to the coinmarketcap.com website.

## Threat Actor Advantages

North Korea epitomizes the use of digital tools to engage in organized criminal activities and circumvent sanctions. North Korea has developed digital techniques to generate revenues to fund its illegal proliferation efforts, gain intelligence and technical know-how, and harm the businesses and reputations of its foreign adversaries. Its arsenal includes the capability to disrupt monitoring of U.N. sanctions against the regime.

When he succeeded his father in 2011, Kim Jong Un boasted that “cyber warfare, along with nuclear weapons and missiles, is an ‘all-purpose sword’ that guarantees our military’s capability to strike relentlessly,” according to testimony by a South Korean intelligence chief, *The New York Times* newspaper reported. Kim’s cyber force is viewed as the strongest weapon in his “secret war,” and

A tour bus drives over the border between China and North Korea. Sanctions violators, such as North Korea, use cryptocurrencies to obfuscate their online identities and to support proliferation financing and logistics.

AGENCE FRANCE-PRESSE



North Koreans use computers in the Sci-Tech Complex in Pyongyang, North Korea. The regime employs a two-tiered system in which most citizens must use a national intranet, sealed off from the outside world. The elite and members of Kim Jong Un's cyber force have less restricted access. THE ASSOCIATED PRESS



its members are considered part of North Korea's elite, among one of few well-paid positions in the nation, a North Korean military defector told Reuters.

North Korean state actors and nonstate proxies are increasingly making use of new anonymizing technologies such as cryptocurrencies, the dark web, encryption and advanced cyber attacks. North Korea has obtained U.S. \$571 million from hacking and stealing cryptocurrencies alone, and U.S. \$2 billion in total from all cyber-related attacks, U.N. experts estimate.

The North Korean regime has been able to weaponize cryptocurrencies by stealing from cryptocurrency exchanges; cashing out ill-gotten funds by exchanging them into cryptocurrencies; creating a global virus that encrypts victims' data and demands bitcoins to receive their data; selling and acquiring

goods using cryptocurrencies; mining them; hacking into others' computers to mine them; and creating new cryptocurrencies.

The most lucrative cyber attacks for the North Koreans have been hacking cryptocurrency exchanges, online companies for exchanging different cryptocurrencies and state-backed currencies. Perpetrators target the digital wallets where exchanges store the funds held in between transactions for clients. These wallets yield high payoffs as targets because they contain huge amounts of customers' funds. Stealing the passwords that control these wallets to redistribute the funds yields significant gains.

North Korea was responsible for 75% of all globally reported cryptocurrency exchange hacks, a total of about U.S. \$882 million from late 2016 to fall

of 2018. Additionally, cryptocurrency exchange services can offer transfers that turn stolen coins into cash and easily obfuscate a trail of ownership of stolen coins by switching from one cryptocurrency to another. While many cryptocurrency exchanges follow some regulation to check identities of customers, there are many that enable trading without any regulation.

While not currently the most lucrative method, creating new cryptocurrencies is perhaps the most intriguing development in North Korea's toolbox of tricks. A new cryptocurrency is often created by preselling some portion of its coins, with promises of how buyers will benefit, often with the subtext of a financial return. North Korea created two coins in 2018: MarineChain, a new cryptocurrency that fraudulently claimed to sell ownership of large ships, and another that is marketed online and sold in exchange for other cryptocurrencies or fiat. Its name was changed many times (from Interstellar, Stellar, HOLD and HUZU) to obfuscate its origins.

Over time, North Korean hackers have been moving toward revenue-generating cyber attacks, primed to adopt the latest technological trends and taking advantage of weak regulatory standards surrounding emerging technologies, including cryptocurrencies.

### PRC Ambitions

Chinese enterprises and investors are the world's undisputed leaders of cyber operations. Benefiting from favorable government regulations and seed investments to produce specialized computers for mining cryptocurrencies, the People's Republic of China (PRC) now dominates the creation of new cyber coins. Between 50% and 74% of cryptocurrency mining happens in China, according to the U.N. conference on trade and development website.

**The PRC's voracious capacities in cryptocurrency mining could be repurposed to create new private currencies that will enable the operation of closed financial networks, accessible only to trusted Chinese actors or allies.**

The PRC's relentless drive into global markets with its One Belt, One Road infrastructure investment scheme presents an ominous cyber sphere corollary, given that China's communist government is apparently equally determined to dominate the most valuable digital technologies and industries. The PRC's voracious capacities in cryptocurrency mining could be repurposed to create new private currencies that will enable the operation of closed financial networks, accessible only to trusted Chinese actors or allies. Protected from outside monitors, such networks would be immune to the power of the U.S. dollar-based monetary system, including the force of U.S. sanctions and assets freezes.

The reversal in late 2013 from the dollar to the yuan as the dominant currency buying and selling bitcoin, the most widely used cryptocurrency, reveals even more compelling evidence for the PRC's desired dominance of cyber commerce. Despite the volatility of the value of bitcoin, the Chinese have been responsible for up to 95% of bitcoin-based trading in recent years, the international news organization Quartz reported in 2017.

Although Chinese mining seems to be slowing, the signals may merely reflect a trend toward new private coins. The pattern would be consistent with previously observed shifts, for example, when Chinese investors backed their own internet platforms and technologies such as Alibaba, WeChat and others.

### Dollar and Yuan Share of Bitcoin Trading

The Chinese yuan has become the dominant currency buying and selling bitcoin, the most widely used cryptocurrency.



Sources: ATLAS, Bitcoinity

### Gains for Legitimate Actors

Innovators herald the beneficial implications of cryptocurrency technology as having a historic impact on par with the disruptive power of the internet. Actors as diverse as JPMorgan Chase, the PRC and Facebook are all creating their own cryptocurrencies in the belief that they can process transactions faster and more reliably, while drastically cutting transactional costs and expanding to establish new markets and profit centers. Hedge fund leaders are creating equity-and-debt-trading platforms whose operational superiority is incentivizing finance professionals to migrate away from traditional security exchanges. Industry champions such as IBM are implementing blockchain-based tools to provide real-time insight into supply chains of goods, ranging from shipping containers to food stuff or commodities. In countries experiencing high inflation, such as Argentina,

citizens resort to cryptocurrencies as an alternative to their unreliable government-backed currency.

These developments in cryptocurrencies could have a greater impact than the internet because they revolutionize the control center of the economy — finance. In 2016 the United Kingdom's chief scientific advisor's report defined blockchain as a pinnacle in the information and telecommunications revolution that has been radically reducing costs and replacing “hierarchical systems of organization and governance” with collaborative online networks. In this sense, cryptocurrency could be the greatest catalyst of the fifth technological revolution that is afoot in information and telecommunications, as scholar Carlota Perez detailed in her 2003 book, *Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages*. (See chart, page 27).

### Addressing International Threats

To understand the security or insecurity implications of cryptocurrencies, contrast them with today's financial regulator and supervisory protocols. Traditional money emerged in a world of centralized financial institutions processing transactions, complying with national rules and thereby guaranteeing integrity, stability and liquidity of the monetary system.

In the cryptocurrency/blockchain paradigm, a network of computers, rather than centralized institutions, generate and process transactions. Regulating the networks is challenging because blockchain and encryption technologies guarantee their users high degrees of anonymity. Only highly intrusive forensic investigative tools can penetrate the complex coding sequences of a blockchain to deanonymize transactions. A regulatory framework for cryptocurrencies requires a different and nuanced approach to address security risks.

Security threats from ill use of cryptocurrencies are best addressed holistically by a U.N. response to cyber threats as an equivalent to a threat to international security. Since the early days of the internet, some experts have been cataloguing the weaponization of digital technologies as the industry has evolved and discovered how cyberspace has become integral to strategies of sanctioned entities to circumvent international norms. Such insights can help guide U.N. policy.

National cyber regulatory frameworks have been adopted by 138 countries, but most focus on domestic crime prevention while remaining blissfully detached from the international security implications of a weaponized cyber sphere. The U.N. Security Council has addressed cyber threats only in a spotty and inconsistent manner, despite having 20 years' worth of reports and

A man walks past an electric board showing exchange rates of various cryptocurrencies, including bitcoin, top left, in Seoul, South Korea. REUTERS

bitcash

<b>비트코인 (BTC)</b> <b>₩ 18,800,000</b> - ₩416,000 (-2%) ▼	<b>대시 (DASH)</b> <b>₩ 968,600</b> + ₩80,400 (+9%) ▲	<b>이더리움 클래식 (ETC)</b> <b>₩ 32,370</b> + ₩800 (+3%) ▲	<b>이더리움 (ETH)</b> <b>₩ 711,000</b> + ₩107,300 (+18%) ▲
<b>라이트코인 (LTC)</b> <b>₩ 338,850</b> + ₩72,850 (+27%) ▲	<b>리플 (XRP)</b> <b>₩ 44,000</b> + ₩1,000 (+2%) ▲	<b>비트코인캐시 (BCH)</b> <b>₩ 1,734,000</b> + ₩54,500 (+3%) ▲	<b>모네로 (XMR)</b> <b>₩ 336,500</b> + ₩14,500 (+5%) ▲
<b>제트캐시 (ZEC)</b> <b>₩ 409,100</b> + ₩21,300 (+5%) ▲	<b>퀀텀 (QTUM)</b> <b>₩ 294,700</b> + ₩4,800 (+2%) ▲	<b>비트코인 (BTC) BITSTAMP</b> <b>₩ 18,030,924</b> - ₩130,907 (-1%) ▼	

Exchange Rate : USD 1,090.8 EUR 1,282.73 CNY 164.73

Sri Lanka Soldiers search a house in Mattegoda after bomb attacks on Easter Sunday in 2019. Investigators determined the Islamic State of Iraq and Syria used cryptocurrencies to raise money for weapons and to coordinate the attacks.

REUTERS



## Enhanced Preparedness to Safeguard Cyber Transactions and Ventures

### For individuals, blockchain ventures and cryptocurrency exchanges:

- Understand the identities of trading partners, the nature of transactions and their funding sources.
- Follow professional cyber security guidelines, including cryptocurrency exchanges and ventures and cloud facilities.
- Share information with the cyber security community when attacks occur.

### For individuals, companies or entities already under U.N. sanctions:

- Block all trade of embargoed goods, components or technologies.
- Block financial accounts and digital wallets; flag suspicious transaction reports when appropriate.

evidence about how digital technology has been driving conflicts and benefited sanctioned actors.

The Financial Action Task Force, for one, is gradually amending its 40 recommendations to prevent and protect against digital variations of anti-money laundering, counterterrorism financing and nonproliferation financing. Certain digital technologies should be universally classified as dual-use, as outlined in the 1996 Wassenaar Arrangement, the first global multilateral arrangement on export controls for conventional weapons and sensitive dual-use goods and technologies.

There have been some unilateral steps in the direction of cyber sanctions. For example, the U.S. recently sanctioned three North Korean cyber entities and two cryptocurrency accounts owned by Iranian individuals. The European Union has released some guidance, including a cyber diplomacy toolkit. Yet these steps are far from the comprehensive approach needed. North Korea's diverse ability to conduct monumental, but barely perceptible and cheap, cyber raids on data or financial assets belonging to governments, companies and individuals has propelled it to adopt offensive digital and information warfare tools.

At the international level, existing U.N. sanctions do not categorize abuses of the international cyber

# The Five Technological Revolutions

	Description	Year (approx.)	New Technologies and Industries	New Infrastructure	'Common Sense Principles'
1st	Industrial Revolution	1770	Mechanized Industry	Canals and Water Power	Factory Production, Productivity, Local Networks
2nd	Steam and Railways	1830	Steam Engines, Iron Machinery	Railways, Telegraph, Ports	Economies of Agglomeration, Standardized Parts, Urbanization
3rd	Steel, Electricity, Heavy Engineering	1875	Cheap Steel, Heavy Chemistry	Electrical Networks, Global Shipping	Economies of Scale and Vertical Integration, Science as Productive Force, Efficiency
4th	Oil, Automobile, Mass Production	1910	Cars, Cheap Oil, Petrochemicals, Home Appliances	Road Networks, Universal Electricity	Mass Production, Horizontal Integration Standardized Products, Energy Intensity, Suburbanization
5th	Information and Telecommunications	1970	Cheap Microelectronics, Computers, Mobile Telephony	Worldwide Digital Communications	Information Intensity, Decentralized Networks, Knowledge as Capital, Economies of Specialization, Globalization

Source: Carlota Perez, *Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages* (2003)



**Mark Zuckerberg, Facebook chairman and CEO, testifies in October 2019 before a U.S. congressional hearing on the company's plan to launch a digital currency.** REUTERS

infrastructure as sanctionable acts. Passive government and industry leaders still run the risk of cyber attacks leading to loss of revenue, critical data and operational capacities; compliance failures and reputation loss from enabling sanctions violations; and being left behind in efforts and initiatives to regulate technologies with

potentially far-reaching implications for their economies and national security.

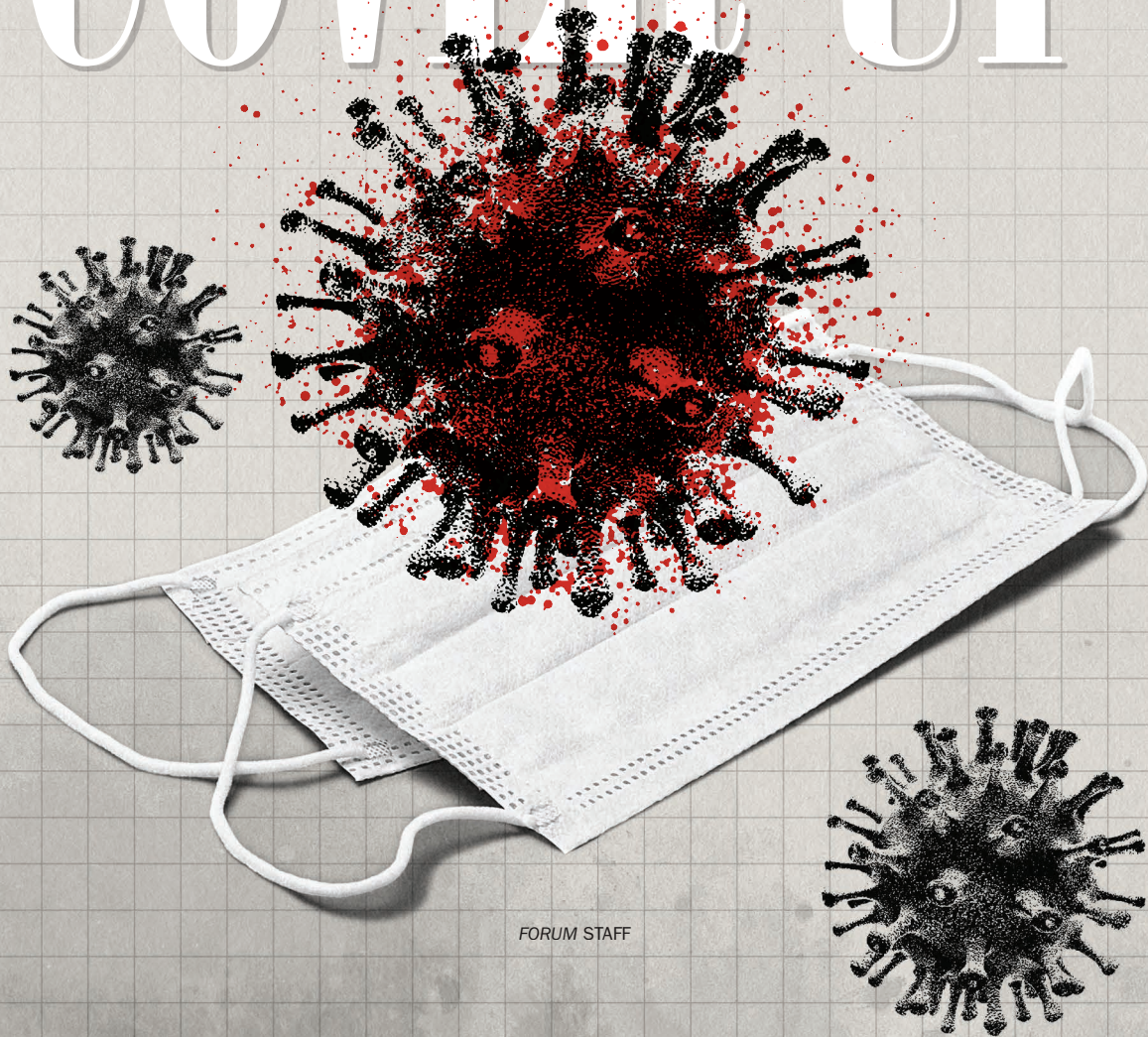
## Regulation and Emerging Technologies

Technology entrepreneurs exploiting the richly rewarding disruptive and transformative potential of digital technologies were historically incentivized by soft regulatory standards. Recognition of the potentially harmful impact of these new technologies to political, social and security matters is beginning to mobilize European and U.S. regulators to intervene against, and discipline, technology companies that are trespassing national and international standards. Yet a regulatory approach that focuses on the existing threat is not sufficient to deal with emerging ones.

