

DPG Cyber Review

Volume 1, Issue 5

JUNE 2020





DPG Cyber Review, Vol. 1, Issue 5 June 2020

ABOUT US

Founded in 1994, the Delhi Policy Group (DPG) is among India's oldest think tanks with its primary focus on strategic and international issues of critical national interest. DPG is a non-partisan institution and is independently funded by a non-profit Trust. Over past decades, DPG has established itself in both domestic and international circles and is widely recognised today among the top security think tanks of India and of Asia's major powers.

Since 2016, in keeping with India's increasing global profile, DPG has expanded its focus areas to include India's regional and global role and its policies in the Indo-Pacific. In a realist environment, DPG remains mindful of the need to align India's ambitions with matching strategies and capabilities, from diplomatic initiatives to security policy and military modernisation.

At a time of disruptive change in the global order, DPG aims to deliver research based, relevant, reliable and realist policy perspectives to an actively engaged public, both at home and abroad. DPG is deeply committed to the growth of India's national power and purpose, the security and prosperity of the people of India and India's contributions to the global public good. We remain firmly anchored within these foundational principles which have defined DPG since its inception.

DPG Cyber Review

DPG Cyber Review is compiled by our research team from publicly available information and open source media to provide an overview of significant developments related to cyber and digital technology domains during the month. Your comments and feedback can be addressed to Brig. Abhimanyu Ghosh (Retd.), Senior Fellow for Cyber Security and Digital Technologies at **abhi.ghosh@dpg.org.in**

Cover Photographs:

Prime Minister Narendra Modi holding an All Party Meeting via video conferencing to discuss the situation along the India-China border in Ladakh, June 19, 2020. Source: PMO

© 2020 by the Delhi Policy Group

Delhi Policy Group

Core 5A, 1st Floor, India Habitat Centre, Lodhi Road, New Delhi- 110003. www.delhipolicygroup.org

DPG Cyber Review, Vol. 1, Issue 5 June 2020

Contents

National Developments	1
Cyber Threat Scenario	1
CERT-In issues advisory on phishing attack campaign	1
CERT-In issues Advisory to delete 106 Google Chrome extensions	1
Post Galwan clashes, Chinese cyber armies wage war against India	1
Ladakh standoff: Hundreds of fake Twitter accounts from Pakistan created	1
Hackers target J&K Power Development Dept, wipe out essential data2	2
Digital Technologies	2
Digital technologies have enabled India to handle the COVID-19 pandemic	2
Communication Technologies	2
Biggest spy network using illegal VoIP exchange in India busted	2
BSNL, Indian Army operationalise mobile tower in Ladakh	2
Tata Communications, ADC consortium build new submarine cable in Asia Pacific	
Artificial Intelligence	3
India joins Global Partnership on Artificial Intelligence (GPAI)	3
5G Technology	3
Reliance Jio seeks DoT nod to test own 5G gear	3
Pompeo ramps up global pressure on Huawei, calls Jio 'clean' for spurning it	1
Blockchain	1
India to introduce a law to ban cryptocurrencies	1
Strategy/Regulation/Policy	1
Government Bans 59 mobile apps which are prejudicial to sovereignty and integrity of India, defence of India, security of state and public order	
India steps up vigil for cyber attacks from China after apps ban4	1
DoT to set up committee to review BSNL, MTNL 4G tender4	1

DoT notifies telecom equipment for mandatory testing under phase - II
5
Indian Agencies are capable to address cyber challenges from China5
Budgetary Support5
India investment body backs incentives for \$706 million Samsung display plant5
Capability Building6
Goa Govt grants permission to set up cyber lab via PSU6
ITI, Tech Mahindra partner to develop 4G, 5G solutions6
International Developments
Cyber Threat scenario7
Anonymous Claims Responsibility for Cyberattack7
NATO condemns Cyber Attacks
EC accuses China of peddling disinformation7
Australia hit by massive cyber-attack, Chinese hackers suspected7
EU to probe TikTok's data processing and privacy practices
Twitter removes accounts from China, Russia, Turkey promoting pro- govt content
Digital Technologies8
China launches final satellite of BeiDou-3 navigation system8
Japanese supercomputer, crowned world's fastest, is fighting coronavirus9
Communication Technologies9
Google sets limit on how long it will store data9
5G Technologies9
U.S. companies can work with Huawei on 5G, other standards9
Huawei controversy opens field for 5G challengers9
Nokia launches next-generation 5G cloud RAN10
Rakuten's 5G roll-out on track10
Blockchain Technology10
N.Zealand Freezes Assets of Alleged Russian Cyber Criminal10
Quantum Technologies10
Honeywell claims creating the world's most powerful quantum computer
Bilateral Cooperation
India and Australia signs Framework Arrangement on Cyber and Cyber- Enabled Critical Technology Cooperation

