



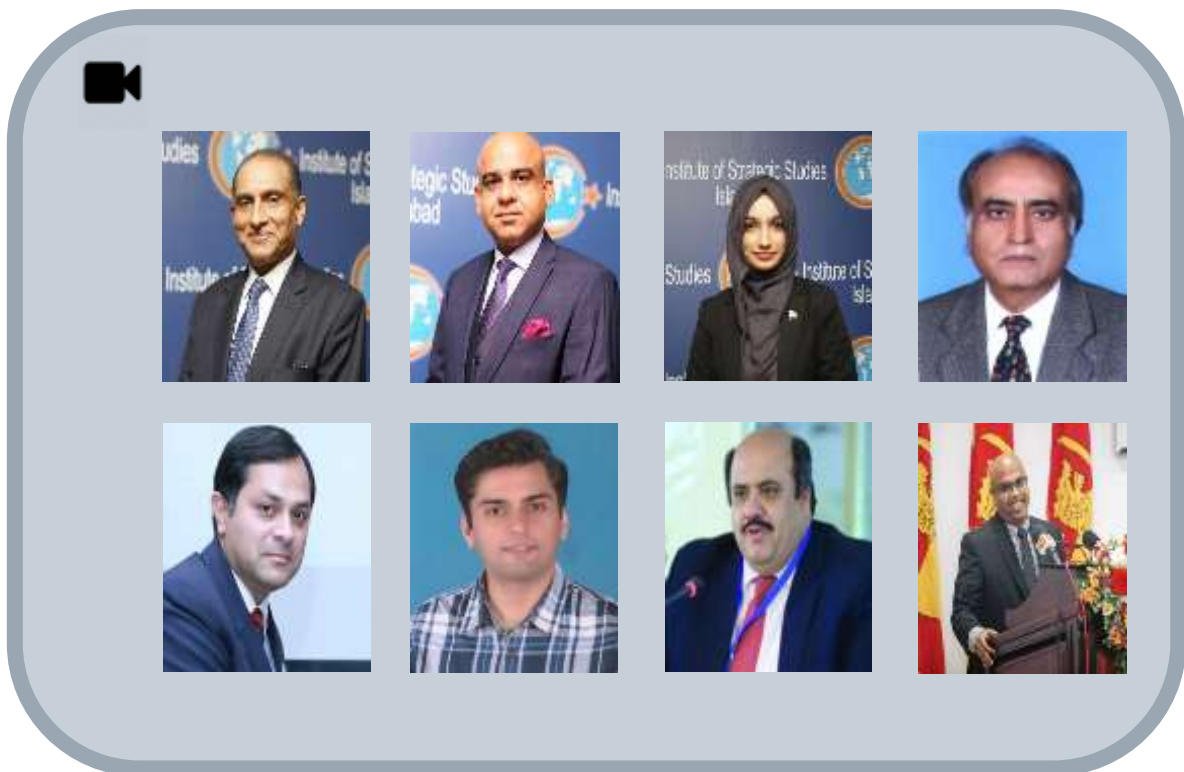
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Report – Webinar

“COVID19: Use of Technology as a New Normal”

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The Arms Control and Disarmament Centre (ACDC) at the Institute of Strategic Studies Islamabad (ISSI) organised a webinar titled, “COVID19: Use of Technology as a New Normal” on June 9, 2020. Mr Khawaja Mohammad Ali, Chief Information & Cyber Security Officer at Agriculture Development Bank of Pakistan (ADBP), Islamabad, was the keynote speaker at the occasion. The other participants of the webinar were Mr Usama Nizamani, Consultant, Islamabad Policy Research Institute (IPRI); Dr Zafar Nawaz Jaspal, Professor at the School of Politics and International Relations at the Quaid-i-Azam University (QAU), Islamabad and Dr Harinda Vidanage, Director Bandaranaike Centre for International Studies (BCIS) Colombo, Sri Lanka. Malik Qasim Mustafa, Director ACDC, made introductory remarks and moderated the webinar. Ms Aamna Rafiq, Research Associate ACDC-ISSI gave a briefing on the subject. Welcome remarks were delivered by Ambassador Aizaz Ahmad Chaudhry, Director General ISSI, and Ambassador Khalid Mahmood, Chairman BoG ISSI, made concluding remarks.