In addition to the threats from cryptocurrencies, the commercialization of data has created a pathway for manipulation of public opinions, and perhaps the subversion of essential democratic processes such as elections. International and national laws are not equipped to counter such threats. The future of international security and national sovereignty will hinge, in part, on establishing best practices for cyber space and enforcing them. □

Ashley Taylor is a senior collaborator at Compliance and Capacity Skills International.

# COSTLY COVER-UP



FORUM STAFF

FORUM ILLUSTRATION

## *The Chinese government's suppression of information about the coronavirus outbreak may have increased the financial and human toll worldwide*

Slightly after 2 a.m. February 8, 2020, the morning after the death of Dr. Li Wenliang, the hashtag #wewantfreedomofspeech# appeared on the Chinese social media site Weibo, according to media accounts. The Wuhan ophthalmologist had been among the first to inform other doctors in late December 2019 in an online chat room about the seriousness of the then-mysterious coronavirus outbreak. Two days later, Chinese police detained him and several other doctors, reprimanding them for “disseminating rumors,” NPR reported. While treating patients, Li would later be infected by the virus and succumb to virus-induced pneumonia. By 7 a.m., the morning after his death, the hashtag had more than 2 million views and 5,500 posts, according to *The New York Times* newspaper. Soon thereafter, Chinese government censors deleted the hashtag and others on related topics, including one calling for the Wuhan government to apologize to Li for attempting to silence him. “He was an ordinary figure, but a symbol,” Zhang Lifan, an independent historian in Beijing, told *The Washington Post* newspaper. “If it weren’t for the epidemic and nobody could leave their home, there would likely be demonstrations right now. Officials are absolutely concerned.”

In his death, Li became emblematic of the People’s Republic of China’s (PRC’s) suppression of information about the emerged coronavirus later named COVID-19. The PRC’s muzzling of doctors and other citizens may have contributed to the spread of the virus and escalation of the human and economic costs of the outbreak, experts contend.

“There is no question that the



**Dr. Li Wenliang wears a respirator mask in a Wuhan hospital days before he died on February 7, 2020. REUTERS**

Wuhan government underestimated the disease,” an unnamed senior advisor to China’s central government, told the *Financial Times* newspaper in mid-February 2020. “The mayor of Wuhan has neither the expertise nor the willingness to follow health experts’ advice. His concern is that an escalation in disease prevention may hurt the local economy and social stability.” He added: “In the current political atmosphere, which values obedience more than competence, local officials have an incentive to avoid taking responsibility.”

Many others also saw Chinese Communist Party (CCP) politics interfering in the implementation of sound health practices during the crisis. “There’s a natural inclination for party officials at all levels to bury negative information and censor dissenting views irrespective of who’s in charge in Beijing,” Jude Blanchette, a China analyst at the Center for Security and International Studies, a Washington-based think-tank, told the *Financial Times* in February 2020. “But under Xi Jinping, the inclination to suppress has become endemic and, in this case, contributed to a prolonged period of inaction that allowed the virus to spread.”



**A citizen pays tribute to Dr. Li Wenliang at his hospital in central China’s Huebei province on February 7, 2020. AFP/GETTY IMAGES**

Wuhan authorities through late January 2020 underreported the number of cases and deaths and repeatedly told the public that human-to-human transmission was improbable, Wuhan doctors revealed to the *Financial Times*, among others. PRC authorities had been informed weeks earlier that the deadly virus could indeed spread between humans, Wuhan doctors maintained. In an interview with Huxijie, a medical website, Zhao Jianping, a

pulmonologist at Tongji Hospital in Wuhan, said he diagnosed patients with suspected coronavirus as early as December 27, 2019.

“We didn’t expect the disease to be so severe,” Zhao said. “But we were sure it could spread from human to human.” Zhao said he immediately reported the situation to the Wuhan Centre for Disease Control and Prevention, the *Financial Times* reported.

The World Health Organization (WHO) wouldn’t declare the outbreak a public-health emergency of international concern until January 30, 2020, more than a month after Li’s and Zhao’s warnings, likely due in large part to the PRC’s lack of transparency. Such delays, experts said, impeded wider preparation and mobilization of resources to combat the outbreak that started in Wuhan, China, in early December 2019, and would spread to more than 68 countries and territories, afflicting more than 88,365 people by March 1, 2020.

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Weeks before WHO’s action, many experts believed the outbreak had already exceeded the threshold of the designation. They also questioned whether the PRC may have not only withheld information from WHO but also influenced WHO’s decision to delay the determination, according to *The Daily Mail* newspaper. By the time WHO declared the international emergency, the disease had already afflicted more than 9,500 people and killed 213, according to PRC figures, *The Wall Street Journal* newspaper reported.

Yanzhong Huang, senior fellow for global health at the Council on Foreign Relations, told *The Daily Telegraph* newspaper in mid-January 2020, more than a week before WHO’s designation, that “the criteria for declaring a public health emergency of international concern have been met.” However, “not all WHO decisions are made based on the developments in the biological world,” he said.

Through mid-April 2020, the Chinese government had failed to identify at least publicly the source of the

Wuhan virus and also refused to answer key questions about its first detection and early spread. The CCP’s continued lack of transparency has fueled speculation that the virus escaped from a Chinese biological laboratory in Wuhan, either by accident or because of inadequate safety procedures at the lab. The CCP has repeatedly denied such claims, which are under investigation by U.S. intelligence agencies, according to *The Wall Street Journal*.

“We know that this virus originated in Wuhan, China. We know that there is the Wuhan Institute of Virology just a handful of miles away from where the wet market was. There’s still lots to learn,” U.S. Secretary of State Mike Pompeo told Fox News on April 15, 2020, referencing a live animal market where some health experts suggest the virus naturally emerged. “We really need the Chinese government to open up.”

### Soaring Costs

Even then, by mid-January 2020, it might have been too late to significantly stop the spread.

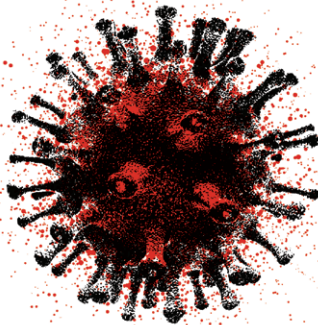
The coronavirus epidemic was already starting to disrupt China’s manufacturing network and supply chain, sending shock waves through entire industries from airlines and tourism to auto, drug and tech manufacturers worldwide.

International companies, such as Tesla and Apple, had already suspended operations in mainland China by that time, according to

Bloomberg News. The impact was also being felt outside of China. South Korea’s Hyundai, for example, halted production of cars due to issues with its supply of parts from China.

By the end of January 2020, analysts were already predicting that the epidemic’s economic toll in the PRC alone could exceed U.S. \$60 billion with the PRC’s gross domestic product (GDP) taking the biggest hit. “GDP growth in the first quarter of 2020 could be about 5%, and we cannot rule out the possibility of falling below 5%,” Zhang Min, a Chinese Academy of Social Sciences official, told Caixin, one of the few Chinese media outlets that the government does not tightly control. Other economists feared even slower growth, under 4%, with no immediate rebound in sight. China’s economy grew by 6% in 2019, which was its lowest rate since 1992 when data was first tabulated.

The coronavirus also fueled inflation in China, driving consumer prices in January 2020 up 5.4% to their highest level in more than eight years, *The Wall Street Journal* newspaper reported in early February 2020. Moreover, the current data may not have captured





**A woman wearing a mask reacts as workers sanitize a traditional market in Seoul, South Korea, on February 26, 2020. South Korea reported more than 3,700 cases and 21 deaths as of March 1, 2020. REUTERS**

the true economic effects of the epidemic, Liu Xuezhi, an economist at China's Bank of Communications, told *The Wall Street Journal*.

As the detrimental economic repercussions continued to spill over to other countries, analysts adjusted their forecasts upward. By early February 2020, some analysts were predicting a U.S. \$300 billion to U.S. \$400 billion global impact. Among them, Panos Kouvelis at Washington University's Olin Business School in St. Louis, Missouri, said the outbreak could disrupt supply chains for 16 months to two years "until you stop seeing these shocks to the global supply chain."

By mid-February 2020, the China-originated COVID-19 epidemic had killed more than 1,300 people and infected nearly 60,000 people worldwide, although mainly in the PRC, surpassing the severe acute respiratory syndrome (SARS) epidemic in 2002-2003 that killed 774 people and infected more than 8,000 people globally. SARS cost the world economy between U.S. \$30 billion and U.S. \$50 billion, which was a fraction of the global GDP at the time of about U.S. \$35 trillion, *The Guardian* newspaper reported. The impact of the coronavirus on global supply chains could be multiple times greater than that of SARS, Kouvelis said.

"Even if the virus does not turn into a pandemic, to think it isn't going to impact what's going on in the world is irrational," Scott Miner, global chief information officer of Guggenheim Investments, wrote in a mid-February 2020 research note, according to *U.S. News & World Report* magazine. "The impact of all this on corporate profits and free cash flow will be dramatic."



**Medical workers don protective suits in a preparation room next to isolation wards at Wuhan Red Cross Hospital in Wuhan, China, the epicenter of the emerged coronavirus outbreak, on February 24, 2020. REUTERS**

## Tumbling Stock Markets

Stock markets and commodity prices around the world also started plummeting as the outbreak progressed, largely due to fears about the health crisis. The PRC's market fell 8% in early February 2020, the first day after the Lunar New Year holiday, the BBC reported. Other markets would soon follow. Asia's other major markets, including those in Hong Kong, Japan, South Korea and Taiwan, all took hits. European markets declined as well.

Although initially stable, the U.S. stock market would soon face a virus-driven market correction. On February 27, 2020, the Dow Jones Industrial Average set a record for the largest point drop ever in a single day. By the end of February 2020, U.S. stocks saw the greatest decline since the 2008 financial crisis on the order of a correction in the 10% range, and analysts also started extending the duration of their negative



**Workers disinfect a residential compound in Bozhou, Anhui province, China, on February 18, 2020. REUTERS**



**A teacher records a lesson inside a middle school classroom in Shaoyang, Hunan province, China, on February 16, 2020, after the coronavirus outbreak delayed the restart of classes. REUTERS**

forecasts for the PRC from the first quarter to the first two quarters of 2020. “The Chinese economy is flat-lining right now,” Stephen Roach, a senior fellow at Yale University, told CNBC’s Squawk Box in late February 2020. “The impact of unprecedented quarantines and restrictions on travel have brought the Chinese economy right now to a virtual standstill.”

Roach, who lived in China from 2007 until 2012 during his tenure as chairman of Morgan Stanley Asia, said he hoped the Chinese government would continue to work to contain the coronavirus outbreak despite short-term economic effects.

In March 2020, the coronavirus continued to spread worldwide at a horrific rate, however, hitting Italy, Spain and the United States

harder than China and infecting 179 countries and territories. The Dow Industrials set more records, heading into bear territory and plunging 10% on March 21, its worst percentage drop in one day since the 1987 crash. Then after bottoming out on March 23 at a level 42% lower than the start of the year, the Dow climbed 21% over a three-day period, the largest three-day percentage gain for the index since 1931, *The Wall Street Journal* reported.

By the end of March, more than 870,000 people worldwide were infected with coronavirus and more than 43,000 people had died from the disease. The U.S. tallied over 189,000 cases, Italy over 105,000 and Spain over 100,000 cases to China’s over 82,000 cases through March 31, 2020. Deaths in France, Italy, Spain and the U.S. had also exceeded the number of reported deaths in China at that time. Meanwhile, the Dow experienced its worst first-quarter performance ever, losing more than 22% of its value in the first three months of 2020, according to CNBC. The S&P 500 would record its worst first quarter since 1938.

COVID-19 case numbers and deaths continued climbing into April 2020. Volatility in the U.S. and other markets also continued into April, as economies around the world continued to be battered by the pandemic in unforeseen ways. Although investment firm Goldman Sachs predicted in late March that the U.S. economy would experience an unprecedented decline in the second quarter, the firm said the recovery would be the fastest in history, CNBC reported.

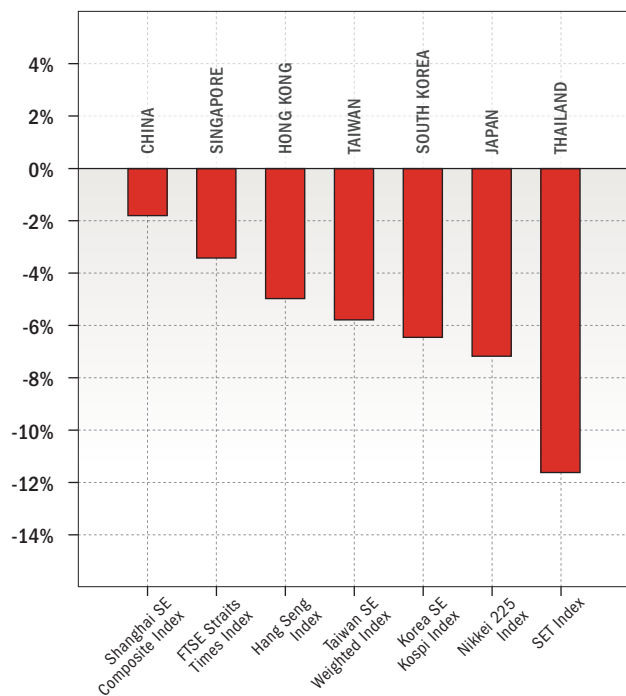
## Total Costs Unlimited

The worrisome economic indexes and forecasts underscore the importance of sound public health policy and good governance and show how failures in each can translate not only into financial costs but also human ones.

