

Delhi Policy Group

DPG Cyber Review

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ABOUT US

Founded in 1994, the Delhi Policy Group is among India's oldest independent think tanks with its primary focus on international and strategic issues of critical national interest. Over the past decades, the Delhi Policy Group has established itself in both domestic and international circles, particularly in the area of national security.

In keeping with India's increasing global profile as a leading power and the accompanying dynamism of India's foreign and security policy, the Delhi Policy Group has expanded its focus areas to include India's broader regional and global role; India's initiatives to strengthen its strategic periphery; India's political, security and connectivity challenges and policies across the Indo-Pacific; and the strategic partnerships that advance India's rise. To support these goals, the DPG undertakes research, publishes policy reports and organises conferences on strategic and geo-political, geo-economic, and defence and security issues.

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 at abhi.ghosh@dpg.org.in

Cover Photograph:

- 1. Shri Ravi Shankar Prasad, Hon'ble Minister of Communications, Law & Justice and Electronics and Information Technology Inaugurated Regional Workshop on 'Digital Infrastructure Readiness & Review of implementation of Government schemes' in Patna on 14 March 2020. Source: https://www.facebook.com/DoTIndia/?ref=py_c
- 2. Dr. Sanjay Bahl, Director General, CERT-In at Cyber Security Summit on Are You a 'War Time' CISO? The Next Generation of Security Leaders at New Delhi on 5th March 2020. Source: https://www.facebook.com/IndianCERT/
- 3. Arunachal Pradesh assembly implements e-Vidhan project, goes paperless in a boost to Digital India. Date: March 02, 2020, Source: Twitter/PemaKhanduBJP

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Abstract

The human anxiety regarding the Coronavirus pandemic and the global lockdown forcing employees to 'work from home' on insecure networks have been exploited by criminals for theft of credentials and financial gains. There has been a spate of fake news and data dissemination across networks and social media. Corporates and governments are working out protocols in line with regulatory frameworks to protect citizens and sensitive data, with technologies like Artificial Intelligence and Big Data being deployed to fight the pandemic. Several countries are deploying communications monitoring technology for contact tracing of patients to prevent spread of the virus.

India is surging ahead with adoption of digital technologies. Capability development initiatives by the Indian Government, Industry and academic institutions are covered in this Review. The World Bank and the All India Council for Technical Education (AICTE) have joined hands to establish Centers of Excellence on Cyber Security in Engineering Colleges. IIT Kanpur, in collaboration with Industry, has established an Interdisciplinary Center for Cyber Security and Cyber Defence of Critical Infrastructures (C3i Center). The Indian Government is supporting these efforts with budgetary support, organisational reforms and Bilateral/Multilateral Cooperation.

The Union Cabinet has set up an Empowered Technology Group (ETG), to be headed by the Principal Scientific Advisor, as an institutional body to lay down, coordinate and oversee national-level policies related to the procurement and induction of technology. The government plans to provide broadband services under the National Broadband Mission (NBM) in all villages of the country by 2022 with an investment of around Rs 7 Lakh crore (US\$ 92.7 Billion) which is to be catalysed largely by the industry, with 10% share being contributed by the government. Further, an investment of around INR 50,000 crores (US\$ 6.6 Billion) has been approved by the Union Cabinet to boost electronics and components manufacturing in the country for exports and domestic production.

Globally, Cyber threats have proliferated to target health related data of hospitals and information related to the Coronavirus Pandemic issued by the World Health Organisation (WHO). In the APAC region, the Cyber Security Firm, Kaspersky, has detected 93 coronavirus-related malwares in Bangladesh, 53 in the Philippines, 40 in China, 23 in Vietnam, 22 in India and 20 in Malaysia. To avert damaging attacks on critical infrastructure by undeterred adversaries, the US Congress had set up the Cyber Space Solarium Commission (CSC) which has just announced several far-reaching recommendations including



the appointment of a 'National Cyber Director' at the White House. The Trump administration has also reportedly agreed to take new measures to restrict the global supply of advanced chips to China's Huawei Technologies, as the White House ramped up criticism of China over spread of the coronavirus.