Introductory Remarks by Malik Qasim Mustafa, Director ACDC-ISSI

In his introductory remarks, Malik Qasim Mustafa, Director ACDC-ISSI, described the ways in which COVID19 has transformed the social, political, economic and security aspects of communities across the globe. He said that states are responding through various means and methods, which also include growing reliance on modern digital technologies for continuity of education, businesses. However, the increasing reliance on technology has put enormous pressure on global technological infrastructure. Technology companies are already innovating for this change. He warned that this shift from physical to the virtual world will not only change the future of emerging technologies but also exposes communities of several risks, challenges and threats.

While highlighting the objectives of the webinar, he said that the main purpose is to explore the challenges regarding the use of technology as a new normal and identify stressors it has put on the digital landscape of Pakistan. How this new normal will affect the development of emerging technologies in the short, medium and long term? It is crucial to identify key policy options for relevant public institutions to enhance the safety, security and credibility of digital communication. He also recognised the significance of fostering international cooperation for the development of mutually beneficial technologies to cope with COVID19 pandemic.

Welcome Remarks by Ambassador Aizaz Ahmad Chaudhry, Director General ISSI

In his welcome remarks, Ambassador Aizaz Ahmad Chaudhry, Director General ISSI, stated that COVID19 is not just a pandemic, it is also a harbinger of change. “It is a transition, where the world that will wake up after COVID19 will have the technology right at its centre,” he added. He highlighted the importance of change by quoting verses from the Holy Quran and poetry of Allama Muhammad Iqbal, the national poet of Pakistan. He said that COVID19 has challenged the public health system but there is a silver lining in every dark cloud. Individuals generally fear change and hardships but with every transition comes a new opportunity. Technology is this new opportunity which is also a great enabler. He stressed on the need of adapting to a new digital world but at the same time, questioned the limit of this adaptation. The sustainability of this new normal is a crucial factor to be considered. Furthermore, an existing competition between states and technology companies to gain a competitive advantage will speed up in the post-COVID19 era. He also pointed out that this new normal will be a huge surprise for traditional individual, organisations and societies. “Despite these concerns, the entire system is gradually moving towards a technologically faster and smarter future,” he concluded.

Briefing by Ms Aamna Rafiq, Research Associate ACDC-ISSI

Ms Aamna Rafiq, Research Associate ACDC-ISSI, highlighted the prevailing COVID19 situation in her briefing. According to the World Health Organisation (WHO), the total numbers of confirmed cases are 6,881,352. Approximately 399,895 people have died due to COVID19 to date. Due to lockdown and social distancing rules, people and businesses are finding new ways to normalise their key operations in this complicated situation. The majority is now relying on technologies and this is becoming a “new normal.” This new normal has given rise to major technological trends which include robotics, drones, online shopping, digital banking, distance learning, work from home, telemedicine, increasing investment in 5G information and communication technologies, supply chain 4.0, 3D printing, online entertainment and extensive usage of social media platforms.

However, these trends will pose various challenges in the coming years. Due to disturbance in the global supply chain, the international market might experience a slowdown in the technology hardware production sector. The shift from physical to the virtual world has already increased