International Cooperation	. 11
WTO: US, China, Japan ask India to roll back telecom tariffs	. 11
World Summit on Information Society Forum 2020	. 11



National Developments

Cyber Threat Scenario

CERT-In issues advisory on phishing attack campaign

On June 19, 2020, The Indian Computer Emergency Response Team (CERT-In) issued an advisory warning citizen about a new email fraud in which malicious actors are planning a large-scale phishing attack campaign with fake attachments against Indian individuals, banks and businesses.

CERT-In issues Advisory to delete 106 Google Chrome extensions

It was reported on June 26, 2020 that Google has removed at least 106 Chrome extensions that were identified as a threat to user privacy, collecting sensitive user data. In order to alert internet users about this, the Indian Computer Emergency Response Team (CERT-In) has issued an advisory suggesting that people should delete these Google Chrome extensions immediately. As per the advisory, scammers are trying to blackmail users and forcing them to pay money by threatening to leak their personal photos and sensitive information.¹

Post Galwan clashes, Chinese cyber armies wage war against India

On June 22, 2020 it was reported that there has been a steep rise in cyberattacks aimed at paralysing Indian economy and informatics, shortly after the Galwan clashes on Indo-Chinese border. Hackers attempted over 40,000 cyber-attacks on India's Information Technology infrastructure and banking sector. Most of these attacks were traced back to the central Chinese city of Chengdu, known as the Headquarters of the Chinese Army's Unit 61398, which is PLA's covert cyberwarfare section.²

Ladakh standoff: Hundreds of fake Twitter accounts from Pakistan created

A private cybersecurity agency, Technisanct, revealed on June 18, 2020 that hundreds of fake accounts -- mostly from Pakistan -- are propagating false news and misinformation about the situation on the India-China border. Such activities are carried out through social media networks like Twitter and Telegram, with fake profiles that are created with Chinese identity and photographs to make others believe that the posts are legitimate.

¹ https://www.cert-in.org.in/

² https://www.hindustantimes.com/india-news/40-300-cyber-attacks-in-the-last-4-5-daysfrom-china-more-coming-maharashtra-cyber-department/story-



Hackers target J&K Power Development Dept, wipe out essential data

In the first cyber-attack in J&K, hackers on June 26, 2020 wiped out essential data from the servers of the state Power Development Department. It is reported that out of 101 servers of the department, 24 servers are under siege. Officials of the department have lodged a complaint in this regard with the police's cybercrime cell.

Digital Technologies

Digital technologies have enabled India to handle the COVID-19 pandemic

India, at the virtual high-level debate on the 'Impact of Rapid Technological Change on the Sustainable Development Goals and Targets' on June 11, 2020 said that new technologies like drones, tracing apps and innovative Artificial Intelligence-based COVID-19 testing kits have enabled the country to handle the pandemic. Addressing the Meeting, UN Secretary-General Antonio Guterres said that digital technology is central to almost every aspect of the response to the COVID-19 pandemic, from vaccine research to online learning models, e-commerce and tools that are enabling hundreds of millions of people to work and study from home.

Communication Technologies

Biggest spy network using illegal VoIP exchange in India busted

On June 01,2020 it was reported that the biggest-ever spy network of Pakistan which was attempting to gather information about the Indian defence in Ladakh, using illegal Voice over Internet Protocol (VoIP) exchange has been busted in Mumbai by the Military Intelligence of Jammu & Kashmir and the Crime Branch of Mumbai Police. VoIP is the transmission of voice and multimedia content over Internet Protocol (IP) networks.