On the digital technologies front, Honeywell has built the most powerful 'Quantum Computer', which will be available to its clients in next three months. The utilisation of Artificial Intelligence (AI) posing threats to freedom of expression and ethical norms is expanding. During the month, the Organization for Security and Co-operation in Europe (OSCE) hosted a roundtable on the impact of AI on freedom of expression. Tesla and SpaceX CEO Elon Musk had suggested that all organisations developing AI should be regulated by both the United Nations and individual governments.

On the aspects of Norms, Rules and Principles in cyber space, there has not been much progress at meetings of the UN Open Ended Working Group (OEWG) and the United Nations Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security (UN GGE) which took place last month.

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National Developments

Cyber Threat Scenario

On March 23, 2020, The Indian Computer Emergency Response Team (CERT-IN) reported that threat actors are using the COVID-19 pandemic as a cyber-attack vector for their own gains. The threat actors employed references related to COVID-19 in phishing attacks to steal information and drop additional malware.¹

Since the outbreak of the Coronavirus pandemic, there has been a massive surge in fake news, videos, GIFs, authentic-looking government notifications and Health Bulletins, that have the potential of causing serious law and order problems. The Government is said to be taking strict measures to curb the trend.²

It was reported on March 25, 2020, that Indian banks and financial services companies are facing unprecedented challenges to maintain requisite cybersecurity protocols in line with regulatory expectations, while protecting corporate networks from cyber-attacks, as employees continued their second week of 'working from home' due to the pandemic.³

On March 27, 2020, ET Telecom quoted a study conducted by PricewaterhouseCoopers suggesting that the number of cyber-attacks on Indian companies has doubled in the past few days. Cybercriminals are using disruption brought about by the Covid-19 outbreak to infiltrate corporate networks and steal data. Due to increased hacker activity in the past few days, phishing attempts have gone up by three times, and the 'work from home' infrastructure is also under attack.⁴ The major threat vector observed in India was AZORult — a malware designed to steal information including credentials.⁵

On March 16, 2020 it was reported by Cyber security firm Kaspersky that Indian users were targeted by a malware which stole cookies collected by the browser and apps of popular social networking sites and then allowed thieves to

 $^2\ https://www.outlookindia.com/newsscroll/huge-surge-in-fake-corona-news-on-facebook-whatsapp-bleeds-india/1773400$

¹ https://www.cert-in.org.in/

³ https://economictimes.indiatimes.com/tech/internet/cyber-crooks-lurk-in-dark-as-bank-staff-work-from-home/articleshow/74802029.cms

⁴ https://telecom.economictimes.indiatimes.com/news/and-now-come-the-cyberattacks-/74839469

⁵ https://ciso.economictimes.indiatimes.com/news/hackers-are-using-covid-19-disruption-to-infiltrate-corporate-networks/74839299



discreetly gain control of the victim's account in order to send various illintentioned content.⁶

Digital Technologies

Artificial Intelligence

On March 20, 2020, the Indian government postponed the nation's first summit on Artificial Intelligence (AI), RAISE (Responsible AI for Social Empowerment), due to coronavirus pandemic. It was to be held in Delhi on April 11-12, 2020, but has been rescheduled to October 5-6, 2020.⁷

5G Technology

On March 11, 2020, it was announced by Telecommunications Standards Development Society, India (TSDSI) that its Radio Interface Technology (TSDSI-RIT) Proposal for affordable connectivity in Rural areas has qualified for the International Mobile telecommunications (IMT-2020) at the recently concluded meeting of ITU Radio Communication Working Party Meeting (ITU-R WP5D) held in Geneva in February 2020. Several countries have supported TSDSI's standard as it addresses their regional needs from a 5G standpoint.⁸ The Low Mobility Large Cell (LMLC) test case for 5G Communication has been evaluated for Indian Rural areas in the 700 MHz band, but will eventually operate in multiple bands including 3.5 GHz band, for better bandwidth, as announced by Pamela Kumar, director-general, TSDSI.⁹