the demand for digital and mobile devices. The slowdown will disturb the global supply-demand equation. So, in coming months international and national markets might see the shortage of various digital devices, as well as, price hikes. This will force digital industries to increase their reliance on smart technologies while minimising human involvement in future. It might increase the global unemployment rate in coming years. In addition, two other interlinked challenges are information and cybersecurity. Due to increased usage of internet, cloud services and applications, servers are reaching their capacity threshold. Keeping in view the slow hardware production, construction of new servers will be a time-consuming task. Data of the individual and organisations will be more vulnerable to cyber threats due to insecure data storage facilities. Another major factor to be taken into account is the impact of technologies on the physical and mental health of people. Excessive digitalisation and reliance on technologies will result in mental health issues like social isolation, anxiety and depression, in addition to physical health problems. She also put forward a few important questions for panellists regarding the impact of new normal on public-private partnerships and military preparedness. Furthermore, she also stressed the establishment of global cyberspace regime and redefining the international human rights regime by declaring equal access to the internet and digital devices.

Remarks by Mr Usama Nizamani, Consultant IPRI

Mr Usama Nizamani, Consultant, Islamabad Policy Research Institute (IPRI), provided a comprehensive background of the digital landscape of Pakistan. He said that Pakistan's operational international bandwidth has increased over seven times from 220 Gbps in 2014 to 1.7 Tbps in 2018. There are over 76 million users of mobile broadband subscribers, which make it 35.90 per cent of the total population. Similarly, the number of broadband subscribers has increased to 36.86 per cent of the population, which makes up 78 million users. However, cellular subscribers in Pakistan stand at 78.16 per cent of the population comprising nearly 165 million users. He acknowledged that assembling and manufacturing of cell phones and digital devices in Pakistan have up ticked. Assembling operations were initiated in 2016 when 290,006 mobile devices were manufactured and assembled annually. In 2019, more than 11.74 million mobile devices were assembled and manufactured locally. This includes assembling of over 70,000 4G phones in 2019.

Mr Nizamani identified wide-range impacts of COVID19 on the digital landscape of Pakistan, which include remote working, online education, e-commerce and telemedicine. The major impact is a rise in streaming services and websites. According to Pakistan Telecommunication Authority (PTA), bandwidth consumption has increased 15 per cent. By April nearly 85000 internet users used Zoom's desktop version, while over 87000 users logged into Netflix. Facebook's usage increased by 6.4 per cent than pre-lockdown days, while WhatsApp desktop's usage grew by 23.5 per cent. The most downloaded government developed apps include Citizen Portal App and Insaf Imdad App. Government has also developed apps for tracking COVID19, web portals for information and knowledge sharing between health professionals through Yaran-e-Watan Portal and web portals on information related to COVID19 and Ehsaas Emergency Cash Programme. Lastly, he identified the digital divide and digital illiteracy as the main challenges to Pakistan's digital inclusion. Nearly 65 per cent of the population does not have access to the internet and the reasons for this are high cost of internet, access and affordability of digital devices, particularly 3G and 4G enabled devices. Approximately 49.2 per cent of the country's female population is digital illiterate.

Remarks by Professor Dr Zafar Nawaz Jaspal, SPIR QAU

Dr Zafar Nawaz Jaspal, Professor at the School of Politics and International Relations at the Quaid-i-Azam University, Islamabad, highlighted the national security repercussions for states. He said that technologies have taken a new role, which is visible, as well as, controversial. People are using technologies to normalise their key operations like communication, banking, learning, education, businesses, governance and socialisation. All these operations were taking place before but COVID19 has multiplied their usage. Increasing use of technologies is enhancing connectivity but also exposed to threats of cyberattacks. Accelerating digitalisation will make Pakistan more vulnerable to disinformation and propaganda. It will facilitate the resurgence of terrorism in Pakistan but with different means and methods.

Talking about the impact of COVID19 on military preparedness, he said that militaries of all states including the US, China, Russia, India and Pakistan are maintaining their normal routines and policies. COVID19 has not caused any noticeable shift in the military preparedness except a temporary slowdown in the production of military-industrial complexes. According to the

traditional conceptualisation of national security, the main objective of the state is to ensure protection against internal and external threats. Keeping in view this conceptualisation and current military trends at the global level, states are not moving out of military security. The US withdrawal from the global leadership position has brought a moment of radical uncertainty at the global strategic landscape. Referring to the latest report of the Atlantic Council and Congressional Research Services, he said that the US has declared China and Russia as a major national security threat and COVID19 has sped up the rise of China and assertiveness of Russia. He argued that the great power tension is a common element of post-World War II and 21st century global orders. COVID19 has made this great power tension more visible and triggered the revival of military security threats.