BSNL, Indian Army operationalise mobile tower in Ladakh

Army defence spokesman said on June 30, 2020 that "The highest mobile tower in Eastern Ladakh at an altitude of 16,000 feet has been operationalised in a joint effort by the BSNL and Indian Army". He said the tower provides vital communication link to one of the remotest locations of Eastern Ladakh at Chongtash, which has been established with assistance from the Indian Army.



Earlier, on June 26, 2020 it was reported that 54 new Mobile Towers will be installed in Ladakh to strengthen communication Network with LAC.³

Tata Communications, ADC consortium build new submarine cable in Asia Pacific

Tata Communications, a member of the Asia Direct Cable (ADC) Consortium, said on June 16,2020 that the ADC is building a high-performance submarine cable, 9,400-kilometer-long, that will connect China (Hong Kong SAR and Guangdong Province), Japan, the Philippines, Singapore, Thailand, and Vietnam. ADC's high-capacity will allow it to support bandwidth-intensive applications driven by technological developments in 5G, cloud platforms, internet of things (IoT), and artificial intelligence. The project is expected to be completed by 2022.

Artificial Intelligence

India joins Global Partnership on Artificial Intelligence (GPAI)

On June 16, 2020 India joined the USA, UK, EU, Australia, Canada, France, Germany, Italy, Japan, Mexico, New Zealand, Republic of Korea, Singapore to launch the Global Partnership on Artificial Intelligence (GPAI or Gee-Pay). GPAI is an international and multi-stakeholder initiative to guide the responsible development and use of AI, grounded in human rights, inclusion, diversity, innovation, and economic growth. This is also a first initiative of its type for evolving better understanding of the challenges and opportunities around AI using the experience and diversity of participating countries.⁴

5G Technology

Reliance Jio seeks DoT nod to test own 5G gear

On June 17, 2020, it was reported that Reliance Jio has sought the telecom department's (DoT) permission to do lab testing of its in-house developed 5G products. While the lab testing requires only non-radiating spectrum, the telco needs to import gear for which it needs permission. JioPhone with its 5G-ready network and extensive fiber assets would play a key role in the development of the 5G ecosystem in India.

³ <u>https://www.amarujala.com/india-news/54-mobile-towers-to-be-strengthened-in-ladakh-lac-area</u>



Pompeo ramps up global pressure on Huawei, calls Jio 'clean' for spurning it

On June 25, 2020, US Secretary of State Mike Pompeo said that Some of the largest telecom companies around the globe are becoming 'clean telcos'. He cited examples of Orange in France, Reliance Jio in India, Telstra in Australia, SK and KT in South Korea, NTT in Japan, and O2 in the United Kingdom. He called them as 'clean telcos' for refusing to do business with firms from China including Huawei, which are considered as tools of the CCP surveillance infrastructure.

Blockchain

India to introduce a law to ban cryptocurrencies

Indian government is planning to introduce a law to ban cryptocurrencies. The spur for the draft cabinet note was the March 4, 2020 decision of the Supreme Court to quash the April 2018 circular from the RBI that prevented banks from providing services in support of cryptocurrencies.

Strategy/Regulation/Policy

Government Bans 59 mobile apps which are prejudicial to sovereignty and integrity of India, defence of India, security of state and public order

On June 29, 2020 The Ministry of Information Technology, invoking it's power under section 69A of the Information Technology Act, has decided to block 59 mobile apps, including TikTok, Shareit, UC Browser, WeChat, Helo etc., since they are engaged in activities which is prejudicial to sovereignty and integrity of India, defence of India, security of state and public order. The Indian Cyber Crime Coordination Centre, Ministry of Home Affairs has also sent an exhaustive recommendation for blocking these malicious apps.

India steps up vigil for cyber attacks from China after apps ban

On June 30, 2020 a senior government official said that the government has increased a nationwide alert and stepped up monitoring as intelligence agencies prepare for intensified cybersecurity attacks from China. Among all the sectors, power, telecom and financial services are being monitored even more closely, given their exposure to Chinese infrastructure.

DoT to set up committee to review BSNL, MTNL 4G tender

It was reported on June 22, 2020 that the Department of Telecommunications (DoT) will set up a six-member committee to decide on the tender



specifications to upgrade state-run telecom operators' BSNL and MTNL's respective networks. The development comes close on the heels of the Indo-China LAC conflict in which 20 Indian troops were killed in action. The new process is likely to disqualify Chinese companies. State-run Bharat Sanchar Nigam Ltd. (BSNL) uses ZTE to a large extent, and has recently approved ZTE and Finland's Nokia for migration of as many as 49,300 2G and 3G sites to 4G.