On March 02, 2020, Reliance JIO sought government approval to conduct 5G trials based on self-designed 5G technology. The Government of India has been pushing Indian telecom industry to build in-house 5G technology. If successful, JIO will be the first Indian player to build its indigenous 5G design and technology for the country.¹⁰

It was reported by ET Telecom on March 18, 2020 that Cellular Internet of Things (IoT) solutions provider Cavil Wireless has joined hands with Maker Village, the Indian IoT and hardware innovation hub, to launch India's first 5G

⁶ https://telecom.economictimes.indiatimes.com/news/researchers-found-malware-which-steals-social-media-cookies/74644952

⁷ https://www.news18.com/news/tech/first-indian-artificial-intelligence-summit-postponed-due-to-covid-19-concerns-2545625.html

⁸ https://tsdsi.in/indias-5g-technology-tsdsi-rit-moves-another-step-forward-at-itu/

 $^{^9}$ https://telecom.economictimes.indiatimes.com/news/indias-local-5g-standard-goal-gains-traction-amid-opposition-from-gear-vendors/74683214

¹⁰ https://www.thehindubusinessline.com/info-tech/reliance-jio-seeks-government-approval-to-test-self-designed-5g-tech-report/article30961677.ece



network test lab in the third quarter of 2020. This lab will facilitate Indian engineering teams to have access to a local cutting-edge, fully functional test platform with 5G coverage.¹¹

Blockchain Technology

On March 04, 2020, the Indian Supreme Court struck down a ban on trading of virtual currencies (VC) in India, which was imposed by a Reserve Bank of India order in April 2018. Virtual currencies include cryptocurrencies, such as Bitcoin, Ethereum etc., which use blockchain technology and operate independent of a central bank. The industry body has welcomed the verdict; however, they have voiced concerns over a pending bill in Parliament to ban all virtual currencies. They opined that digital currencies are integral to the digital economy and innovation and the government will have to maintain a balanced approach between innovation and risk.¹²

Quantum Technologies

On March 3, 2020, it was reported that researchers from Raman Research Institute (RRI), an autonomous institution under the Department of Science & Technology (DST), along with collaborators from the C.R. Rao Advanced Institute of Mathematics, Statistics and Computer Science, have devised a new test for fairness of quantum coin or 'qubit' (the basic unit of information in a quantum computer). The new test uses entanglement that enables better discrimination between quantum states to test the fairness of the quantum coin.¹³

Government Initiatives

Strategy/ Policy/Regulation

On March 6, 2020 it was reported by the Economic Times that more than a dozen technology and business trade groupings from the US, Europe and Japan have jointly asked the parliamentary panel examining the draft personal data protection (PDP) bill to protect the "privacy of Indian citizens" and "remove barriers" to the growth of the country's economy. The letter addressed to the Chairperson of the Standing Committee called for removal of the clause that

¹¹ET Telecom March 18, 2020

¹² https://indianexpress.com/article/technology/tech-news-technology/supreme-court-strikes-down-ban-on-cryptocurrency-trading-in-india-6298798/

¹³ https://dst.gov.in/pressrelease/new-test-quantum-coins-computers-quantum-sensing



makes it mandatory for companies to share non-personal, anonymous data with the government.¹⁴

Meanwhile, the joint parliamentary committee (JPC) studying the Personal Data Protection Bill, 2019 has sought an extension till the second week of the monsoon session of Parliament to submit its report on the landmark legislation. The committee, headed by BJP MP Meenakshi Lekhi, was supposed to submit the report by end of the budget session, which concluded on March 23, 2020.¹⁵

Organisational Reforms

On February 29, 2020, the Union Cabinet has set up the Empowered Technology Group (ETG) to be headed by the Principal Scientific Advisor as an institutional body to lay down, coordinate and oversee national-level policies related to the procurement and induction of technology. The group consists of the chairpersons of the Atomic Energy Commission, the Space Commission and the Defence Research and Development Organisation and the secretaries of the IT, telecommunications and science & technology ministries. The new body will vet all department proposals exceeding Rs 500 crore for the procurement of technology/products before they are submitted to the Expenditure Finance Commission and render advice to determine the direction and trajectory of the government's research & development and technology development programs.¹⁶

