

China-India Brief

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Guest Column

From the Border to Cyberspace: Investigating the Post-Galwan Escalation of Chinese Cyber Attacks against India

By Neeraj Singh Manhas

The India-China relationship has become increasingly complex and challenging, with bilateral tensions rising to their highest point in decades following the **Galwan Valley clash** in June 2020. The skirmish at Galwan sent shockwaves through both countries as it marked the first time since **1975** that soldiers were killed in combat along the border. The subsequent (and still ongoing) standoff only further contributed to the deterioration in bilateral ties. Today, though tensions have calmed somewhat, with both sides agreeing to mutual withdrawals along

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The *China-India Brief* is a bi-monthly digest focusing on the relationship between Asia's two biggest powers. The Brief provides readers with a key summary of current news articles, reports, analyses, commentaries, and journal articles published in English on the China-India relationship. It features a Guest Column weighing in on key current issues in China-India relations.

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parts of the border and engaging in ongoing talks to end the standoff, an undercurrent of hostility has remained.

Indeed, one significant development following the Galwan Valley clash has been a **surge** in alleged Chinese cyber attacks against India. These attacks have targeted a wide range of Indian government and corporate networks, and has caused significant damage. Though Beijing has **denied** any involvement in these attacks, cyber security companies like **Recorded Future** and **CyFirma** have reported cyber espionage activity by Chinese state-linked hacker groups targeting Indian assets and infrastructure.

If China is indeed behind these attacks, what could its motivations be? There are various possibilities. First, the attacks could be **retaliation** for the Galwan Valley clash—a way for China to punish India by inflicting economic and technological costs. Second, they could be aimed at **gathering intelligence** on Indian military and government operations. Such information could give China an edge either in a future military conflict or in diplomatic negotiations. Lastly, the attacks could be part of a larger strategy to undermine India's long-term development and stability. India is rapidly advancing in the **digital realm**, with more and more public and commercial services moving online. As such, India's economy is highly susceptible to disruption from cyber attacks. Indeed, attacks on critical infrastructure, government institutions, and corporations

have the potential to cause **widespread disruption and economic damage**. A study by the Ponemon Institute estimated that the average cost of a data breach in 2022 to be **USD 4.35 million**.

Chinese Hacking Attempts

India witnessed a significant surge in cyber attacks almost immediately following the skirmish at Galwan. Over the course of just five days in late June 2020, Indian IT networks and banking infrastructure suffered more than **40,300 attempted** cyber attacks, most of which, were found to have originated from Chengdu in China, according to Indian police officials. Since then, several more significant attacks on India's critical infrastructure have been detected:

- 1. Hacking of Bharat Biotech and Serum Institute of India:** In March 2021, it was reported that the hacker group **APT 10** (also known as Stone Panda), which has close links to the Chinese government, were planning to target the IT systems of Bharat Biotech and the Serum Institute of India, likely in an attempt to steal intellectual property and gain a competitive advantage in the development of COVID-19 vaccines.
- 2. Targeting Indian power sector:** Beginning from mid-2020, another China-linked activity group, **RedEcho**, was detected conducting suspected network intrusions against Regional Load Despatch Centres (RLDCs) and State Load Despatch Centres (SLDCs) in India's power sector.



Image Credit: iStock/Marco VDM

RLDCs and SLDCs are responsible for maintaining a stable grid frequency and ensuring the proper functioning of the power grid.

3. Phishing campaign and Mumbai power outage: In February 2021, Indian government officials, including ministries, were targeted in a **phishing campaign** involving compromised government domain email addresses. Though the culprits were not ascertained, the incident bore marked resemblance to an earlier phishing campaign suspected to have been carried out by Chinese state-sponsored entities. In a separate incident, a **power outage in Mumbai** in October 2020 was suspected to be caused by malware planted by a Chinese state-linked group. Though again, this has not been substantiated.

4. Chinese attacks and phishing emails: In June 2022, security experts from the Cyber

Peace Foundation **reported** a wave of attacks targeting Indian individuals through phishing emails. The attacks were tied to domains registered in China's Guangdong and Henan provinces, attributed to an organisation named Fang Xiao Qing. The intention of these attacks appeared to be obtaining access to Indian devices for potential future attacks.