The PRC could have mitigated these costs by openly and expediently sharing accurate information with its citizens and the world, many experts contend. No one will ever be able to quantify how many lives and how many billions, even trillions, in assets and revenues could have been protected by swift action by the PRC. However, experts agree that serious economic and social consequences will ensue, especially in China. The total costs will depend on the PRC's ongoing ability to curtail further spread of the virus, how it manages the emerging slowdown and whether it assumes responsibility for its initial missteps, analysts agree.

### Coronavirus hit major Indo-Pacific markets

Year-to-date performance in selected stock exchanges (SE) with confirmed cases through February 27, 2020



Sources: Refinitiv, CNBC

“A premature relaxation of quarantines and travel restrictions could lead to a relapse that would be far more dangerous than the outbreak at present,” Roach told CNBC in late February 2020. “The Chinese would want to avoid that at all cost.

That’s important for the rest of the world where the infection is clearly in the process of spreading right now,” Roach said.

Governments, including the PRC, are rolling out stimulus packages to help offset the economic impact of the outbreak. However, they are unlikely to be enough to remedy the effects of the drastic measures that had to be implemented to stop the epidemic once it was raging. “These measures are basically insensitive to policy action,” he said. “What fiscal and monetary policy can do would be to attempt to stabilize markets — which is certainly important — but most importantly, to underwrite the upside of this subsequent recovery once economies like China and elsewhere go back to work. So, they’re playing for the other side of the virus-related impacts, not the downside.”

*No measures can offset the human costs of lives and freedoms. The real tragedy is the PRC had the power to offset the magnitude of such losses but placed the CCP agenda above citizens’ rights and health.*

No measures can offset the human costs of lives and freedoms. The real tragedy is the PRC had the power to offset the magnitude of such losses but placed the CCP agenda above Chinese citizens’ rights and health, a move that also placed the rest of the world at risk.

“Many people believe that if the authorities had listened to his [Li’s] warning, the virus would not have spread as it has,” wrote correspondent Keiichi Takamura in mid-February 2020 for NHK World online, a Japanese state-owned international news service.

When Li died, online criticism of the CCP exploded worldwide. The PRC sought to mute such criticism by sending condolences to Li’s family and launching an investigation into Wuhan authorities’ handling of the outbreak. Even if motivated by the engines of the PRC’s propaganda machine, the small steps seem to indicate some movement toward heeding citizens’ concerns, valuing greater transparency and better governance.

Before his death, Li emphasized the importance of getting key information about the outbreak out to the public, rather than his vindication, according to NPR. In an interview with the online magazine Caixin, Li said: “A healthy society should not have only one kind of voice.” □



# Countering PRC INFLUENCE OPERATIONS

*Taiwan leads longtime fight against coercion by the People's Republic of China*

LT. GEN. VINCENT W.F. CHEN/NATIONAL SECURITY BUREAU OF TAIWAN

I was asked to talk about China's influence operations against Taiwan and try to put it into the context of the regional as well as the global strategic environment. I'll start off by offering what we view as the nature of the Chinese Communist Party (CCP), and I'll also try to touch upon some aspects regarding what's going on in Hong Kong in terms of the CCP's influence operation against Hong Kong's entire extradition movement. Then I'll focus on how we — Taiwan — view the whole thing that has developed. It evolved into an imminent threat based upon our experience in fighting against it, and what we believe the most is that Taiwan's unique status should not perish.

In an era where the CCP is jeopardizing the world order based on liberal democracy, human rights, market economy and rule of law, Taiwan is front and center of that world order. Taiwan is in a situation similar to Ukraine and Baltic states at the front of Russia's sphere of influence. Yet, Taiwan is unique in facing the CCP's People's Republic of China (PRC), the most powerful party-state in history that is determined to terminate Taiwan as it is. The struggle between liberal democracy and totalitarian dictatorship is central in the discussion of the CCP's sharp power, cognitive warfare, influence operations and mind control.

The history of Taiwan since 1912, especially since 1949, is a process of democratic enlightenment. The CCP's rule in China is based on Deng Xiaoping's four cardinal principles in 1979. Chinese General

Secretary Xi Jinping has further catalyzed that into totalitarianism with some modern technology.

The situation in Hong Kong is a salient example of Beijing's desire to undermine political and civil liberties, as well as subordinate individual human rights to the overarching authority of the party-state.

From the perspective of cognitive warfighting, defined as the capacity to weaponize knowledge, Taiwan has a unique vulnerability because Mandarin Chinese is the common language for both China and Taiwan.

With the unrestrained resources in centralized policy at its discretion, Beijing could easily monopolize or overwhelm the Chinese-speaking audience to achieve the PRC's goal of subliminal cognition manipulation.

We believe Xi's digital Leninism is straddling the world. Xi rules China by emulating imperial-era government, only reinforcing it with advanced surveillance technologies. Dr. Stein Ringen, a Norwegian sociologist and political scientist, termed this combination a perfect dictatorship of a party-state.

Xi's regime is now evaluating 80 million party members based on their test score of Xi's thought. On the little red app on smartphones and since September 2019, journalists are required to pass an exam of Xi's thought to keep their jobs. The PRC's social credit system to be completed in 2020 is the peak of Orwellian treatment of China's entire population.

Also influenced by Marxist and Leninist economic determinism, the CCP intends to appropriate modern global means of production to perpetuate the party's life. Since Deng Xiaoping's open-door policy in the 1980s, the CCP has followed the path of state capitalism, accumulating wealth while disregarding rules of market economy. For this purpose, Xi has sought to achieve a series of feats accomplished through plays like the One Belt, One Road (OBOR) policy, the China standard 2035 and other long-term strategies.



**To keep their jobs, Chinese journalists are required to use a government app to pass an exam on their understanding of Chinese President Xi Jinping's thought. The app also monitors and evaluates Chinese Communist Party members.** REUTERS

Xi also tried to consolidate the South China Sea fortification. He has gradually tried to appropriate aerial, cyber and arctic domains and pushed international adoption of China's preferred technological standards. Under his leadership, China has bypassed the international rule-based order and taken advantage of the West's dismissal of war as a conflict resolution tool.

Through its investment in think tanks, social organizations and elite of other countries using Confucius Institutes, the CCP broadened its foreign influence to cultivate a pro-China public opinion in the world. A grand international propaganda strategy was launched in 2009. The China Central Television (CCTV) is now airing in at least 170 countries in five different languages. In the meantime, state-run technology companies, including Huawei, ZTE, CE, IEC and High Vision, export surveillance equipment to Argentina, Burma, Cambodia, Morocco, the Philippines, South Africa, Sri Lanka, United Arab Emirates and others, and Huawei is installing its safe city solution in cities of more than 100 countries.

CCP propaganda efforts are more effective in Latin America, Southeast Asia and Africa and less so in the

West, at least for now. The CCP has also launched cognitive warfare during the trade war with the U.S. for this core supremacy, manipulation of American voters and Chinese nationalism. The latest propaganda TV show in September 2019 highlighted the Chinese strategic patience and that of a U.S. economic growth slowdown.

The United Nations is another key multilateral platform for the CCP's infrastructure and cognitive campaign efforts. The CCP inserted its OBOR objective into U.N. sustainable development goals locally and released it on a U.N. website. Chinese nationals Houlin Zhao and Fang Liu were reelected to lead ITU (International Telecommunication Union) and ICAO (International Civil Aviation Organization), respectively. In 2019, the CCP successfully secured leadership of the U.N. Food and Agriculture Organization through hybrid warfare. The intelligence suggests the PRC forgave tens of millions of dollars of debt to an African state in exchange for withdrawing its candidate. Before voting in June 2019, the CCP disrupted communication of the French candidate, which led the French government to install encryption devices. On voting day, the CCP took no chances, providing transportation for pro-China voters, and Chinese candidates won the election on the first round.

## HONG KONG CAMPAIGN

Now, I'd like to turn to the CCP's cognitive warfare against Hong Kong's demonstration. Hong Kong's entire extradition to China movement is an epic battle with global and cross-strait implications. The CCP has long offered Hong Kong's business tycoons national prestige, including through appointment to the National People's Congress in exchange for political support, and by appropriating media under the umbrella. The CCP resorted to cutting advertisements or even using gang-related violence for those who refuse to yield.

The CCP Hong Kong central liaison office controls half of Hong Kong's publishing companies, and based on this network, the CCP, at early stages of the demonstrations, pointed at foreign involvement to manipulate cross-strait relations and Taiwan-U.S. ties to ensure that the peaceful transformation in China would not take place. It is worth noting that demonstrators held up a large banner calling for Xi's death on September 27, 2019. The CCP views the role of the U.S. Congress in the Hong Kong demonstration as a threat to national security.

Hong Kong's 2019 pro-democracy protest also exposed the weakness of the CCP's cognitive warfare. Hong Kong protester activities were so flexible and water-like to the extent that some Chinese observers suspected the U.S. military was supporting the Hong Kong demonstrators with telecommunications broadband capacity. Intelligence shows that Hong Kong demonstrations seemed to apply the unconventional warfare that generates impact on financial, trade, legal, media and ideological dimensions. The pro-China

media such as *Oriental Daily News*, a Chinese language newspaper in Hong Kong, admitted in August 2019 that both the CCP's intelligence and propaganda in Hong Kong were utter parroting. The CCP's parroting and smearing campaign seemed to endorse this admission.

## OPERATIONS AGAINST TAIWAN

Let's turn to CCP influence operations against Taiwan. Xi has articulated that the rejuvenation of China cannot occur without the so-called reacquisition of lost territories. He set a deadline of 2049 to solve the Taiwan "problem" vis-à-vis annexation. China's influence operation against Taiwan is an integral part of the CCP's digital Leninism. It can be conceptualized under party ideology and national security. Xi's speech on struggle at the central party school in September 2019 confirmed this as a priority. His remarks revealed that the survival of the party matters the most and is the cardinal imperative. This imperative constitutes the fundamental difference between the CCP's party-state and rest of the world.

Today, the CCP's Taiwan policy is guided by Xi's five-point remarks in January 2019, which dictate the People's Liberation Army (PLA) military coercion, external isolation of Taiwan, infiltration and subversion, United Front interaction, cyber activities and disinformation dissemination. All of these activities are incorporated in the PRC's propaganda framework intended to shape the Taiwan mindset, preferably to the extent of annexing Taiwan without bloodshed. In 2018, the CCP launched a relatively new state-owned eliminating campaign called "namefare" that sought to efface all trace of Taiwan's sovereignty, particularly in the private sector and with nongovernmental organizations.

As for the military rank, the CCP's military short-term coercion against Taiwan had an immediate cognitive dimension in 2019. As reported by overseas Chinese newspaper *World Journal* in February 2019, two Chinese scholars visited California in January 2019 to meet with a former U.S. intelligence official to convey Xi's forceful unification plan by 2022. They revealed that Xi would work with Russia, Iran and North Korea for coordination of a scenario in Mideast and Northeast Asia to constrain intervening U.S. forces for Taiwan. At that time, the plan sounded like a groundless bluff in the midst of the Sino-U.S. trade war. As it turned out in 2019, Xi's plans seemed not so groundless. In Russia, Tu-95 bombers circled Taiwan proper for the first time on June 20.

PLA air force and Russian aircraft jointly patrolled the East China Sea on July 23, 2019. As of October 2019, North Korea had conducted 11 short-range missile and submarine-launched ballistic missile tests. And after the Saudi Arabia oil refinery attack in September 2019, Iran announced a joint military exercise with China and Russia in the western Indian Ocean. The CCP's role is still unclear, but there is some similarity with Xi's plan.

## LONG-TERM COERCION

The CCP has pursued United Front interaction and infiltration in Taiwan for decades, having reached quite widely and deeply in our island. The CCP has developed a complete network of local government across the strait where 24 business, media and semi-official representatives in Taiwan cultivate a wide connection. Some of them have engaged in activities beyond their publicly stated mission. There are at least 22 pro-China organizations, political parties, and we have identified a



Hong Kong students and Taiwan supporters hold up cards that read "Taiwan Supports Hong Kong" and "No China Extradition" outside the Legislative Yuan in Taipei in June 2019. Anti-government protests in Hong Kong against an extradition law were echoed in Taiwan. THE ASSOCIATED PRESS

number of them with connections to organized crime for extending their networking to local entities, Taiwan businessmen in mainland China and Taiwan news.

On the other hand, the CCP's cyber activities are an imminent threat to Taiwan. The cyber force successfully hacked into Taiwan's health insurance data around 2010 to appropriate vital demographic information on Taiwan's population structure.

From 2016 to July 2019, the CCP cyber force launched more than 21,000 attacks against Taiwan, targeting defense, foreign affairs, overseas service, medical service, maritime and firefighting institutes. Many of the attacks were conducted through relay stations. Nearly 300 around the world were used by CCP hackers between January and July 2019.

The CCP has long cultivated influence on Taiwan media, and since 2015, the CCP has attempted to overwhelmingly engage Taiwan media in a cross-strait media summit. In May 2019, this summit assembled executive delegates from 80 communist newspapers, TV and radio stations, news websites and publishing industry and Taiwan news agencies, a scope meant to monopolize perception of Taiwan audiences.



**Supporters of Taiwan President Tsai Ing-wen cheer as she launches her re-election campaign in Taipei on November 17, 2019.**

THE ASSOCIATED PRESS

While China's effort to sway Taiwan's public opinion might work in some instances, it has failed to undermine sovereignty and national identity. A poll released by Taiwan Mainland Affairs Council in May 2019 showed that 86% of respondents oppose the so-called one country, two system formula, and 78.5% support Taiwan authorities vindication of liberal democratic institutions. Another poll released by National Chengchi University showed that 40.3% prefer maintaining status quo and favor independence, while only 3.7% prefer maintaining status quo and unification later.

The CCP's meddling with Taiwan elections dates back to the 1990s. The 1995-96 Taiwan Straits crisis was meant to intimidate voters ahead of the first direct, presidential election. The CCP cyber force hacked into campaign headquarters of major political parties during the



**Taiwan President Tsai Ing-wen speaks during the American Chamber of Commerce annual meeting in Taipei in November 2019.** REUTERS

2008 election. As for Taiwan elections in 2018 and 2020, the CCP established a multidepartmental task force in late 2017 to evaluate the election, finance pro-China parties and support a mainland spouse group. The task force also funded a regional talk show host and website writers.

In 2018, mandated by the CCP's so-called central national security commission, PLA strategic support force was tasked to coordinate propaganda, cyber and Taiwan affairs office as well as the United Front Department to conduct cognitive warfare to shape Taiwan public opinion. Beijing developed so-called self-media, or social media as we call it, to disseminate video messages on YouTube, mobilize armies of internet posters and chair bots to overwhelm discussion. They also work with China's own information technology company to characterize desired issues, evaluate manipulation and modify strategy, accordingly. It also used pro-China media and internet celebrities in Taiwan to echo CCP messages on Facebook, Twitter, Live and other social media. These activities constitute a new model or trend of CCP's cognitive warfare against Taiwan, which challenges Taiwan's response capacities.

## **COUNTERINITIATIVES AT HOME**

Let's turn to Taiwan's overseas effort. To be responsible for Taiwan's destiny, President Tsai Ing-wen on

March 2019 proposed guidance for countering the CCP's version, countering "one country, two systems" in various dimensions. In the legal realm, her administration has comprehensively reviewed 11 laws and about 134 regulations governing the cross-strait interaction and defined and made necessary amendments, such as expanding the scope and definition in criminal law of treason, including protection of sensitive technological information in national intelligence work and enhancing punishment for violation of that law.