Budgetary Support

On March 18, 2020, The Union Telecom Minister Shri Ravi Shankar Prasad, said written Lok Sabha question in reply to a that the government plans to provide broadband services under the National Broadband Mission (NBM) in all villages of the country by 2022. The likely investment is around Rs 7 Lakh crore (US\$ 92.7Billion) which is to be catalysed largely by the industry, out of which contribution of the government through Universal Service Obligation Fund (USOF) is envisaged to be around 10 per cent, that is, approximately Rs 70,000 crore (US\$ 9.27 Billion), which will cover all the states in the country. In a separate reply, he said that as of February 2020, a total

¹⁴ https://tech.economictimes.indiatimes.com/author/479241991/surabhi-agarwal

 $^{^{\}rm 15}$ https://ciso.economictimes.indiatimes.com/news/joint-parliamentary-committee-wants-more-time-to-submit-data-bill-note/74802929

¹⁶ https://tech.economictimes.indiatimes.com/news/corporate/all-cabinet-notes-to-carry-tech-implications-of-proposals/74484984



of 1,36,693 Gram Panchayats (including block headquarters) have been made Broadband service ready. 17

On March 21, 2020, the Union Cabinet approved three key schemes to boost electronics and components manufacturing exports and domestic production in the country, with a total outlay of Rs 48,042.25 crore (US\$ 6.36 Billion). The plans are expected to push local production of mobile phones and components to around INR 10 lakh crore (US\$132.45 Billion) by 2025 and generate employment for some 20-lakh people. The Union Cabinet further approved financial assistance to the Modified Electronics Manufacturing Clusters (EMC 2.0) Scheme. The government expects these EMC's to aid the growth of the ESDM (Electronics Systems Design and Manufacturing Sector), stimulate development of the entrepreneurial ecosystem, drive innovation and enhance the economic growth of the region by attracting investments in the sector, increasing employment opportunities and tax revenues. The total outlay of the proposed EMC 2.0 Scheme is Rs. 3,762.25 crore (US\$ 498 Million). The domestic production is production and descent the descent production of the proposed EMC 2.0 Scheme is Rs. 3,762.25 crore (US\$ 498 Million).

Capability Building

In a major boost to the automation of law-making process in the country, Arunachal Pradesh assembly on March 02, 2020 implemented the e-Vidhan project making it paperless under the Digital India program. Arunachal MLA's can now access information regarding the assembly and documents pertaining to house proceedings on their laptops and mobiles.²⁰

On February 27, 2020, The National Association of Software and Services Companies (NASSCOM) and NITI Aayog launched an Artificial Intelligence (AI) based learning module for students in Indian schools. This module will be implemented across 5,000 Atal Tinkering Labs. It consists of activities, videos and experiments that help students to work through and learn various concepts of AI.²¹

On March 18, 2020, L&T Technology Services Limited (LTTS) signed a Memorandum of Understanding (MoU) with the Indian Institute of Technology

¹⁷ https://telecom.economictimes.indiatimes.com/news/national-broadband-mission-investment-estimated-at-rs-7-lakh-cr-ravi-shankar-prasad/74693235

¹⁸ https://telecom.economictimes.indiatimes.com/news/cabinet-oks-rs-48k-cr-proposals-to-boost-local-electronics-manufacturing/74750245 21 March 2020

¹⁹ https://pib.gov.in/PressReleseDetail.aspx?PRID=1607490#

²⁰ https://www.news18.com/news/india/arunachal-assembly-goes-paperless-implements-e-vidhan-project-under-centres-digital-india-programme-2522681.html

²¹ https://www.livemint.com/industry/infotech/niti-aayog-nasscom-roll-out-artificial-intelligence-modules-in-schools-11582806620462.html