DoT notifies telecom equipment for mandatory testing under phase - II

In a notification on June 25, 2020, the Telecom Engineering Centre (TEC) of Department of Telecommunications (DOT) said, that testing and certification of telecommunications equipment under phase - II of Mandatory Testing and Certification of Telecommunications Equipment (MTCTE) regime as provisioned in the Indian Telegraph (Amendment) Rules 2017 shall be mandatory with effect from 1st October, 2020. This has been a major requirement since 2013, to address Supply Chain Vulnerabilities. However, Global telecom vendors are opposed to the move, saying it will only result in duplication of certification activity, disrupting network gear availability in India and delaying 4G network rollouts by at least 6-to-9 months.⁵

Indian Agencies are capable to address cyber challenges from China

Gulshan Rai, former National Cyber Security Coordinator, wrote in an op-ed on June 22, 2020 that India is among the top 10 countries facing cyber-attacks. Technologies like artificial intelligence, machine earning, internet-enabled devices and big data have complicated the cyber-attack ecosystem. Nevertheless, agencies in the country are geared up and capable to address challenges, from China and other countries. India, however, needs to review the 2013 Cyber Security Policy and take corrective steps to strengthen the system to enhance resiliency of cyber infrastructure in the country, particularly critical infrastructure.

Budgetary Support

India investment body backs incentives for \$706 million Samsung display plant

It was reported on June 17, 2020 that Samsung Electronics would get tax and other incentives from Uttar Pradesh as the South Korean company looks to invest some 53.67 billion rupees (\$705.75 million) in a smartphone display manufacturing plant in the state, India's lead investment promotion body,

⁵ https://telecom.economictimes.indiatimes.com/news/global-gear-vendors-oppose-dotdiktat-on-mandatory-local-testing/76624733



Invest India said in a letter. The recommendations are to incentivise setup of Hi-tech industries in Uttar Pradesh and facilitate a key investor - Samsung Display in relocating its operations from China to India.

Capability Building

Goa Govt grants permission to set up cyber lab via PSU

On June 14, 2020 Goa government has granted permission for setting up a cyber forensic lab cum training center, through a public sector undertaking (PSU). The Centre had approved Rs 1.4 crore for Goa police to set up the lab meant for solving cybercrime cases. The lab to be set up under the Cybercrime Prevention Against Women and Children (CCPWC) scheme will help Goa police solve many pending cases by identifying or locating the accused.

ITI, Tech Mahindra partner to develop 4G, 5G solutions

State-run Indian Telephone Industries (ITI) on June 26, 2020, said that it has partnered with IT services company Tech Mahindra to work together in the areas of 4G and 5G networks, smart cities and health care services, to supplement the country's call for self-reliance in telecoms. ITI said it will productionise 4G upgradable to 5G Radio Access Network (RAN) and related equipment in-line with the government's call for 'Aatmanirbhar Bharat' whereas Tech Mahindra will be responsible for providing the software IPs, implementation and integration of services, operations and maintenance.



International Developments

Cyber Threat scenario

Anonymous Claims Responsibility for Cyberattack

On June 03, 2020, it was reported in the US that following the death of George Floyd at the hands of police in Minneapolis, the hacktivist group, known as 'Anonymous' threatened to hack and "expose" the Minneapolis Police Department. The hacktivist group also claimed responsibility on June 15, 2020, for the weekend outage of Atlanta city's police department website, saying that it was revenge for the recent killing of Rayshard Brooks.⁶

NATO condemns Cyber Attacks

NATO has issued a statement on June 03, 2020 condemning cyber-attacks perpetrated in the midst of the ongoing global health pandemic. In it, NATO condemned destabilizing and malicious cyber activities directed against those whose work is critical to the response against the pandemic, including healthcare services, hospitals and research institutes. NATO described such digital onslaughts as life-threateningly dangerous and also injurious to global efforts to succeed against a virus, at a time when these critical sectors are needed most.⁷

EC accuses China of peddling disinformation

In new plans announced on June 10, 2020 aimed at tackling online falsehoods connected to the Covid-19 public health crisis, the European Commission mentions Beijing for the first time as a source of online disinformation linked to the coronavirus aimed at undermining Western democracies, sowing internal divisions and projecting a distorted view of China's response to the global pandemic.