With respect to country and CCP's infiltration and interfering in Taiwan's elections, the Taiwan National Security Bureau (NSB) has formed a task force integrating intelligence organizations to monitor underground financial transactions across the strait, including local gambling, arms and drug smuggling, gang-related violence, and unusual activities of certain foreign visitors. Taiwan authorities also have formed an iron-clad triangle for cyber security, integrating the National Security Council executive, National Communication Commission and the NSB responsible for early warning and cooperating with the Ministry of National Defense, the police, the investigation bureau as well as international partners for relay station detection.

In terms of information countermeasures, some newspapers now have a rumor terminator section. The security apparatus identified this information and forwarded it to proper authorities to deal with them. To enhance public awareness, our authorities have cooperated with the private sector to introduce internet media programs on disinformation and fake news.

### LIKE-MINDED SUPPORT

Having said this, Taiwan still has lots to do. We appreciate the support of like-minded friends around the world, the U.S. in particular. The U.S. passed the Taiwan Travel Act in 2018, the Taiwan Assurance Act of 2019 and the Taipei Act in 2020. In the first Indo-Pacific strategy report by the U.S. Department of Defense in July 2019, Taiwan is characterized as a partner of vital interest to the U.S. The global training and cooperation framework managed by the U.S. and Taiwan has made impressive progress, lately attracting Japan, Sweden and other countries to participate. Additionally, Taiwan was invited to join the U.S.-led coalition to counter ISIS. The White House called out Beijing for launching "namefare" to coerce the international community into its One China Principle.

We appreciate, in particular, the U.S. government position concerning Taiwan's national defense, manifested by the recent sale of M1A2 Abrams battle tanks and F-16V fighter jets.

The U.S. authorities shared with Taiwan information about technologies nations used to meddle in the U.S. midterm election in 2018. Later in October 2019,

British experts were invited to Taiwan for a workshop to share the United Kingdom's balanced approach against disinformation.

For the future, and in light of the growing CCP digital Leninism threat and looming urgency for complete unification, it is increasingly difficult for Taiwan to survive on its own. From the cognitive perspective with U.S. support, it is worth considering that Taiwan and like-minded countries form an interregional alliance of cyber security combating this information where we can share information and other pertinent early warning information.

The objective of this alliance is to safeguard freedom of speech and explore regulation of internet activity. As part of the Indo-Pacific strategy, the U.S. and Taiwan could consider signing a joint memorandum of understanding on combating disinformation, as Taiwan is the real-time combat zone.

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## *The objective of this alliance is to safeguard freedom of speech and explore regulation of internet activity.*

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The CCP's activities and Taiwan's defense experience can serve as a valuable reference for the free world. Besides, we can also further expand the cognitive interoperability among us. For example, through a bilateral U.S.-Taiwan free trade agreement, more cooperation between public Taiwan television and HBO or more Taiwan appearances on *CNN Heroes* to name just a few.

In March 2019, President Tsai Ing-wen announced her duty to confront the national security threat of a new era and to preserve options for Taiwan future generations. She then asserted that the key for peaceful development of cross-strait relations is democratization of China. This remark suggests that Taiwan's uniqueness is an inspiration for Chinese democratization and a key element in responding to the CCP's influence operation against Taiwan. It is reassuring that during his tenure U.S. Assistant Secretary of Defense Randy Schriver, who left the Pentagon in December 2019, affirmed that the U.S. will continue to help Taiwan maintain its unique status. □

Lt. Gen. Vincent W.F. Chen is the deputy director-general, National Security Bureau of Taiwan. This article is excerpted from his October 15, 2019, presentation, "The Unique Status Shall Not Perish: CCP's Influence Operations Against Taiwan," at the Jamestown Foundation's Ninth Annual China Defense and Security Conference at the Carnegie Endowment for International Peace in Washington, D.C. It has been edited to fit FORUM's format.

# FOREIGN *engagement*

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AND THE U.K. INVEST  
TIME AND MONEY TO  
PROMOTE A FREE AND  
OPEN INDO-PACIFIC**

FORUM STAFF



**T**he concept of a Free and Open Indo-Pacific region is gaining support globally. An increasing number of nations support the notion that a prosperous, peaceful and stable region aligns with their own national strategies. Partnerships and programs are emerging in the Indo-Pacific with countries such as Canada, France and the United Kingdom, all aimed at ensuring the region thrives economically and politically. “For the first time, there’s a genuine appreciation that the center of gravity has shifted from the Atlantic to the Indo-Pacific,” Kasi Rao, Canada India Business Council president and chief executive officer, told Forbes.com in October 2019. “Therefore, we must get it right with Asia.”

The region for some time has captured the world’s attention due to its strategic importance. Roughly

one-third of global maritime trade passes through the South China Sea alone, according to the U.S. State Department. Plus, nine out of the world’s busiest seaports are in the region. “The story of the Indo-Pacific in recent decades is the story of what is possible when people take ownership of their future,” U.S. President Donald Trump said in November 2017 at the Asia-Pacific Economic Cooperation Chief Executive Office Summit. “This region has emerged as a beautiful constellation of nations, each its own bright star, satellites to none.”

No wonder so many countries continue to cast their attention to what’s happening inside the Indo-Pacific. What follows is a synopsis of how Canada, France and the U.K. have invested time and money to show their commitment to the region and its sustained peace and prosperity.



**HMCS Ottawa conducts ship maneuvers with JS Chokai and JS Shimakaze during KAEDEX, a bilateral exercise with the Japan Maritime Self-Defense Force, conducted as part of Operation PROJECTION in October 2019.** CANADIAN ARMED FORCES

## CANADA

The growing economic and political events of the Indo-Pacific are of critical importance to Canada's regional strategy regarding prosperity, development, inclusion, sustainability, peace and security. Since 2006, Canada has added 10 new diplomatic offices in China and India, committed new resources to the Association of Southeast Asian Nations (ASEAN) and, in March 2013, appointed Canada's first resident ambassador to Burma.

Canada continues to power up its focus on the Indo-Pacific with plans to double its overseas exports by 2025. For context, the U.S. accounted for about 76% of

Canada's trade activities in 2000 while the Indo-Pacific accounted for only 10%, according to Forbes.com. In 2018, the figure for the U.S. shrank to 63%, while that of the Indo-Pacific grew to 17%, Forbes.com reported.

Canada is part of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, a free-trade agreement between Canada and 10 other countries operating in the Indo-Pacific, including Australia, Brunei, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam. Once fully implemented, the 11 countries will form a trading bloc representing 495 million consumers and 13.5% of global gross domestic product, giving Canada increased access to key markets in the Indo-Pacific and Latin America.

As one of ASEAN's longest-serving partners, Canada has made notable efforts recently to boost its engagement with Southeast Asia. Canada remains a key partner in counterterrorism efforts and disaster relief. With Vietnam stepping into the ASEAN chairmanship role in 2020, Canada has taken a keen interest in that bilateral relationship. Canadian vessels have increasingly visited Vietnam, and a formalized agreement was recently inked for Vietnam's participation in Canadian military training.

In May 2019, Vietnamese Defense Minister Ngo Xuan Lich became the first sitting defense minister to visit Canada since bilateral ties were established in 1973. In addition to talks on personnel training and sharing expertise on areas such as United Nations peacekeeping operations, the two countries discussed common regional and global interests, including the South China Sea and ASEAN. They also discussed ways to advance their defense relationship. Options include cyber security, disaster relief, and rescue and maritime security, including expansion of a law enforcement agreement between the two coast guards and welcoming Canadian naval ships for visits and drills, according to the online magazine *The Diplomat*.

In Northeast Asia, Japan has also asked for more Canadian engagement in the region. Japanese Prime Minister Shinzo Abe pitched closer defense cooperation with Canada, among other things, during a meeting with Canadian Prime Minister Justin Trudeau in April 2019. Abe wants increased information and personnel exchanges between the two militaries, and he also wants to work with Canada in international peacekeeping, an area where both countries share strengths.

"We share a lot of common value systems ... in terms of human rights, support for democracy, good economic linkages," Dave Perry, a defense expert at the Canadian Institute of Global Affairs, told the Canadian Broadcasting Corp. "But I think we're also on the same side of some of the strategic issues in the region, where we want to promote open access, free trade and freedom of movement ... something that has been in place for the last several decades enforced by the U.S. Navy in the Pacific, which has benefited both of our countries."

According to a statement by the government of Canada, "Canada is committed to promoting a

progressive approach to trade that fosters open markets, creates jobs, helps business become more competitive and drives growth across the Asia-Pacific region. To this end, Canada is working to ensure that trade discussions are informed by, and respond to, issues such as workers' rights, the environment, gender equality and reinforcing the continued right of governments to regulate in the public interest."

## FRANCE

France has a significant military presence in the Indo-Pacific region, with 4,100 personnel permanently stationed in the Indian Ocean and another 2,900 personnel permanently stationed in the Pacific Ocean. These forces primarily ensure the protection of French territories and surveil exclusive economic zones. They also participate in humanitarian assistance and disaster relief (HADR) efforts and fight trafficking. "With territories and population in both the Indian and Pacific Oceans, France is a nation of the Indo-Pacific region and holds a distinctive place in this part of the world, from the African coastline to the seaboard of Americas," Florence Parly, French minister of the Armed Forces, wrote in the foreword of the 2019 report "France and Security in the Indo-Pacific." "France permanently maintains sovereignty and presence forces in the region to defend its interests and to contribute to the stability of the region alongside its partners, primarily India, Australia, the United States, Japan as well as Malaysia, Singapore, New Zealand, Indonesia and Vietnam."

When it comes to HADR, France regularly offers its support by mobilizing its Army, Navy and Air Force assets. In the South Pacific, France works with Australia and New Zealand in accordance with the FRANZ Agreement among the three countries to coordinate disaster relief actions to states in need. A French advisor for civilian security is also based in Singapore to coordinate civil protection and crisis management cooperation in Southeast Asia.

France is the sixth largest economy in the world, and it boasts comprehensive and independent military resources as illustrated by its autonomous design and

manufacturing of nuclear deterrence capabilities, satellites, fighter aircraft, submarines, ships, tanks and other combat vehicles.

France has a vested stake in the region with 1.6 million French nationals, several island territories in the Indian and South Pacific oceans and vast exclusive economic zones. "France is not going anywhere, because we are part of the region," Parly said in June 2019 during her speech at the Shangri-La Dialogue. "Our forces will be ready to face any kind of threats, whether from terrorism, organized crime, and any attempts to undermine French sovereignty. Some of these threats are straightforward, some insidious. We will confront them anyway. We will organize our presence, our prepositioned forces, our temporary deployments, to ensure a robust defense of our interests."

France has five military commands and three sovereign bases in the region. In 2018, French forces seized 15 tons of drugs in the Indian Ocean — "enough to dope all the region's sharks into oblivion," Parly said. France supports building a regional security architecture and has taken steps to work closer with ASEAN, Parly said.

She also spoke to France's commitment to a Free and Open Indo-Pacific, saying open access to maritime lines of communication in the region is key to the prosperity of Europe and the preservation of trade arteries that remain vital to the world. "This is a question of principle. Where rules are no longer the boundary of ambition, what security can there be for smaller states in the region? What is the meaning of sovereign equality, that cardinal principle of the U.N.?" Parly said during her Shangri-La Dialogue speech. "As for us, we will go about this issue in our own, steady, nonconfrontational but obstinate way. We will continue to sail more than twice a year in the South China Sea. There will be objections, there will be dubious maneuvers at sea. But we will not be intimidated into accepting any *fait accompli*, because what international law condemns, how could we condone?"

## UNITED KINGDOM

How a refocused U.K. will fit into the Indo-Pacific once Britain leaves the European Union remains unclear, but analysts expect a realignment of foreign policy interests to



Expeditionary forces from Australia, Canada, New Zealand and the United States pose in August 2019 for a group photo during Exercise Hydracrab, a quadrilateral exercise conducted by forces from the four countries. PETTY OFFICER 2ND CLASS KELSEY L. ADAMS/U.S. NAVY



Royal Australian Air Force Air Commodore Ken Quinn, center right, speaks with French Armed Forces officers Capt. Dominique Weschler, left, Capt. Thierry Paolucui and Royal Australian Air Force Wing Commander Jim Xinos at Fort Teremba, New Caledonia, during Exercise Croix du Sud 2014. COMMONWEALTH OF AUSTRALIA, DEPARTMENT OF DEFENCE

soon follow. In the meantime, the U.K. maintains strong ties with Australia and Japan, two of its closest Indo-Pacific security allies, and is working to raise its profile among Southeast Asian nations.

“The very nature of the U.K.’s future profile as an international leading actor is likely to be defined in the Asia-Pacific as a result of the country’s choices on how to engage with its complex security landscape,” Alessio Patalano, an East Asian security specialist at King’s College London, wrote in a 2019 report, according to *Asia Times*, a Hong Kong-based English-language newspaper. “As the region continues to ascend to prominence in international affairs, the U.K. faces a hard choice. It has to decide whether it intends to actively shape the regional security landscape, or merely to contribute in managing its transformation.”

The British government has shown that it plans to take an active role in its future relationships in the Indo-Pacific. “The Pacific region is becoming ever more important to the U.K., with growing trade links and regional security issues that have global implications,” according to a December 2018 British Ministry of Defence report, “Mobilising, Modernising and Transforming Defence. We will increase our presence in the region, through our bilateral relationships and the Five Eyes and Five Power Defence arrangements groups. Together, we will stand up for the global rules, including freedom of navigation, that underpin our security and prosperity as an island trading nation.”

Then-British Defense Secretary Gavin Williamson

spoke in early 2019 about getting as many British military resources forward based in Southeast Asia, further shedding a spotlight on the U.K.’s desire to be closer to its Indo-Pacific allies, strategically and physically. “This is our biggest moment as a nation since the end of the Second World War,” Williamson told the *Sunday Telegraph* newspaper in January 2019. “This is our moment to be a true global player once more — and I think the armed forces play a really important role as part of that.”

Williamson said during the June 2018 Shangri-La Dialogue that Britain intended to demonstrate its solidarity with the “rules-based system” in Asian waters by sending its warship to sail through the hotly contested South China Sea. “We have to make it clear that nations need to play by the rules and that there are consequences for not doing so,” Williamson said. “We must speak with one voice. ... We want to look and see how we can do more with our allies in the region, have a bigger effect and make a bigger difference.”

Britain also promised to sail aircraft carriers in the Pacific once they’re operational in 2020. “Certainly, as we bring our two new aircraft carriers onstream in 2020, and as we renew and update our defense forces, they will be seen in the Pacific,” Kim Darroch, then-Britain’s ambassador to the U.S., announced in December 2016, according to Reuters. “And we absolutely share the objective of this U.S. administration, and the next one, to protect freedom of navigation and to keep sea routes and air routes open.” □



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ASIA DEVELOPMENT BANK PUBLIC AFFAIRS

# **THE ASIAN DEVELOPMENT BANK PROMOTES GROWTH, PROSPERITY AND SUSTAINABILITY IN THE INDO-PACIFIC**

PAUL CURRY/ASIAN DEVELOPMENT BANK

**By** tackling issues that range from economic disparity to disaster resilience, a Philippines-based multilateral development bank has been an engine for socioeconomic progress in the Indo-Pacific for decades.