(IIT) Kanpur to collaborate on research in industrial and infrastructure cybersecurity. According to the MoU, LTTS and IIT-Kanpur will together setup a Center of Excellence (CoE) in the IIT-Kanpur campus and conduct research in the various aspects of cyber defence and provide cybersecurity awareness and training programs. The CoE will be a part of IIT-Kanpur's Interdisciplinary Center for Cyber Security and Cyber Defence of Critical Infrastructures (C3i Center), to protect India's Strategic and Critical Utility Infrastructure. The center is also engaged with international partners from Israel and the US in developing research and technology exchange, student training, as well as hosting conferences, workshops, and cyber security competitions to develop a world class academic research culture in the field of cyber security.²³

Earlier, on March 8, 2020 it was reported that IIT Kanpur has been chosen as Technology Innovation Hub (TIH) in Cyber Security of Cyber Physical Systems which will focus on three verticals: Critical Infrastructure, Automotive and Unmanned Aerial Vehicle security. The TIH has been named as National Technology Hub for Cyber Security of Cyber Physical systems (NaTCyCPS).²⁴

On March 18, 2020, it was reported that the Government has decided to set up centers of excellence in cybersecurity in engineering colleges. The project will be partially funded by the World Bank under the technical education quality improvement program (TEQIP) implemented by the All India Council for Technical Education (AICTE). The cost of establishment of the proposed centers of excellence will be borne "equally" by the TEQIP and the Industry, or Sponsors facilitated by Central Public Sector Entreprises (CPSE). ²⁵

On March 06, 2020, Intel signed a memorandum of understanding (MoU) with the Central Board of Secondary Education (CBSE) to increase the pace of AI integration in India's education system. The initiatives which form part of this collaboration include co-development and roll-out of an AI curriculum for students, setting up AI skills labs, and creating AI-readiness by skilling facilitators across CBSE schools.²⁶

²² http://bwsmartcities.businessworld.in/article/L-T-Technology-Services-and-IIT-Kanpursign-MoU-for-research-in-cybersecurity-programs/18-03-2020-186527/

²³ https://security.cse.iitk.ac.in/mission

²⁴ http://www.uniindia.com/iit-kanpur-chosen-for-technology-innovation-hub-tih-in-cyber-security-of-cyber-physical-systems/business-economy/news/1911651.html

 $^{^{25}\,\}text{https://www.deccanherald.com/national/govt-to-set-up-centres-of-excellence-to-skill-cybersecurity-professionals-815062.html}$

²⁶ https://www.expresscomputer.in/artificial-intelligence-ai/intel-collaborates-with-cbse-to-enable-ai-ready-next-generation/50577/

International Developments

Cyber Space

On March 22, 2020, Computer Weekly reported that cyber gangsters attacked the computer systems of Hammersmith Medicines Research (HMR), with Maze ransomware, publishing personal details of thousands of former patients after the company declined to pay a ransom. The company, which carried out tests to develop the Ebola vaccine and drugs to treat Alzheimer's disease, performs early clinical trials of drugs and vaccines. The cybercrime group published HMR's medical files only days after the Maze crime group made a public promise not to attack medical research organizations during the coronavirus pandemic.²⁷

On March 13, 2020 it was reported by cybersecurity firm Kaspersky that cybercriminals are exploiting public fear of rising COVID-19 cases through malware and phishing emails in the guise of content coming from the Centers for Disease Control and Prevention (CDC) in the US and the World Health Organisation (WHO). In the APAC region, Kaspersky has detected 93 coronavirus-related malwares in Bangladesh, 53 in the Philippines, 40 in China, 23 in Vietnam, 22 in India and 20 in Malaysia.²⁸

On March 10, 2020, Microsoft addressed 115 vulnerabilities, including 26 critical issues affecting Windows, Word, Dynamics Business Central, and the company's web browsers. Internationally.²⁹ Subsequently on March 12, 2020, Microsoft and its partners across 35 countries disrupted one of the world's most prolific botnets, called Necurs, which had infected more than nine million computers worldwide. 14% of these infected computers were from India.³⁰

On March 11, 2020, the U.S. Cyberspace Solarium Commission (CSC) – a US Congress mandated bipartisan body of lawmakers, intelligence officials and others – recommended a number of actions intended to avert damaging attacks on critical infrastructure and the financial system. Its recommendations include setting up of new cybersecurity committees in both houses of Congress and appointment of a "national cyber director" at the level of an