These incidents collectively **raised concerns** about the presence of Chinese malware within India's critical information infrastructure and the potential vulnerabilities in its cyber defences. In April 2021, India's most senior armed forces official, Chief of Defence Staff (CDS) Bipin Rawat, **noted** that China was capable of launching cyber attacks that could "disrupt a large amount of [India's] systems." He also warned that India's best defence against these attacks was to keep outage time limited when a breach did occur. These

warnings came at a time when tensions between India and China were already high following the Galwan clash. The increased cyber attacks from China were a further reminder of the threat that the country posed to India's security.

Response of the Indian Government

Over the last decade, the Indian government has adopted a number of measures to strengthen its cyber security architecture. The most notable was the 2013 establishment of the **National Cyber Security Coordinator (NCSC)** position under the **National Security Council Secretariat**. The NSCS plays a crucial role in coordinating with other central-level agencies on matters related to national cyber security. One of its key responsibilities is to monitor communication metadata, providing valuable inputs to law enforcement agencies for investigating potential cybercrime cases. Presently, the NCSC is actively involved in updating and replacing the 2013 National Cyber Security Strategy.

The forthcoming **National Cyber Security Reference Framework (NCRF)** will replace the outdated strategy and adopt a common but differentiated approach. While the overall cyber security goals will remain consistent for all stakeholders, the framework will tailor specific objectives for government organisations, private institutions, academia, and other relevant entities. There has also been other measures

such as the creation of **Cyber Swachhta Kendra** (Botnet Cleaning and Malware Analysis Centre) which is a new desktop and mobile security solution for cyber security in India. It was launched by the Indian government's **Computer Emergency Response Team (CERT-in)** in 2017 to combat cyber security violations and prevent their increase. CERT-in also functions as the nodal agency for the coordination of all cyber security efforts, emergency responses, and crisis management. It is responsible for monitoring and responding to cyber threats, providing technical assistance to organisations, and disseminating information about cyber security best practices.

Way Forward

The threat of increasing cyber attacks poses a significant challenge to India's national security. India needs to step up its efforts to safeguard itself from attacks of this nature. The attacks demonstrated meticulous planning, precise targeting, and use of sophisticated techniques, and based on third party reports, were likely orchestrated with the support of the Chinese government. Moreover, the timing of these attacks indicates a deliberate intent to disrupt and destabilise India, particularly following the clash at Galwan.

When it comes to **defending** the country against cyber attacks, the Indian government, corporations, and ordinary

citizens all have important roles to play. The government must proceed with the implementation of measures to further bolster the country's cyber defences. In addition, people and businesses in India need to be vigilant of the danger posed by cyber attacks and incorporate cyber security best practices into their daily activities. This includes the use of robust passwords, caution when deciding what information to give online, and awareness of the most recent risks to online security. It is imperative for government agencies to also strengthen post-breach strategies, including the potential to counterattack the hackers, and to partner with other countries in the development of cyber defences.

Neeraj Singh Manhas is the Director of Research at the Indo-Pacific Consortium at Raisina House, New Delhi. He has authored and edited four books and has various research interests covering Sino-Indian border issues, China in the Indian Ocean, India-China foreign policy, water security, defence, and Indo-Pacific studies. His most recent edited book, *Analysing the Current Afghan Context* was published in 2023 by Routledge. He has published his writings for renowned institutions such as the *Institute for Security & Development Policy (ISDP)*, *Observer Research Foundation (ORF)*, *Centre for the Joint Warfare Studies (CENJOWS)*, *Jamestown Foundation*, *The Hindu BusinessLine*, *The Pioneer*, *Financial Express*, *Firstpost*, *The Millennium Post*, and other online platforms. He tweets at [@The_China_Chap](https://twitter.com/The_China_Chap).

News Reports

Bilateral relations

India's Modi, China's Xi Agree on Efforts to De-Escalate Border Tensions

Voice of America, August 24

India's prime minister and China's leader have agreed to intensify efforts to de-escalate tensions at the disputed border, according to an official from India's foreign ministry.