The Asian Development Bank (ADB) was established in 1966 and headquartered in Manila. Its vision is to achieve a prosperous, inclusive, resilient and sustainable Asia-Pacific region, from Tbilisi to Tarawa. ADB uses a blend of loans, grants, equity investments, guarantees, technical assistance and policy dialogue as the primary instruments for achieving its objective to eradicate poverty and foster economic growth in its developing member countries (DMCs) across the region. ADB has played a central role in the region's socioeconomic development, and as its largest donor, it will continue to play a forward role in the Indo-Pacific's political, social and economic transformations.

In 2018, ADB provided more than U.S. \$20 billion in sovereign loans and grants as well as private sector investments in development assistance to its DMCs. The majority of its resources are financing infrastructure, supporting policymaking and good governance, and improving socioeconomic development outcomes. In 2018, some of ADB's major commitments by sector included energy (24%), transport (23%), natural resources and rural development (11%), public sector management (11%), and urban and water (10%).

ADB's assistance is based on close consultations with its shareholders and DMCs as well as other development partners active in the region. The United States is one of the bank's founding members and its "co-equal" largest shareholder, along with Japan. Collaboration between ADB and the U.S. has supported the steady growth of resources available to the bank's member countries, and in turn, has played a key role in strengthening U.S. relations with countries across the region.

## **OWNERSHIP AND GOVERNANCE**

ADB is owned by 68 member countries. Of its 49 regional members, 44 are classified as DMCs and are therefore eligible to borrow and receive assistance. Ownership by regional and nonregional members is based on the purchased number of shares. The largest shareholders are Japan (15.6%) and the U.S. (15.6%), followed by the

People's Republic of China (PRC) (6.4%), India (6.3%) and Australia (5.8%).

Similar to other multilateral development banks, including the World Bank, ADB's governance structure comprises a board of governors and a resident board of directors. The board of governors is responsible for long-term strategy and overall institutional governance. The Department of the Treasury leads U.S. engagement at the board of directors at ADB and is represented by the U.S. ambassador to ADB.

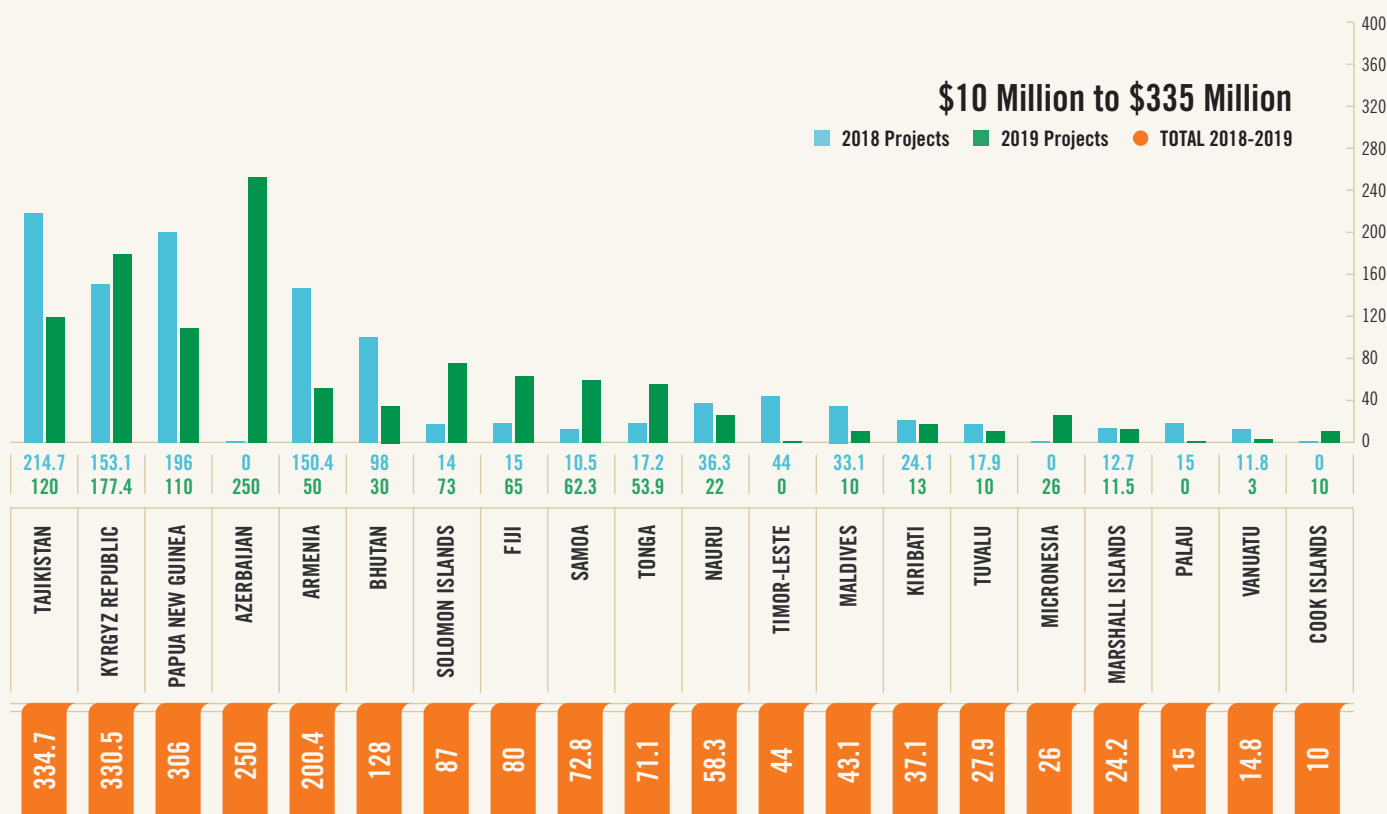
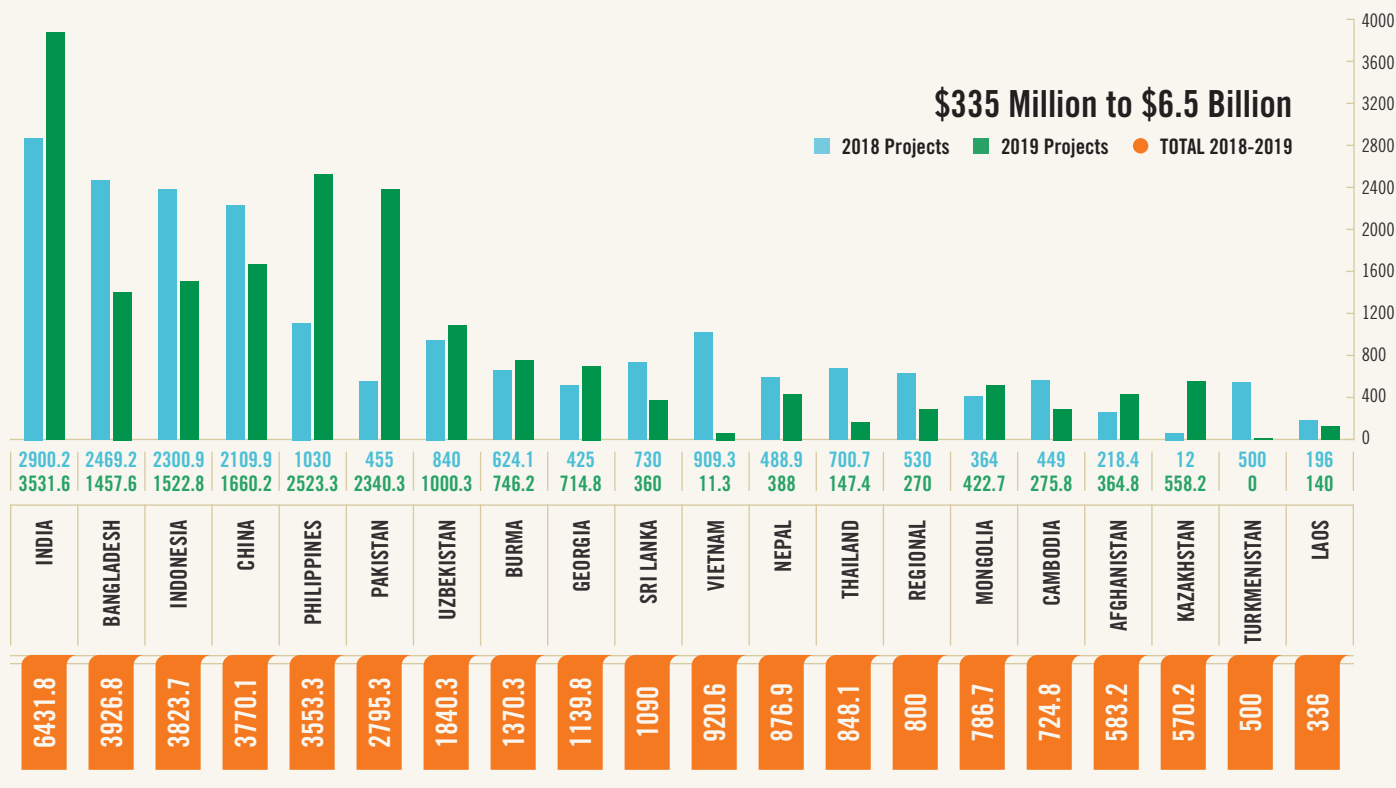
The board of directors represents shareholders' interests at the bank and approves all strategies, policies and economic assistance. The board of directors is in continuous session throughout the year and comprises 12 chairs, each led by an executive director. Nine of the chairs represent groups of countries, while three of the chairs are single constituency chairs from Japan, the U.S. and the PRC. ADB's president is the chairperson of the board of directors and guides the bank's operations, staff and management. ADB historically has been led by a Japanese national. ADB's newest president, Masatsugu Asakawa, took office on January 17, 2020.

## **MANAGEMENT AND OPERATIONS**

Operationally, ADB is organized into regional and support departments. The regional departments coordinate assistance between ADB and its borrowers. They oversee ADB's field offices in borrowing countries and work closely with governments, the private sector and development partners to plan and implement country-specific assistance portfolios. The regional departments design and implement ADB's country assistance, including ADB's country partnership strategies and the country operations business plans.

ADB's regional departments — listed according to their share of new commitments made in 2018 — are: South Asia (32%), Southeast Asia (29%), Central and West Asia (21%), East Asia (14%), and the Pacific (2%). The majority of regional departments are "on the ground" with 59% of ADB's regional department staff located in resident missions in DMCs. This enables ADB to tailor its assistance so that it is responsive to domestic needs and aligned with ADB's broader strategic priorities. ADB's Private Sector Operations Department complements its regional teams by focusing on nonsovereign transactions to catalyze private investment.

# ASIA DEVELOPMENT BANK PROJECT FINANCING (FIGURES IN U.S. DOLLARS)



TOTAL FINANCED (U.S. DOLLARS) - 2018 **\$19.3 BILLION** - 2019 **\$19.5 BILLION** - COMBINED (2018-2019) **\$38.8 BILLION**

ADB's support departments provide a range of help for ADB's internal operations (such as communications, legal counsel and internal evaluation) but also in designing and implementing projects in thematic or sectoral areas such as climate change or energy. Some examples of ADB's nonregional departments include the Economic Research and Regional Cooperation Department, the Sustainable Development and Climate Change Department, the Department of Communications, and the Independent Evaluation Department.

All of ADB's departments, staff and consultants strive for a "One ADB" approach, which encourages sharing knowledge and expertise across the organization to effectively implement ADB's guiding strategy.

## **STRATEGY 2030 AND ADB'S PRIORITY AREAS**

In 2018, ADB released Strategy 2030, the bank's long-term guiding framework. It established seven operational priorities to direct ADB's public and private sector operations, advisory services and knowledge-sharing activities.

Strategy 2030's seven operational priorities are: addressing remaining poverty and reducing inequality; accelerating progress in gender equality; tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability; making cities more livable; promoting rural development and food security; strengthening governance and institutional capacity; and fostering regional cooperation and integration.

Although Strategy 2030's priority areas provide the framework for ADB's operations, its country programming is carefully designed around a DMC's needs, financial and technical absorptive capacity, and each DMC's socioeconomic development status. ADB's blend of concessional and market-based lending modalities, paired with grants and technical assistance, allows it to deliver country-appropriate financial assistance alongside constructive policy dialogue and support for private sector development.

## **LENDING POLICIES AND MODALITIES**

ADB has different lending terms for its DMCs. It uses a three-tiered classification system to determine whether a DMC is eligible to borrow at near-market rates from ADB's ordinary capital resources (OCR), at concessional loan terms, or to receive grants from the Asian Development Fund (ADF). Lending terms are based on the DMC's gross national income per capita, creditworthiness and risk of debt distress. ADB's lending operations generate income that covers administrative expenses, grow the bank's capital base, and help finance technical assistance and grants. Donors fund the bulk of ADF, replenishing the grant window on a four-year cycle. The U.S. is the second-largest historical donor to ADF after Japan.

## **ADB IN THE INDO-PACIFIC**

ADB is the largest regional development bank in the Indo-Pacific region, with more than U.S. \$20 billion of assistance in loans, grants and other commitments per year. ADB also has one of the longest legacies of providing development assistance in the region— more than 50 years — allowing it to establish unparalleled relationships with governments and private sector stakeholders throughout the region. But ADB's financial capacity and deep relationships are not the only reasons it is a premier development bank. ADB's suite of policies, covering debt sustainability, environmental and social safeguards, procurement, anticorruption and integrity, are a cornerstone of the institution. These policies are in line with best international practices and represent the gold standard of high-quality, sustainable investments.

As a trusted multilateral development partner, ADB often plays a convening function for governments, development partners and bilateral donors active across the Indo-Pacific. U.S. leadership at ADB is therefore an important element for planning and delivering assistance programming and investments in the region.

Due to its established role in the region, a recent report by the Center for Strategic and International Studies (CSIS) recently characterized the ADB as a "strategic asset of the United States." The report noted that: "As of 2018, the U.S. had \$23 billion committed in overall capital subscription, with an additional \$1.9 billion committed to co-financing projects. The co-financed programs have been spread across several countries in the region, including India, Vietnam and Nepal. The U.S. has also invested in multidonor trust funds, such as the Afghanistan Infrastructure Trust Fund, which has pursued private sector co-financing for infrastructure improvement."

Though the Treasury Department leads the U.S. engagement at the ADB, the bank also regularly engages with a variety of U.S. departments and agencies including the State Department, the U.S. Agency for International Development, the U.S. DFC, the Environmental Protection Agency and the Interior Department, among others. The CSIS report highlighted the collaboration between ADB and the U.S. Trade and Development Agency to launch a global procurement initiative with bankable projects for the Indo-Pacific region. The Overseas Private Investment Corp. also worked alongside ADB to co-finance a bank and a private equity fund, both in India. Finally, U.S. companies such as General Electric and Citibank have worked closely with ADB as co-financiers providing private sector capital and expertise.

As one of the largest shareholding members in the bank, the U.S. has been supportive of ADB, and at the same time, benefits considerably from its membership. The U.S. provides financial capital and technical expertise while ADB provides a highly visible multilateral platform from which the U.S. can support and direct sustainable development efforts across the Indo-Pacific. □

Paul Curry is the principal operations coordination specialist at the Asian Development Bank.