Australia hit by massive cyber-attack, Chinese hackers suspected

On June 19, 2020, the Australian government reported about a massive cyberattack on government and businesses, which is allegedly a handiwork of a nation-state backed hacking group and China is top on the suspect list. Australia's Prime Minister Scott Morrison said, "This activity is targeting Australian organisations across a range of sectors, including all levels of

⁶ https://www.govtech.com/security/Anonymous-Claims-Responsibility-for-Atlanta-PD-Website-Outage.html

⁷ https://www.infosecurity-magazine.com/news/nato-condemns-cyberattacks



government, industry, political organisations, education, health, essential service providers and operators of other critical infrastructure. Australia will spend A\$1.35 billion (\$926.1 million) over the next 10 years to boost its cyber security defences, he added, on June 30, 2020. The package will include A\$470 million to hire an extra 500 security experts in the Australian Signals Directorate, the country's cyber intelligence agency.⁸

EU to probe TikTok's data processing and privacy practices

Chinese-owned short video app TikTok faces new regulatory scrutiny in Europe after it raised national security concerns in the U.S. The European Data Protection Board (EDPB) set up a task force to investigate the ByteDance-owned app's data processing activities and privacy practices across the European Union. Several U.S. government agencies that deal with national security and intelligence issues have also banned employees from using the app.

Twitter removes accounts from China, Russia, Turkey promoting pro-govt content

On June 12, 2020 Twitter has permanently removed over 32,000 state-linked accounts which were part of three distinct operations from China, Russia, and Turkey spreading political propaganda favourable to the ruling government of these countries, and critical of dissidents and protesters. The accounts were suspended for various violations of Twitter's platform manipulation policies. While Twitter is blocked in China, researchers at the Australian Strategic Policy Institute found that the campaign was targeted at Chinese-speaking people outside the country.

Digital Technologies

China launches final satellite of BeiDou-3 navigation system

On June 23, 2020, China has successfully put into orbit the final satellite in its BeiDou-3 navigation system, further advancing the country as a major power in space. The \$10bn network is made up of 35 satellites and provides global navigation coverage. The third version of the BeiDou Navigation Satellite System (BDS) offers an alternative to Russia's GLONASS and the European Galileo systems, as well as America's GPS.

⁸ https://ciso.economictimes.indiatimes.com/news/australia-to-spend-nearly-1-billion-toboost-cyber-security/76705276



Japanese supercomputer, crowned world's fastest, is fighting coronavirus

Japan's FUGAKU supercomputer claimed the top spot on June 22, 2020 breaking a long run of US-China dominance, returning Japan to the top for the first time in 11 years. Its performance was measured at 415.53 petaflops, 2.8 times faster than second-place IBM SUMMIT's 148.6 petaflops. Third place in the list went to another IBM system, while the fourth and fifth places were taken by computers in China. A supercomputer is classified by being more than 1,000 times faster than a regular computer. The machine located in the city of Kobe was developed over six years by Japanese technology firm Fujitsu and the government-backed Riken Institute. FUGAKU has already been put to work on fighting the coronavirus.

Communication Technologies

Google sets limit on how long it will store data

Google said on June 24, 2020 that it will automatically delete some location history after 18 months for new users and make it easier for everyone to access its search, Maps and You-Tube apps without being tracked. The updates to Google's privacy controls arrive as the world's largest search engine faces heightened scrutiny on its data collection and privacy practices.

5G Technologies

U.S. companies can work with Huawei on 5G, other standards

U.S. Commerce Secretary Wilbur Ross confirmed in a statement on June 15, 2020 that the Department will amend its prohibitions on U.S. companies doing business with China's Huawei to allow them to work together on setting standards for next-generation 5G networks. "The United States will not cede leadership in global innovation," Ross said. "The department is committed to protecting U.S. national security and foreign policy interests by encouraging U.S. industry to fully engage and advocate for U.S. technologies to become international standards."