India, China hold Major General-level talks on LAC issues

Hindustan Times, August 19

The talks were held on August 18 at separate locations in eastern Ladakh—Daulet Beg Oldi and Chushul.

China-India border dispute: rare 2-day talks fail to resolve deadlock ahead of Xi-Modi Brics meeting

South China Morning Post, August 16

Both sides “agreed to maintain the momentum of dialogue and negotiations through military and diplomatic channels”.

Hope China ensures circumstances that allow Indian journalists to operation: MEA

The Economic Times, August 12

During the weekly media briefing by the Indian External Affairs Ministry, spokesperson Arindam Bagchi, conveyed his hope that China would ensure circumstances that would allow Indian journalists to stay and report there.

China and India in the Region

Sri Lanka 'processing' China's request for docking research ship 'Shi Yan 6', concerns abound in India

Firstpost, August 23

China has requested permission for a research ship to dock in Sri Lanka, Colombo said.

China's Wang Yi urges closer ties with South Asia under Belt and Road Initiative

South China Morning Post, August 16

China's top diplomat Wang Yi, called for the South Asian countries to “build ‘a development community’ for the long-term stability and prosperity of the region”.

India is a rising force in Southeast Asia as region seeks to counter China's dominance

CNBC, August 13

Growing rivalry between India and China has influenced India's strategic calculations in strengthening its presence and having a “more forceful and more upfront” about its comprehensive strategic partnership with Southeast Asia.

'Adhere to international law, rules-based order': India amid China-Philippines row

Times of India, August 12

Amid rising tensions between China and Philippines in South China Sea, India reiterated its call for adherence to international law and a rules-based order in the region, as well as, the peaceful resolution of disputes.

Trade and Economy

China, South Asia trade ties shine in key expo, but Indian presence remains low

South China Morning Post, August 22

Global supply-chain upheaval and trade tensions have forced China to get creative in securing new buyers in the face of geopolitical disputes.

India's rice export ban could make China a binge buyer

Asia Times, August 21

India's move to stabilise staple food prices by banning rice exports could invariably affect Chinese food security as its own crop production have been affected by extreme weather conditions.

Chinese economy in distress, its model is 'broken': report

The Hindu, August 21

The total debt, including that held by various levels of government and state-owned companies, climbed to nearly 300% of China's GDP as of 2022, surpassing U.S. levels and up from less than 200% in 2012, according to Bank for International Settlements data.

iPhone maker Foxconn's cautious pivot to India shows limits of 'China plus one'

Financial Times, August 14

Foxconn executives and other observers dismiss the expectation that India could come even close to matching China's role as a global technology manufacturing hub.

Energy and Environment

Chandrayaan-3: India makes historic landing near Moon's south pole

BBC, August 24

India joins an elite club of countries to achieve a soft landing on the Moon, after the US, the former Soviet Union and China.

China's new green-power guidelines to drive interprovincial trade

Nikkei Asia, August 21

Gong Zhaoyu, a power-trading expert at Envision Digital, pointed out that under the new guidelines, power users and producers in different provinces can negotiate and trade directly, while provincial-level power exchange centre.

Indian energy company ONGC Videsh secures 3-yr extension to explore South China Sea

Reuters, August 19

ONGC Videsh has secured an extension from Vietnam to explore 'Block 128' in the South China Sea.

India Solar Firm Plans \$3 Billion Move into Power Generation

Bloomberg, August 18

Riding on India's plan to install 500 gigawatts of clean energy capacity by 2030, Indian Solar Firm, Jakson Group, seeks to be included in this expansion by achieving 5 gigawatts of power capacity by 2030.

Analyses

India Can't Cut the Cord From China

The Wire, August 18

By Sushant Singh, Senior Fellow at the Centre for Policy Research, and Lecturer in Political Science at Yale University

Only a return to the status quo of May 2020 means resolution. Disengagement certainly isn't.

How India Is Gaining Ground in Its Indo-Pacific Maritime Contest with China

South China Morning Post, August 17

By Asma Khalid, Independent Researcher and former Visiting Fellow at the Stimson Centre

Through boosting military, diplomatic ties and cooperation with the Quad nations, ASEAN and the Pacific Islands, India is “rallying support from like-minded countries” that can collectively push back against the Chinese.