# WATCHFUL EYES

## Task Force Chief: Indo-Pacific Partners Collaborate to Disrupt Traffickers

FORUM STAFF



*Rear Adm. Robert Hayes took over as director of Joint Interagency Task Force (JIATF) West in April 2019 to lead U.S. Indo-Pacific Command's counterdrug activities. In his previous post as the U.S. Coast Guard's assistant commandant for intelligence, Hayes led the efforts of more than 1,100 intelligence professionals. He is now leaning on that intelligence background to spearhead efforts to disrupt drug cartels and transnational criminal organizations in the Indo-Pacific. Hayes sat down with FORUM in October 2019 to discuss a range of topics that included everything from JIATF West's partnerships in counterdrug efforts to the havoc being wrought internationally by the dangerous opioid fentanyl.*

**FORUM:** How does JIATF West work with partners in the Indo-Pacific region to stem drug trafficking?

**Rear Adm. Hayes:** Given the vastness of this region, everything we do is a team sport. Whether we are helping to interdict drugs or precursor chemicals, generate and share information with allies and partners, or assist other nations in improving their capabilities, it requires collaboration. As one example, the reality is that for drugs that come to the United States (or other nations), almost all of them require chemicals to be produced. There are many drugs of concern for us in this theater — methamphetamine, fentanyl, heroin, cocaine and marijuana being the primary ones. Other than marijuana, if you're going to make an illegal drug such as heroin, methamphetamine, fentanyl or cocaine, you are going to need chemicals and a lot of them. And where are most of the chemicals made that are used for that? In the Indo-Pacific, chemicals are made in China and India. The majority of these chemicals are made for legal purposes and are often regulated. They are made for pharmaceuticals, cosmetics, paints, and a number of other legitimate purposes. As we like to say, they are legal until they are not. On a daily basis, there are significant loads of chemicals

coming across the Pacific to countries such as Mexico, Colombia, and others that may be diverted to make a drug like fentanyl or cocaine. Understand, Colombia produces about half of the world's cocaine, while Mexico makes most of the heroin and methamphetamine that comes to the United States. And increasingly, fentanyl is coming to the United States from Mexico. All of these drugs require chemicals for production.

Like I mentioned, intelligence and counterdrug work are team sports. And so, the size of the Indo-Pacific region and the ability to understand the networks operating there and target them effectively requires investigative and intelligence work that no one entity or country can do alone. We rely a lot on multiple intelligence and law enforcement partners within the U.S. government, but much more broadly than that, many similar partners in other countries. When we are dealing with other countries, we are working in coordination with our law enforcement partners — the Drug Enforcement Administration (DEA), Homeland Security Investigations, the FBI and others who have investigative authorities

**Rear Adm. Robert Hayes takes over as Joint Interagency Task Force West director in a change-of-command ceremony in April 2019.**

PETTY OFFICER 2ND CLASS RYAN GRADY/U.S. NAVY

to target transnational criminal organizations, drug-trafficking organizations and the like. They have people in the various embassies throughout the Indo-Pacific area, and we work through them. Sometimes, we will put an analyst in that embassy and work directly in support of those law enforcement investigators as they leverage our analytical horsepower. They coordinate with that host country on investigative leads and operational targets, after which the task force gathers the information and refines it, working with others in the inter-agency and ultimately pushes the information back so that a more thorough investigation or operation may be conducted.

Most chemical shipments are not moving fast. When you are talking about a cargo vessel, a container vessel that has chemicals onboard, it might take a couple of weeks for that ship to go from China to South America or Mexico, so we have time to refine the information. While I am focusing on the eastward flows of precursor chemicals used to make illegal drugs, we also look at the westward flows of the



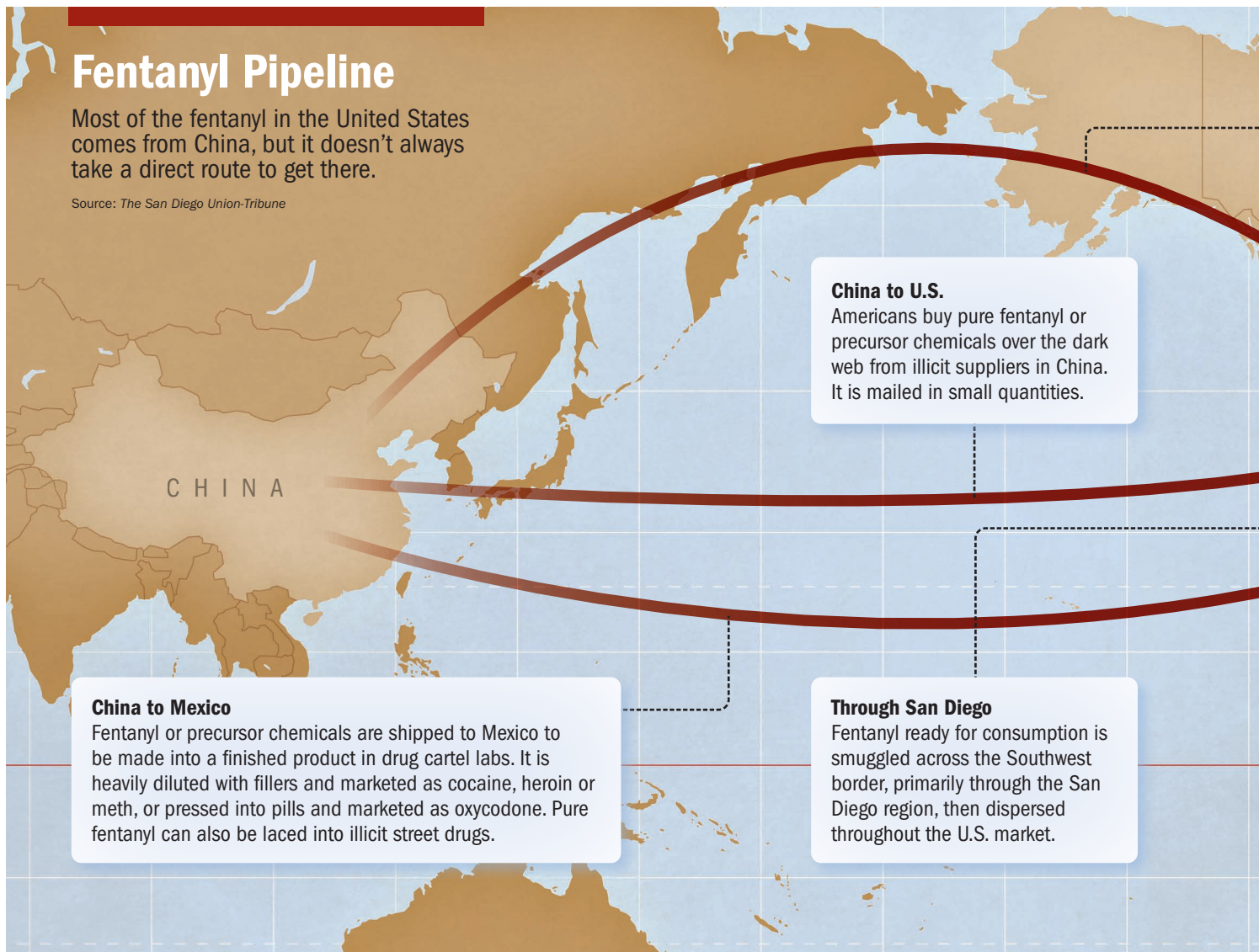
**Indonesian Maritime Police Force officers practice narcotics field testing techniques during training with members of Joint Interagency Task Force West's Integrated Maritime Skills Training Team.** PETTY OFFICER 2ND CLASS RYAN GRADY/U.S. NAVY



# Fentanyl Pipeline

Most of the fentanyl in the United States comes from China, but it doesn't always take a direct route to get there.

Source: *The San Diego Union-Tribune*



finished drugs created with these precursors. We can't do this without other people. We don't arrest people. We don't directly investigate people. We don't conduct end-game law enforcement activities. But by the intelligence that we produce, by the partner capacity and security cooperation efforts that we conduct, we work together to counter transnational criminal groups.

**FORUM:** The precursor chemicals have legal and illegal uses. How much more difficult does that make your task?

**Rear Adm. Hayes:** Absolutely. It's very difficult because they have legitimate uses. It takes significant analytical efforts and partnerships to identify the suspicious shipments. You don't have to have a chemist's level of knowledge, but you do need to have an appreciation for the specific chemicals required to make illegal drugs.

You can look for patterns. How much extra of a certain chemical might be going to a certain location? Or, you try to find linkages between transnational criminal groups ...

people who we know are known bad actors in the crime world and the transnational criminal world ... and find connections between them and the people importing those drugs.

Like other countries, Mexico and Colombia import lots of chemicals — for pharmaceuticals, cosmetics, a whole host of things. To identify the possible shipments of concern, you are looking for specific shippers who are known to collaborate with bad actors. You are looking for other linkages to the networks that we try to understand and that we try to support investigations of and support targeting of them.

**FORUM:** How does your mission contribute to a Free and Open Indo-Pacific region?

**Rear Adm. Hayes:** What is a Free and Open Indo-Pacific? It is an environment that respects the sovereignty of every nation, ensures freedom of movement in international waters and airspace, adherence to



international laws and norms, and relative stability and prosperity. A fundamental component of that is governance, which means a nation is able to monitor and govern its borders to include maritime borders. Most nations claim a 12-[nautical] mile territorial sea and a 200-[nautical] mile exclusive economic zone. Being able to govern that means I can monitor that and detect bad activity that's going in and out of my country or through my borders. So on the security cooperation side, what we do is with countries that maybe lack some of those elements of a drug control strategy, a judicial system, law enforcement capabilities, the ability to launch boats or launch aircraft. ... we work with the U.S. government and Congress, get money and do security cooperation to help address those areas. We build things for them, train them on how to use them, do exercises with them and things like that. ... It's promoting good governance in the region because better governance is bad for the bad guys and better for those of us on the good-guy team working for the rule of law, transparency and good governance.

We're also talking about free and open trade. Part of what we've moved to in the last couple of decades is a global economy, which relies on just-in-time delivery of resources. Underpinning that is the safety and security of those goods coming quickly. So what you want is a framework that allows goods to move in and out quickly, but also for the screening of people or cargo on ships or planes in order to discover illegal goods or criminal activity. What we try to promote is the ability to data mine in order to uncover linkages to transnational criminal groups, resulting in leads we forward to appropriate agencies to address.

**FORUM:** How does the task force reach out to the remote Pacific islands? And why is that important?

**Rear Adm. Hayes:** It is important because these nations are our partners; we have historical ties to them. Several of these islands are U.S. territories or are compact states with whom we have a special relationship. Often, people think



**Instructors with Joint Interagency Task Force West's Maritime Skills Training Team demonstrate handcuffing techniques during training with members of the Sri Lanka Navy Special Boat Squadron.**

AFP/GETTY IMAGES

change is affecting many of them. For most of them, transnational crime is one of their top concerns. Illegal fishing is affecting their GDP [gross domestic product]. Much of their economies are based on either tourism or fisheries, and illegal activity in the form of illegal fishing is having a very detrimental effect. [Rear Adm. Hayes referenced recent news articles describing how Fiji and some other Pacific islands are becoming transshipment

of the U.S. homeland as being composed of only the continental United States. However, these U.S. territories are part of the U.S. homeland, just as the state of Hawaii is. More broadly, these are countries that are suffering devastating impacts from a confluence of things. Climate

hubs for narcotics traffickers.] ... You are talking about small countries with large areas of surrounding waters that are difficult to monitor. All 23 countries in Oceania have a total population of about 10 million people, and Papua New Guinea is about 7 million of that, roughly. The other 22 are tens of thousands each and they usually do not have large customs or police organizations or a robust judiciary. They are doing their best, but when you're having major drug-smuggling organizations for example, the Sinaloa [cartel] from one end or the triads from the other, their ability to counter that is difficult. What we want to do is work with them to help them with good governance, transparency, stability, all of those things.

**FORUM:** In addition to helping the Pacific islands increase their drug-fighting capabilities, how do these efforts help the broader region?

**Rear Adm. Hayes:** I think it makes it harder for illegal activity to happen when those countries are in partnership. You essentially create a neighborhood watch program, and that unites the neighborhood. You make it harder for criminals to conduct their activity, and that's what we're trying to do regionally. Some of these countries are more capable than others, but we want to raise the game of all of them so that they can deter illicit activity. That's a rules-based order, the thing that all countries, China included, have benefited from in the last 20, 30 or 40 years. We want that for these countries to help sustain their ability to raise their GDP and raise their standard of living by having good governance and having the ability to push out illicit activity. It's part of basic sovereignty, really. Some of these countries are seeking assistance and we're trying to help them. This helps ensure a Free and Open Indo-Pacific, creating economic opportunity for everybody.

**FORUM:** An increase in consumption and overdose deaths related to fentanyl have generated numerous headlines. How has that changed JIATF West's task?

**Rear Adm. Hayes:** We have about 70,000 overdose deaths a year in the United States. That's a massive number. We lost approximately 55,000 people in the Vietnam War, in the entirety of that war. And we're losing 70,000 people a year in the United States due to overdoses. Not all are due to fentanyl. Roughly half are due to opioids (including fentanyl). What we've seen over the last several years is fentanyl becoming increasingly used as a drug of choice, but also some criminal groups are lacing other drugs with fentanyl to provide a unique high or kick. A sugar packet could contain about 100 lethal doses. With fentanyl, you are talking about very minute amounts and it is relatively cheap to produce. The profit margin is astronomically higher. It's easier to produce as opposed to cocaine and heroin, where you can use imagery and overhead pictures to say, 'There are coca leaves growing there. There is poppy being grown there.' And you can target that for eradication and get the supply chain. Fentanyl is purely chemicals. Most illicit fentanyl consumed in the United States is made in China, but we're seeing a shift where a fair amount of that is made in Mexico and coming over the border. ... So for us as a task force, fentanyl is a difficult one for us to get after because of the way it's produced, sold on the open net and dark web, and people often use cryptocurrency to pay for it. Where we try to have an impact is more toward looking at the networks and identifying who the bad actors are, identifying the precursor shipments related to fentanyl production, and how is that linked to money laundering and other activities. It's more of a network approach.

**FORUM:** What else would you like to highlight about JIATF West's mission?



This photo illustration depicts 2 milligrams of fentanyl, which is a lethal dose in most people. U.S. DRUG ENFORCEMENT ADMINISTRATION

**Rear Adm. Hayes:** We — in partnership with many other agencies and countries — protect our nation and the fellow citizens of other nations. It is hard work, and measuring our impact can take years, given the persistence it takes to disrupt networks or help a partner nation improve their capabilities. It is a noble mission. While it can be disappointing to be in this line of work, we keep at it. Criminal networks are adaptive and have lots of resources. This effort to counter them goes back decades to centuries. It's almost like there's a drug, you get after it and people find other drugs. And the movement toward chemical-only drugs is a concerning trend. When you have marijuana, you can see where that's being grown. Poppy for opioids and heroin, you can see where that's being grown. The same thing for cocaine and coca leaves. When it's just chemicals, that really complicates it because somebody can find a warehouse somewhere and if they can get access to chemicals, they can make a synthetic drug. It's a challenging job. The ingenuity, the creativity and the resources of some of these criminal groups is pretty amazing. They are using everything from semi-submersibles to advanced technology to counter-surveillance. They are capable entities to go after. But at the end of the day, everybody on this task force — we have a mix of civilian, active military and reserve, contractors, intelligence agencies, investigative agencies — we really believe we are protecting our country. We look at it as an honor to be serving our country, to be guardians of our country as well as our partners. So the opportunity to do that gives meaning and purpose to what we do. It's a privilege to come to work and to do this and to know that many of us have family or friends who have been affected by drugs and drug overdoses. It can be a motivating factor in that regard. It's also something that ties us together with our partners. □

# OPENING LOGISTICS LANES

U.S. AND PARTNER NATION  
AGREEMENTS FOR ACQUISITION  
AND CROSS-SERVICING  
STREAMLINE MISSIONS

PHILIP J. VALENTI



**A** burned-out hulk of a partner navy ship is towed across the Pacific Ocean from the U.S. back to its home port. The U.S. Navy conducts a replenishment at sea with a partner navy ship, providing it with fuel, ammunition, spare parts and food. A U.S. Air Force KC-10 refuels three allied aircraft at 30,000 feet. A partner nation experiences a serious earthquake that causes major damage and destruction and “hires” U.S. military aircraft to augment its own air force to provide disaster relief supplies and troop transportation. The U.S. Navy conducts a search and recovery operation afloat to search for a partner nation’s aircraft and pilot, both of which were lost at sea in an unknown location. The U.S. is exercising with a

foreign partner in that country, and both parties combine their rental car requirements to obtain a volume discount, as well as to avoid competing against each other in the rental car marketplace, thereby driving up prices for both.