Huawei controversy opens field for 5G challengers

With growing pressure to keep China's Huawei out of 5G network development, firms like Japan's NEC and South Korea's Samsung see opportunities. Samsung and NEC joined forces two years ago and have launched a joint marketing team to offer 5G products to European and Asian markets. NEC has a partnership in Japan with mobile operator Rakuten and is also a leader on undersea cables, fibre optic networks and logistics



management software. In building its 5G network, Samsung has so far focused on North America and parts of the Asia-Pacific region.

Nokia launches next-generation 5G cloud RAN

Finnish telecom gear Nokia Tuesday said on June 23, 2020 that its nextgeneration 5G AirScale Cloud RAN solution based on virtual Radio Access Network (vRAN) 2.0 will be commercially available this year with general availability expected in 2021, following successful trials. The 5G AirScale Cloud RAN will enable operators to fully utilize the low-latency capabilities of 5G. This will provide scalability, low-latency, high-performance and capacity.

Rakuten's 5G roll-out on track

Rakuten Inc said on June 26, 2020 that its Japanese wireless network was on track to begin 5G services in September, after being forced to delay the introduction by three months due to disruption from the coronavirus outbreak. Rakuten has gained prominence because it uses cloud-based software and commoditised hardware instead of proprietary equipment.

Blockchain Technology

N.Zealand Freezes Assets of Alleged Russian Cyber Criminal

New Zealand police revealed on June 22, 2020 that they had frozen NZ\$140 million (US\$90 million) in assets linked to a Russian man accused of laundering money for organised crime using cyber currency. Police said they acted after discovering funds belonging to Alexander Vinnik, who is in custody in France facing fraud charges, were being held in a New Zealand company. Vinnik operated digital currency exchange BTC-e until his arrest in 2017, prompting a three-way extradition tussle between the United States, France and Russia.

Quantum Technologies

Honeywell claims creating the world's most powerful quantum computer

Honeywell unveiled on June 18, 2020 the "world's highest performing quantum computer," a type of experimental computer that could be a successor to today's supercomputers. Honeywell's machine, dubbed "H0", has achieved a Quantum Volume of 64, a metric devised by IBM that measures the performance of the machine and error rates. In January, IBM announced that it had achieved a Quantum Volume of 32 with its latest machine, Raleigh.



Bilateral Cooperation

India and Australia signs Framework Arrangement on Cyber and Cyber-Enabled Critical Technology Cooperation.

Prime Ministers Narendra Modi and Scott Morrison participated in an India-Australia Leaders' Virtual Summit on 04 June 2020. As part of the Australia-India Leaders' Virtual Summit, both countries signed the Australia-India Framework Arrangement on Cyber and Cyber Enabled Critical Technologies Cooperation, wherein both countries jointly decided to work together in the areas of digital economy, cyber security and critical and emerging technologies as identified by the Framework. Under the Arrangement, Australia and India will work together to promote and preserve an open, free, safe and secure Internet, enhance digital trade, harness critical technology opportunities in artificial intelligence, guantum computing and robotics, guided by international standards and address cyber security challenges. The Arrangement will be complemented by a new, four-year \$12.7 million Australia-India Cyber and Critical Technology Partnership, which will create a research and development fund for Indian and Australian businesses and researchers, and support other countries to improve their cyber resilience. Together, these measures will help shape a global technology environment that meets shared vision of an open, free, rules-based Indo-Pacific region.

International Cooperation

WTO: US, China, Japan ask India to roll back telecom tariffs

At the meeting of the Council for Trade in Goods at the WTO on June 08, 2020 the US, China, Japan and four others at the World Trade Organization have asked India to roll back its Customs tariffs on telecom and other products such as mobile phones and cameras, which they allege are inconsistent with its multilateral commitments. New Delhi defended its duties and reiterated that the items were not covered under the IT Agreement and hence no rules were flouted.

World Summit on Information Society Forum 2020

World Summit on the Information Society (WSIS) virtual Forum 2020 is being held from June 22 onwards. The final week of the Virtual WSIS Forum 2020 will take place on 7-10 September 2020. The 2020 WSIS Forum (WSIS+15) will provide an opportunity to serve as a platform to track and analyse the achievements of WSIS Action Lines in collaboration with the UN Agencies involved and provide information of its implementation since 2005.



www.delhipolicygroup.org