India is Pushing Back Against China in South Asia

Foreign Policy, August 16

By Derek Grossman, Senior Defence Analyst at RAND

India is no longer losing—and may even be winning—its strategic competition with China in the region.

India-China Tensions on the Global Stage

Observer Research Foundation, August 16

By Harsh V. Pant, Professor of International Relations with King's India Institute at King's College London and Director (Honorary) of Delhi School of Transnational Affairs at Delhi University

From the SCO and BRICS to the United Nations and the Indo-Pacific, the stress caused by the Sino-Indian contestation is moving across various platforms from the bilateral to the global arena.

Border Issues Are Not the Entirety of China-India Relations

Global Times, August 16

By Liu Zongyi, Secretary-General of the Research Centre for China-South Asia Cooperation at Shanghai Institutes for International Studies

Rather than the escalation of border issues, India's tough stance against the Chinese is due to their broader grand strategy which aims to utilize the US to contain China while simultaneously driving the global industry supply chain to shift toward India, achieving economic growth and ascending as a major global power as a result.

Books and Journals

Partnership or Polarization? Southeast Asian Security between India and China

Contemporary Southeast Asia, August 2023

Edited by Evan Laksmana, Senior Fellow for Southeast Asia Military Modernization at the International Institute for Strategic Studies (IISS) and Byron Chong, Research Associate at the Centre on Asia and Globalisation, Lee Kuan Yew School of Public Policy.

Southeast Asian states face numerous security challenges that require the assistance of external partners. China and India, two Indo-Pacific powerhouses, could offer potential solutions but their relations with Southeast Asian states vary considerably. At the same time, escalating tensions between China and India increase the risks of their engagement with Southeast Asian states leading to greater polarization in the region. By utilizing the “4-C Calculus”, which comprises cost, complexity, credibility and capacity, this special issue seeks to understand how Southeast Asian states evaluate China and India as potential security cooperation partners, and whether cooperation with both—together or individually—can help address the region’s security needs. The articles in this special issue employ the 4-C framework to analyse five key security concerns: defence modernization; health security; the postcoup crisis in Myanmar; humanitarian assistance and disaster relief; and maritime security.



They contribute to the literature on security partnerships by providing fresh insights into our understanding of why and how smaller states partner with larger powers over shared security challenges, as well as by illustrating how certain policy considerations can influence the direction and quality of security partnerships.

Contributors to this special issue include: Monalisa Adhikari, Ian Tsung-Yen Chen, Lina Gong, Dhanasree Jayaram, Yogesh Joshi, and Curie Maharani Savitri.

Our team



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THE CENTRE ON ASIA AND GLOBALISATION

The Centre on Asia and Globalisation is a research centre at the Lee Kuan Yew School of Public Policy, National University of Singapore. It conducts in-depth research on developments in the Asia-Pacific and beyond, and aims to provide academics, decision-makers, and the general public with objective analysis on issues of regional and global significance. The Centre's motto "Objective Research with Impact" reflects its commitment towards ensuring that its analysis informs policy and decision makers in and about Asia.

OTHER CAG PUBLICATIONS

- *Partnership or Polarization? Southeast Asian Security between India and China* edited by Evan Laksmana and Byron Chong (Contemporary Southeast Asia, 2023)
- *Asian Conceptions of International Order: What Asia Wants* edited by Kanti Bajpai and Evan Laksmana (International Affairs, 2023)
- *How Realist Is India's National Security Policy?* edited by Kanti Bajpai (Routledge, 2023)
- *Deterring Conflict and Preserving Peace in Asia* edited by Drew Thompson and Byron Chong (Centre on Asia and Globalisation, 2022)
- *What Can the United States Learn from China about Infrastructure?* by Selina Ho in *The China Questions 2* (Harvard University Press, 2022)
- *India Versus China: Why they are Not Friends* by Kanti Bajpai (Juggernaut Books, 2021)
- *Winning the Fight Taiwan Cannot Afford to Lose* by Drew Thompson (Strategic Forum, 2021)
- *Routledge Handbook of China-India Relations* edited by Kanti Bajpai, Selina Ho and Manjari Chatterjee Miller (Routledge, 2020)



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