What do these diverse and seemingly unrelated situations have in common? They were all made possible by an Acquisition and Cross-Servicing Agreement (ACSA) between the U.S. and the partner nation with whom the goods and services were exchanged.

The ACSA is a bilateral agreement between the U.S. Department of Defense and a partner nation’s defense ministry. It provides the required statutory authority to U.S. military forces to engage in reciprocal mutual logistics support with those nations with whom the U.S. has the



**U.S. Coast Guard members wave to passing Republic of Korea Coast Guard members aboard the Lee Cheong Ho after a joint search and rescue drill during a capacity building exercise in the East China Sea in March 2019.**

PETTY OFFICER 1ST CLASS MATTHEW MASASCHI/U.S. COAST GUARD

agreement. Through January 2019, the U.S. has established ACSAs with 119 nations and organizations worldwide, including the United Nations and 16 nations or entities in the Indo-Pacific.

Without the existence of an ACSA, U.S. military forces have limited means to procure logistics support, supplies and services (LSSS) from partner nation militaries and governments. Generally, U.S. forces can provide LSSS to foreign partners only via the foreign military sales (FMS) program, which follows a detailed process more similar to deliberate action planning than crisis action

planning. The FMS process is complex and thorough, but over time it proved to lack the flexibility to respond to emergent needs. FMS can provide major defense services and articles (MDSA), such as ships, fixed and rotary wing aircraft, precision guided munitions, rifles, torpedoes and artillery. And, significantly, FMS is a one-way street. While the U.S. can provide LSSS to an ally via FMS, it cannot acquire it from an ally under the program.

The desire to have the flexibility needed to address emergent requirements on a reciprocal basis resulted in the passage of the NATO Mutual Support Act in the 1970s, which eventually evolved into the current ACSA program. Unlike FMS, ACSA transactions prohibit the exchange of MDSA and are limited to a smaller universe of authorized items and services. However, even considering its limitations on what can be bought and sold, the ACSA provides an extensive range of items and services that U.S. forces can both sell to, and procure from, partner nation military forces. This list includes such common items as food, water, clothing and billeting. Transportation to include airlift, petroleum, oils, lubricants, secure and nonsecure communication services, medical services and ammunition are authorized. Also covered are base operations support, storage services and facilities use, training services, spare parts, components, repair and maintenance services, calibration services and port services. Best of all, the exchange of all these types of LSSS may be done on a reciprocal basis.

In addition to the range of articles and services that can be exchanged anywhere in the world, the ACSA program has several highly attractive attributes that make it the preferred logistics support vehicle for U.S. and partner nation military forces. These advantages include:

- Almost all ACSA transactions can be accomplished using the mutually agreed upon one-page ACSA form, which is straightforward and easy to understand. It serves as both an ordering and receiving document and also doubles as an invoice, signaling to the receiving party that payment is due to the supplying party within 60 days. Since ACSA orders allow the receiving party to delay paying for the goods and services up to 60 days after an invoice is presented by the supplying party, the ACSA also serves a bit like an interest-free credit card. However, unlike a credit card, which allows the borrower to pay a minimum amount instead of the full amount, the ACSA requires full payment when due.
- Unlike most purchasing arrangements that require cash transactions, the ACSA allows the supplying party to elect repayment by one of three methods:
  - Monetary reimbursement: Cash currency, check, wire transfer or electronic funds transfer.
  - Replacement in kind (also referred to as an exchange transaction): The receiving party replaces the LSSS it receives from the supplying party with an equal value of a substantially identical nature to the LSSS it received. For

example, if the U.S. provides 100 gallons of diesel fuel to a partner, the partner repays the U.S. with 100 gallons of diesel fuel by a predetermined date.

■ **Equal value exchange:** The receiving party replaces the LSSS it receives with LSSS of an equal value. Continuing with the example above, the U.S. provides the partner 100 gallons of diesel fuel worth U.S. \$500, and the partner repays the transaction with U.S. \$500 worth of meals to the U.S.

- The U.S. and its partners agree to charge each other the same prices that their own forces pay, with no markups or surcharges. In practice, this means that if the U.S. list price for a gallon of fuel is U.S. \$3, the U.S. can only charge the partner U.S. \$3. Under this construct, supplying parties neither make nor lose money on ACSA transactions, making those transactions revenue neutral.
- Given that the ACSA allows a partner to purchase airlift, sealift, air refueling and replenishment at sea services from U.S. forces, the ACSA serves as a force multiplier for the partner military. In this usage, the term force multiplier is defined as something that allows a military force to either obtain a capability it does not possess or expand a capability it does possess without making a commensurate investment in personnel, equipment and infrastructure. In practical terms, a small partner nation need not procure airlift capable aircraft because that capability and several

others can be procured from the U.S. using the ACSA.

- The final advantage of the ACSA is that although the agreement is of indefinite duration, meaning it has no expiration date, either party can cancel the agreement by providing six months' written notice. This right of cancellation means that if either party becomes dissatisfied with the agreement, the party is free to cancel. Of note, of the approximately 115 nations and organizations with which the U.S. has concluded an ACSA, none has ever canceled.

Some nations are hesitant to conclude an ACSA with the U.S. because they assume the agreement is something that it is not. Simply put, the ACSA is a nine-page, legally binding international agreement that specifies under what circumstances and limitations the U.S. and partner nation military forces may provide mutual logistics support to one another. Contrary to some impressions, the ACSA is not a mutual defense treaty, status of forces agreement or visiting forces agreement. It does not bind or commit partner nations to U.S. wars, operations or exercises. The ACSA does not allow the stationing of U.S. troops, ships or aircraft in the partner nation, and it does not confer any right of entry into a partner nation's land borders or territorial waters. The ACSA does not create a contractual obligation to provide logistics support, similar to what a procurement contract does, but the partners do agree to "make every effort" to fulfill support requests consistent with "national laws, regulations and policies."

The process to enter into an ACSA with the U.S. is straightforward, but it does generally take 12-18



Pacific Angel dentists, Royal Australian Air Force Squadron Leader Alistair Soon, center, and Papua New Guinea Defence Force Capt. Vasiti Kep, right, discuss treatments in Lae, Papua New Guinea, in September 2019. TECH SGT. JERILYN QUINTANILLA/U.S. AIR FORCE



Royal Brunei Armed Forces Col. Pg Azmali bin Pg Haji Mohd Salleh, right, and U.S. Marine Corps Col. Boyd Miller acknowledge the first ammunition sale, facilitated by an Acquisition and Cross-Serving Agreement between the two forces, at Brunei International Airport in October 2019. SGT. CAMILO PARODY/U.S. MARINE CORPS FORCES, PACIFIC



**An MH-60S Seahawk conducts a vertical replenishment at sea in December 2019.** SEAMAN APPRENTICE DARREN NEWELL/U.S. NAVY

months to complete. It involves the U.S. Congress, the U.S. departments of State and Defense, the U.S. Joint Chiefs of Staff, as well as the U.S. Indo-Pacific Command (USINDOPACOM). The first step after all U.S. interagency approvals are obtained is for the U.S. Embassy to present the draft agreement to the respective foreign affairs ministry. Once a given country's defense and foreign affairs ministries have had sufficient time to review the proposed agreement, USINDOPACOM sends a representative to the partner nation to explain the agreement in detail, answer questions concerning the ACSA, and conduct the ACSA negotiation. Although the U.S. makes every reasonable effort to accommodate partner requests, nations are encouraged to stay as close as possible to the language in the proposed text because any substantive changes to the language may result in delay, or disapproval of, the proposed ACSA agreement. However, partners are given sole authority to decide the following items: which logistics support, supplies and services they wish to exclude from ACSA transactions; who in their government has authority to conclude Implementing Arrangements (agreements that further amplify ACSA provisions for use in specific situations, such as air refueling or large volume fuels sales); and how they desire the ACSA to enter into force (become legally

binding). Once the parties reach agreement on the text, and the same is coordinated with the U.S. departments of State and Defense, who must also approve the text language, the parties then identify the signatories, where and when the agreement will be signed, and what level of public affairs coverage is desired.

The advantages of concluding an ACSA are clear and significant, as summarized below:

- Either party can decline support requests.
- Flexible payment methods.
- Ease of ordering requiring only a one-page order form.
- Payment may occur interest free 60 days after receipt of invoice.
- No geographic restrictions as the ACSA has worldwide applicability.
- Either party can cancel with six months' written notice.

Given all the benefits an ACSA provides, coupled with no disadvantages to either party and no expiration date, there is a compelling case to enter into this agreement. Should a nation be interested in concluding an ACSA with the U.S., or just learning more about this valuable security cooperation tool, the local U.S. defense attache or security cooperation officer can provide further details, as well as get the process started. □



**DANIEL K. INOUE**  
**ASIA-PACIFIC CENTER FOR**  
**SECURITY STUDIES**



# Celebrating 25 Years

## THE DANIEL K. INOUE ASIA-PACIFIC CENTER FOR SECURITY STUDIES *Has Come a Long Way*

MARY MARKOVINOVIC/DKI APCSS  
PHOTOS COURTESY OF DKI APCSS

The Daniel K. Inouye Asia-Pacific Center for Security Studies (DKI APCSS) celebrates its 25th anniversary in 2020 as a U.S. Department of Defense executive education institute.

U.S. Sen. Daniel K. Inouye called for the development of a center to serve the Indo-Pacific region after the success of the George C. Marshall European Center for Security Studies, which serves the European region. Inouye, a recipient of the Medal of Honor and the Purple Heart in World War II, represented Hawaii in the House of Representatives and the Senate for 53 years until his death in 2012.

In December 1994, the then-commander-in-chief Pacific Command (today known as commander, Indo-Pacific Command) approved the formation of a center working group headed by Col. Jimmie Lackey, who would become executive director in 1997.

The institute, based in Honolulu, Hawaii, was established in 1995 to foster understanding, cooperation, and study of security-related issues among military and civilian representatives of the United States and other Asia-Pacific nations.

Before opening its doors, however, the center was officially named the Asia-Pacific Center for Security Studies. The organization started with fewer than 10 employees and grew to about 120 staff and faculty members today.

“The center started out literally in a broom closet at PACOM [Pacific Command] headquarters,” according to one of the center’s

The center was renamed the Daniel K. Inouye Asia-Pacific Center for Security Studies on October 6, 2015.

first employees, Lenore Patton, who still serves as head of the Regional Engagement Outreach program. “Eventually, we needed to move into a space where we could hold our courses and which would also provide easy access to housing for our fellows.”

The center’s first course — the 12-week Executive course (EC96-1) — was held September 23 to December 12, 1996. That first class included 23 fellows from 12 countries — 18 military and five government civilians, including 22 men and one woman.

### CURRICULUM DEVELOPMENT

The center’s curriculum has come a long way since its founding. Today’s five-week Advanced Security Cooperation (ASC) course is a far cry from the first executive course. In the recent ASC course, 117 fellows came from 34 locations around the world. Demographics of attendees included 49 (42%) military, 57 (49%) civilian (including nongovernmental organizations, media, think tanks and regional organizations) and 11 (9%) law enforcement. Twenty-seven women, or about 23% of the total fellows, attended the course.

Administrators expanded the single course into a rich curriculum, including the Senior Executive course (now called the Transnational Security Cooperation course); the Junior Executive course (which has been replaced with the Indo-Pacific orientation course); the Comprehensive Security Responses to Terrorism course; the Security, Transition, and Reconstruction course

(now called the Comprehensive Crisis Management course); and the new Comprehensive Maritime Security Cooperation course.

“I’ve been to several other courses like this before, but what I found unique here is that APCSS makes us feel to be part of a big family, where we share about our own cultures and we get to learn about other cultures,” explained Lailufar Yasmin, a recent ASC fellow and professor of international relations, Daka University, Bangladesh. “We learn about the differences, we are able to get rid of our preconceived ideas and biases. While we’re talking about security cooperation, if we cannot get rid of our biases, we cannot thrive, we cannot cooperate with each other. So this is something we learned in negotiation skills that was extremely valuable.”

In addition, DKI APCSS started a tradition of hosting a number of conferences to bring together security practitioners on such issues as global security trends and U.S.-China defense relations, food security and political stability, and island state security.

### LEADERSHIP CHANGES

By its 10th anniversary in 2005, the center saw a change in leadership. Retired U.S. Army Lt. Gen. E.P. Smith took over, changing the leadership title from “executive director” to “director.” Shortly thereafter, retired U.S. Army Brig. Gen. Jim Hirai became deputy director. Under Smith’s leadership, the center began doing workshops in the region on topics such as





**“Several of us got together and said it’s about time we establish a center where leaders — military, diplomatic and others — could get together, sit around, chat ... yes, argue ... and discuss matters of common interest, common concerns, disasters, and come up with solutions and come up with mutual understandings.”**

– U.S. Sen. Daniel K. Inouye (1924-2012)

counterterrorism, security sector development, maritime security and crisis management.

In 2012, retired U.S. Air Force Lt. Gen. Dan “Fig” Leaf took over as director. During his tenure, he promoted “women, peace and security” and “good governance” as topics for center courses and workshops. In mid-2012, the APCSS opened Maluhia Hall. The

dedication ceremony was the last time Sen. Inouye visited the center. After Inouye died, a Hawaii legislator submitted a bill to the U.S. Congress to rename the center the Daniel K. Inouye Asia-Pacific Center for Security Studies. The name change took effect in 2015.

Retired U.S. Navy Rear Adm. Pete Gumataotao joined the center in 2018. Since then, DKI APCSS has supported the Office of the Secretary of Defense for Policy with special workshops on topics such as a Free and Open Indo-Pacific strategy, Association of Southeast Asian Nations defense ministers working group meetings on disaster management and many others.

### SUCCESS STORY

Over the years, DKI APCSS has opened its doors to more than 14,000 security practitioners from not just ministries of defense, but ministries of foreign affairs, customs and immigration, justice, social services, emergency services, as well as law enforcement, think tanks, academics, and members of the media. Six of the center’s alumni have gone on to become presidents or prime ministers, 11 have become vice presidents or deputy prime ministers, and 33 have become chiefs or deputy chiefs of defense.

DKI APCSS continues to foster the relationships made with the fellows who attend courses and workshops individually and through 59 DKI APCSS alumni associations around the world.