²⁷ https://www.computerweekly.com/news/252480425/Cyber-gangsters-hit-UK-medical-research-lorganisation-poised-for-work-on-Coronavirus

²⁸ 13 MARCH 2020 | SOURCE: IANS

²⁹ https://redmondmag.com/articles/2020/03/10/march-microsoft-security-patches.aspx

³⁰ https://economictimes.indiatimes.com/tech/software/microsoft-disrupts-botnet-necurs-14-of-all-infected-ips-were-from-india/articleshow/74598204.cms March 12, 2020



Assistant Secretary of State at the White House, to lead a new cybersecurity bureau to direct coordination within the government and the private sector.³¹

On March 14, 2020, Israeli Prime Minister Benjamin Netanyahu announced a plan to use "anti-terrorism" tracking technology to minimise the risk of coronavirus transmission. Cyber monitoring would be deployed for contact tracing, to make sure coronavirus-hit citizens do not breach quarantine. Netanyahu said that he had requested Justice Ministry approval because such measures could infringe patients' privacy.³²

Subsequently, on March 16, 2020 the Israeli government approved the Emergency Rule that enabled the Shin Bet counter-terrorism agency to monitor cellular location data for contact tracing. However, civil liberties activists protested the breach of privacy and petitioned Israel's Supreme Court on March 19,2020, to suspend cell phone monitoring without Parliament approval. Asking the court to dismiss the petitions, the state said that the cabinet will seek "normal législation" for governing monitoring procedures during the health crisis once parliament meets. The Court has adjourned the hearing till May 2020.³³

Digital Technologies

Quantum Technologies

On March 3, 2020 Honeywell, the US industrial giant, announced that it has built the world's most powerful 'Quantum Computer'. Honeywell plans to make this technology available to clients via the internet in the next three months.³⁴

Artificial Intelligence

On March 10, 2020, the Organization for Security and Co-operation in Europe (OSCE) hosted a roundtable on the impact of artificial intelligence (AI) on freedom of expression. The event marked the debut of a project on the impact of AI on freedom of expression, aimed to develop policy recommendations on the most effective ways to safeguard freedom of expression and media pluralism, when deploying advanced machine-learning technologies such as

³¹ https://www.bloombergquint.com/politics/u-s-dangerously-insecure-in-preparing-for-major-cyber-attacks

³² https://www.aljazeera.com/news/2020/03/israel-anti-terror-technology-counter-coronavirus-200315090238052.html

³³ https://in.reuters.com/article/health-coronavirus-israel/israels-top-court-hears-challenge-to-coronavirus-cyber-monitoring MARCH 19, 2020

³⁴ https://www.technologyreview.com/f/615309/industrial-giant-honeywell-says-its-built-the-worlds-best-quantum-computer/



AI.³⁵ Tesla and SpaceX CEO Elon Musk had said earlier that all Organisations developing Artificial Intelligence (AI) should be regulated including TESLA, by both the United Nations and individual governments. ³⁶

Blockchain Technologies

On March 13, 2020, The U.S. Department of Justice reported that a woman named Zoobin Shahnaz had been sentenced to prison for funding ISIS with cryptocurrency. Shahnaz had taken a loan worth \$22,500 as well as fraudulently obtained credit card numbers to buy \$62,000 in bitcoin and other crypto currencies.³⁷

On March 02, 2020, The U.S. Treasury Department's Office of Foreign Assets Control added 20 new Bitcoin (BTC) addresses associated with Jiodong Li and Yinyin Tian to the list of sanctioned individuals. They are accused of being linked to the 'Lazarus' cybercrime group possibly affiliated with North Korean government. This group has been accused of stealing more than half a billion dollars in crypto in 2018.³⁸

5G Technologies

On March 13, 2020 it was reported by Reuters that The French Cyber Security Agency (ANSSI) will authorise the use of some of Huawei's equipment in the rollout of its 5G network but only for non-core parts of the network, as these pose less significant security risks.³⁹