Today’s alumni are celebrated for the completion of their fellows projects, which include drafting national policy documents, writing analytical papers, reforming procedures, among other works. DKI APCSS alumni have executed successful security plans for national elections and major international sporting events, and even peace treaties. □



**LEFT: Fellows from the Advanced Security Cooperation course collaborate during an exercise.**

**Faculty and fellows participate in the Comprehensive Maritime Security Cooperation course. About 25% of the attendees were women.**

# Banking Memories

THE ASSOCIATED PRESS

In response to the Taiwan Cultural Memory Bank project, Taoyuan City has established a story collection station and sent a minivan across Taoyuan to collect and preserve local stories.

Initiated by the Ministry of Culture, the Taiwan Cultural Memory Bank project aims to reconstruct cultural memories and local knowledge, then preserve them through digital technology. With active engagement of local public and private sectors, the project hopes to establish a platform for saving content highlighting Taiwan cultures.

Located at Sianguang 2nd Village, the story collection station encourages the public to share their own stories on-site. The minivan, which is called the "Military Dependents' Village Puncar," also collects the public's memories by visiting military dependents' villages and veterans' homes.

The field survey conducted in Taoyuan has discovered 105 characteristics of these villages. Information containing Google map location and old photographs of the villages is posted outside the station for the public to read and hear by scanning the QR code.

In addition, activities, such as a reality game featuring Matsu New Village, immersive theater and a cultural festival, were also held to introduce the history and cultural significance of the military dependents' village.

The Taiwan Cultural Memory Bank collects stories and cultures, regardless of skills that have been passed on through generations or everyday life. Through this project, the Ministry of Culture hopes to piece together and preserve cultural landscapes and scenes of Taiwan.

For more information, visit <https://www.facebook.com/pg/TaiwanCulturalMemoryBank>.



The Taiwan Cultural Memory Bank is collecting personal stories and photographs, such as these from 1974, to preserve local history. TAIWAN CULTURAL MEMORY BANK



# STORIED DISCOVERY

## Indonesian Cave Art is Earliest Known Record of Storytelling

**A** cave painting found on Indonesia's island of Sulawesi that depicts humanlike figures hunting animals appears to be the earliest known pictorial record of storytelling, according to a study by a team of Australian and Indonesian researchers. The painting, found in a limestone cave in 2017, was dated to nearly 44,000 years ago using uranium-series analysis, according to the study published in December 2019 in the journal *Nature*.

It shows eight therianthropes, or humans with animal characteristics, appearing to chase and kill six animals, such as the warty pigs native to the island, using what look like spears and ropes.

"The portrayal of multiple hunters confronting at least two separate prey species possibly suggests a game drive, a communal hunt in which animals are indiscriminately flushed from cover and directed towards waiting hunters," the researchers said.

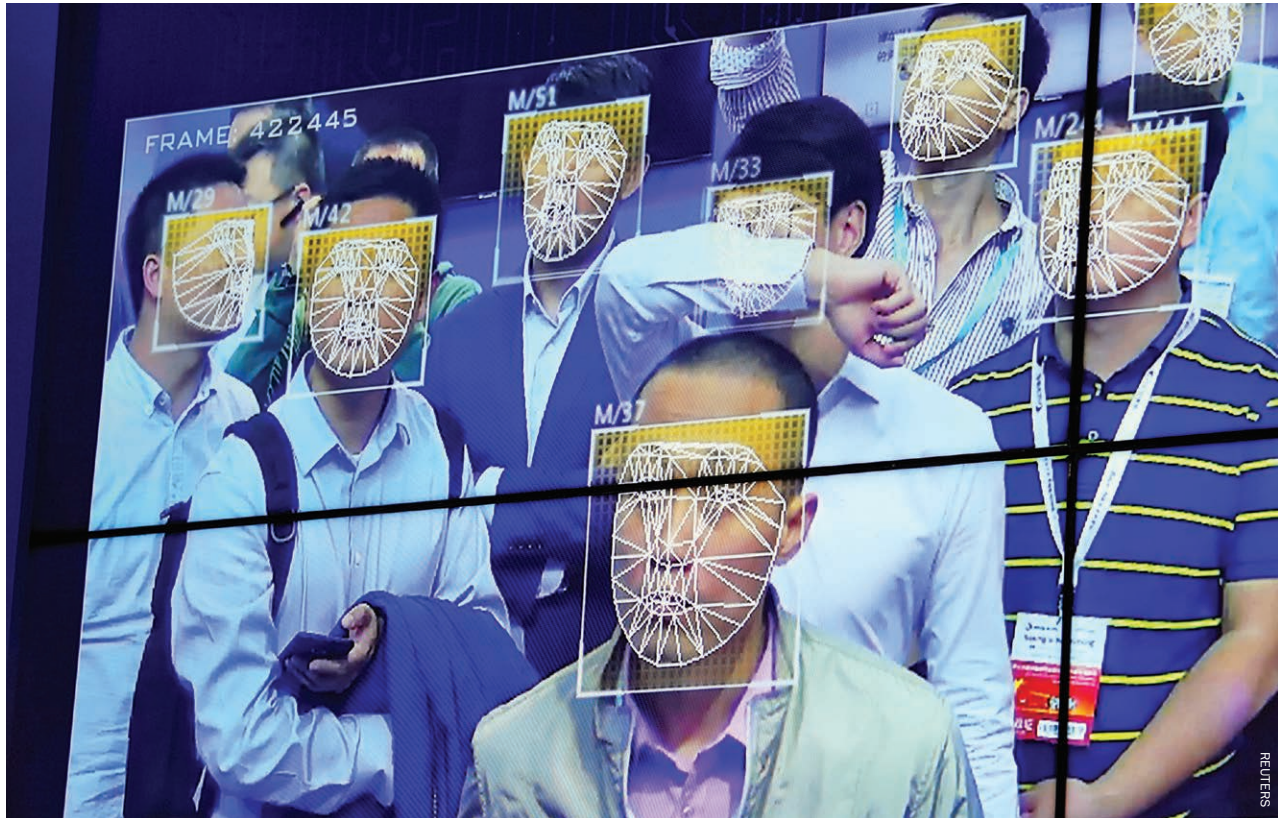
Until now, the oldest rock art showing a character with the characteristics of an animal had been an ivory sculpture found in a cave in Germany. Thought to date back 40,000 years, it depicts a human body attached to a felinelike head.

The Indonesian cave painting also provided some of the earliest evidence of human spirituality, said one of the study's co-authors, Adam Brumm, an archaeologist at Australia's Griffith University. "Therianthropes occur in the folklore or narrative fiction of almost every modern society, and they are perceived as gods, spirits or ancestral beings in many religions worldwide," he said in a statement.

The research was done in collaboration with Indonesia's National Research Centre for Archaeology and scientists from the culture heritage department of Makassar, the provincial capital. The Griffith researchers said cave art in Sulawesi was first discovered in the 1950s, with at least 242 caves and shelters containing such imagery documented since.

Some of the caves had damage that could threaten the art, said Indonesian rock art expert Adhi Agus Oktaviana, pointing to threats from salt, dust, peeling, microbes and smoke. "It would be a tragedy if these exceptionally old artworks should disappear in our own lifetime, but it is happening," added Oktaviana, who is a doctoral student at Griffith.

Reuters



# China Facial-Recognition Case Puts Big Brother on Trial

**F**acial-recognition technology has become embedded in the People's Republic of China (PRC), from airports to hotels, e-commerce sites and even public toilets, but a law professor had enough when asked to scan his face at a safari park.

Guo Bing took the wildlife park to court, raising the temperature in a growing debate about privacy and abuse of personal data in an increasingly digitized society.

The Chinese government has thrown its support behind companies that develop facial recognition and artificial intelligence for commerce and security, part of a drive to become a world leader in advanced technologies.

Surveys have indicated a broad public willingness to surrender

some privacy in exchange for the safety and convenience that technology can bring.

However, that's changing as the collection of biometric data such as fingerprints and facial scans mounts.

Domestic media have called Guo's suit against the Hangzhou Safari Park in eastern China, filed in October 2019, the first of its kind in the country. The public reaction has exposed fears that technology is outpacing legal safeguards.

Online posts regarding the case on the popular Weibo platform have garnered more than 100 million views, with many users calling for a ban on collecting such data.

The sentiment stems in part from the rampant abuse of personal data by the PRC, ranging from

outright financial fraud to the common leaking of mobile phone numbers to phishing operations.

In a recent article posted online that generated wide discussion in China, Lao Dongyan, a law professor at prestigious Tsinghua University in Beijing, called abuse of facial recognition data "a deal with the devil."

"The wanton promotion of facial-recognition technology will open Pandora's box. The price we pay will be not only our privacy, but also the security we strive for," Lao wrote.

Guo, a professor at Zhejiang Sci-Tech University in Hangzhou, said in his civil complaint that collection of data like facial scans, "if leaked, illegally provided or abused, will easily endanger consumers' personal and property safety."

A newspaper published by the PRC's Ministry of Science and Technology said the safari park's "rash and rough attitude showed indifference" to public sensitivities. Laws must be used to prevent "overreach," it added.

On December 30, 2019, the PRC issued a directive specifying a range of practices related to the collection and use of personal information via mobile phone apps that it considered unlawful.

The PRC still lacks a specific set of laws governing personal data. Legislation is now being formulated, but it remains unclear when it could be introduced.

Despite headlines about the brave new Chinese world of high-tech, experts say the PRC actually continues to lag far behind the U.S. in advancement but excels in scaling up technologies for wide commercial use.

It has the world's largest population of mobile internet users — more than 850 million — which operates as a valuable testing ground for consumer viability.

Facial recognition is now used to pay bills, take attendance in some schools, streamline security in public transit and punish jaywalkers.

Restrooms at some tourist attractions even require a facial scan to receive toilet paper to curb overconsumption.

The China Consumers Association in November 2018 released a report stating that more than 90% of mobile apps were suspected of excessively collecting personal information, and 10% excessively amassing biometric data.

Concerns have grown after recent state media reports said thousands of pieces of facial data were sold online for as little as U.S. \$1.40 each, and after the government began implementing a new requirement that consumers provide a facial scan to register for mobile phone services.

Agence France-Presse



## White House Proposes Regulatory Principles to Govern AI Use

**T**he White House in early January 2020 proposed regulatory principles that would limit authorities' "overreach" in governing the development and use of artificial intelligence (AI).

In a fact sheet, the White House said federal agencies should "conduct risk assessment and cost-benefit analyses prior to any regulatory action on AI, with a focus on establishing flexible frameworks rather than one-size-fits-all regulation."

The comments come at a time when companies are racing to integrate AI and deep machine learning into their businesses to remain competitive. However, the technology raises ethical concerns about control, privacy, cyber security and the future of work, companies and experts have said.

The U.S. administration said agencies should "promote trustworthy AI" and "must consider fairness, non-discrimination, openness, transparency, safety and security."

As an example, the White House cited the Food and Drug Administration, which is considering how to regulate the use of AI and machine learning technologies by medical device manufacturers.

The White House said, "Europe and our allies should avoid heavy handed innovation-killing models." It added, "The best way to counter authoritarian uses of AI is to make sure America and our international partners remain the global hubs of innovation."

In 2019, the European Commission's High-Level Expert Group on Artificial Intelligence issued a set of ethical guidelines, and European Union leaders are considering regulatory action.

Some U.S. states have raised concerns about AI applications. California's Legislature in September 2019 passed a three-year ban on state and local law enforcement using body cameras with facial-recognition software, the latest curb on technology that some say poses a threat to civil liberties. Some U.S. cities have also voted to bar facial-recognition technology by law enforcement.

Michael Kratsios, the White House's chief technology officer, said that the administration's "principles set the nation on a path of continued AI innovation and discovery."

In February 2019, U.S. President Donald Trump signed an executive order for federal government agencies to dedicate more resources and investment to AI-related research, promotion and training.

A 2018 study from consultancy PwC said 30% of jobs around the world are at risk of automation by the mid-2030s, including 44% of workers with low education levels. The study also found automation could boost global gross domestic product by U.S. \$15 trillion by 2030. Reuters



INTERNATIONAL RICE RESEARCH INSTITUTE

## Philippines Approves GMO Rice to Fight Malnutrition

A breed of rice genetically engineered to combat vitamin A deficiency has received approval from regulators in the Philippines. Supporters say a variety known as golden rice could remedy a condition that kills up to 250,000 children each year worldwide and blinds twice that number, according to the World Health Organization.

It's the first genetically modified organism (GMO) designed to fight a public health issue to get a green light from food safety officials in the developing world.

Golden rice has faced vigorous opposition from GMO opponents throughout its development, citing safety concerns and other issues. Protesters destroyed test fields in the Philippines in 2013.

The Philippine Department of Agriculture Bureau of Plant Industry announced in December 2019 that golden rice is as safe as conventional rice. Regulators in Australia, Canada, New Zealand and the United States have also cleared the grain of safety issues.

After 20 years of developing the rice, "it feels absolutely tremendous" to reach this stage, said Adrian Dubock, executive secretary of the Golden Rice Humanitarian Board, the nonprofit working to take the crop from the lab to the field.

Two added genes turn rice golden, one from maize and one from a soil bacterium. Under their direction, rice grains produce beta carotene, the vitamin A precursor that makes carrots and sweet potatoes orange. A third bacterial gene serves as a traceable marker.

In the Philippines, vitamin A deficiency among children increased from 15.2% in 2008 to 20.4% in 2013, despite a national supplement program, according to the Philippines-based International Rice Research Institute (IRRI), which is developing the crop.

Golden rice could provide up to half of a young child's daily need for vitamin A, IRRI says.

### CONTROVERSIAL CROP

Biotech boosters have presented golden rice as one of the best examples of what biotechnology can do, producing plants and animals that benefit humanity faster than conventional breeding can.

Opponents have said the crops raise unknown risks, though the scientific consensus is that GMO varieties on the market today are safe, including golden rice.

GMO critics are also wary that the for-profit corporations that have developed GMOs will have undue influence over the seed supply.

Agricultural biotech company Syngenta previously owned key patents for golden rice but has donated them to the Golden Rice Humanitarian Board. Dubock said golden rice strains are for use only by public and nonprofit crop breeding programs and would not cost farmers any more than conventional rice.

### DIETARY SOLUTION

Critics say the considerable time, effort and money spent on developing golden rice would have been better spent pursuing efforts to diversify the diets of the people who suffer from malnutrition.

"There are very limited funds available for development ... It really matters which route you choose to go, where you choose to put your funds," said Bill Freese, science policy analyst at the Center for Food Safety.

Programs that get more fruits and vegetables into the diets of low-income people would help alleviate several chronic ailments, not just vitamin A deficiency, he noted.

Dubock agrees that "a diversified diet is the best solution," he said. He added that golden rice is a tool that works with how people are already eating.

It's not clear when Philippine farmers will be able to grow golden rice. Regulators still have to certify that the crop won't cause problems in farmers' fields. IRRI said it would submit its application in early 2020. Steve Baragona/Voice of America



# SECURE SUMMIT

A Thai Soldier participates in an anti-terrorism exercise in Nonthaburi province, Thailand, on the outskirts of Bangkok in late October 2019. Thailand increased security ahead of the 35th annual Association of Southeast Asian Nations summit in early November 2019. More than 17,000 police and Soldiers secured the summit venue.

Photo By: **SAKCHAI LALIT** | THE ASSOCIATED PRESS

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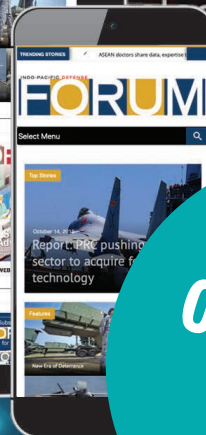
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