Rakuten Inc., on March 24, 2020, said that it has jointly developed the 5G communication radio unit (RU) with Japanese electronics company NEC Corporation and shipped the first unit. The 5G RU conforms with open architecture standards, comes in a compact form factor and is energy-efficient. The 5G RU will prove to be important for Rakuten Mobile's fully virtualized cloud-native mobile network.⁴⁰

 $^{^{35}\,}https://dig.watch/updates/osce-explore-ai-impact-freedom-expression$

³⁶ http://www.impactlab.net/2020/02/27/elon-musk-says-all-advanced-ai-development-should-be-regulated-including-at-tesla/

³⁷ https://www.justice.gov/opa/pr/long-island-woman-sentenced-13-years-imprisonment-providing-material-support-isis

³⁸ https://www.coindesk.com/us-treasury-department-blacklists-20-bitcoin-addresses-tied-to-alleged-north-korean-hackers

³⁹ Reuters March 13, 2020

 $^{^{40}\,}https://telecom.economictimes.indiatimes.com/news/rakuten-mobile-nec-team-up-for-openran-5g-radio-equipment-production/74787668$



On March 27, 2020, it was reported by Reuters that the Trump administration had agreed to take new measures to restrict the global supply of advanced chips to China's Huawei Technologies, as the White House ramps up criticism of China over coronavirus. The Chinese telecoms company was blacklisted last year, limiting the company's access to US suppliers.⁴¹

⁴¹ https://telecom.economictimes.indiatimes.com/news/exclusive-u-s-nears-rule-change-to-restrict-huaweis-global-chip-supply-sources/74835253



Multilateral Cooperation

On March 11, 2020, CERT-IN successfully completed the Asia Pacific Computer Emergency Response Team (APCERT) Cyber Drill. This year's theme was "Banker doubles down on Mining" and it tested the response capability of leading Computer Security Incident Response Teams (CSIIRT) within the Asia Pacific economies.⁴²

The second UN Open Ended Working Group (OEWG) meeting on Rules, Norms, and Principles in Cyber Space, was held in New York from February 10-14, 2020. Most representatives agreed that the main focus needs to be on clarifying how to apply the existing international law to cyberspace.⁴³ The Intersessional Consultations on the pre-draft scheduled for 30-31 March has been cancelled due to Corona Virus Pandemic.⁴⁴

The second session of the sixth United Nations Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security (UN GGE) was held on 24-28 February 2020. The group was established following Resolution 73/266 (December 2018) of the United Nations General Assembly (UNGA), with the aim to study existing and potential threats in the sphere of information security and possible cooperative measures to address them, and how international law applies to the use of information and communications technologies by states, as well as norms, rules and principles of responsible behavior of states, confidence-building measures, and capacity-building.⁴⁵

On March 19, 2020, the International Telecom Union (ITU), a specialized agency of the UN responsible for information and communication technology (ICT), launched guidelines for the development and implementation of national emergency telecommunication plans to combat the global epidemic Coronavirus. The ITU said the guidelines will assist policy makers and concerned authorities in developing policies and regulations to ensure that telecommunication networks and services remain operable before, during and after a disaster.⁴⁶

⁴² https://www.cert-in.org.in/PDF/APCERT_Drill2020_Press%20Release_CERT-In.pdf

⁴³ https://dig.watch/updates/oewg-held-second-substantive-session

⁴⁴ https://www.un.org/disarmament/open-ended-working-group/

⁴⁵ https://dig.watch/events/un-gge-second-session

⁴⁶ https://www.itu.int/en/mediacentre/Pages/PR05-2020-new-guidelines-for-national-emergency-telecommunication-plans.aspx



India-Sweden Bilateral Cooperation

On March 10, 2020, the Indian Department of Science and Technology (DST) and Swedish Energy Agency agreed to establish a fund for the research and development of smart grids. The objective of the cooperation is to tackle challenges in the field of smart grids by bringing together researchers and academics from India and Sweden. Both countries have committed an estimated US\$5 million to the project.47

 $^{^{47}\,}https://mercomindia.com/india-sweden-create-5-million-fund-research-smart-grids/$



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