Keeping in view the prevailing trend of great power competition at the strategic chessboard, Pakistan cannot move out of traditional military threats. Great power competition is happening in the neighbourhood of Pakistan and the regional trends in South Asia have also not changed with COVID19. Due to hegemonic designs of India, South Asia is moving towards the same security dilemma where Pakistan is trying to express its sovereign equality and maintain its resilience in the face of the Indian threat of military aggression. He also predicted an increase in military security threats at the regional level in the coming years. Tensions at the eastern and western borders will remain a great challenge for the national security of Pakistan. Through increasing border tensions with China and Pakistan, India is trying to divert public attention from its deteriorating economy and internal security situation.

Remarks by Dr Harinda Vidanage, Director BCIS, Colombo, Sri Lanka

Dr Harinda Vidanage, Director Bandaranaike Centre for International Studies (BCIS) Colombo, Sri Lanka, explored the prospects of international cooperation in his remarks. He stated that COVID19 has put a halt on human thinking based on linear progression and produced a sense of shared vulnerability that cut across nationalities, ethnicities and national borders. Despite this common vulnerability, there is little space for international cooperation. Over the course of the last few years, geopolitical rivalries among great powers have intensified. COVID19 has further accelerated these existing geopolitical rivalries rather than de-acceleration. He argued that COVID19 is not just a health issue, in fact, it is generating a systematic crisis by sending shock

waves across various systems which hold societies and governance structures together. Consequently, this systematic crisis is eroding national security, diplomacy, economy and education.

He proposed a regional approach to build resilience against this shared vulnerability. Governments, academia and civil society could identify various ways to materialise an initiative of regional cooperation. He also highlighted the significance of establishing data centres at the national level and data sharing among them for better management of pandemic. He warned that the world is about to enter the next and the most dangerous stage where states are slowly lifting lockdowns. Data sharing among states could protect humanity from the second wave of the pandemic. States are performing exceptionally well in terms of tracing COVID19 patients at the national level. But there is no data sharing arrangement at the international level to isolate the epicentres. Furthermore, states must invest in technologies and the establishment of a global mechanism for data governance to control the fake news. Social media is accelerating disinformation which is generating fear among masses. He also warned of a growing focus on national security. States are so invested in the idea of national security that they have lost the track of natural security. States are enhancing their military capabilities including optical and sensor capabilities but none of them could detect microbial threats. Previously, infrared technology made the detection of viruses very easy e.g. SARS and Merc. However, there is no technology for the detection of COVID19 which has created a panic wave across the globe. So, states must work together to discover smart technological solutions for COVID19 and management of fake news. States must learn to live with microbes as well as emerging technologies.

Keynote Remarks by Mr Khawaja Mohammad Ali, CICS ADBP, Islamabad

Mr Khawaja Mohammad Ali, Chief Information & Cyber Security Officer at Agriculture Development Bank of Pakistan (ADBP), Islamabad, was the keynote speaker at the occasion. While talking about the impact of COVID19 on technological business he said that the aviation industry has come down from the US\$178 billion to 46 billion and online meeting business alone has touched the US\$50 billion. In December 2019, FATF has predicted that by the year 2020 the digital transactions would cross US\$7.6 billion. It also predicted that 6 per cent of the world's

overall GDP will be digitised. Due to technological overreliance on other countries, Pakistan is extremely vulnerable to the threat of denial of technological services. In future enemies can cut Pakistan access to global internet and services like Google, YouTube, etc. He stressed on the need for indigenisation of technologies. One way of achieving technological self-sufficiency is to invest in research and development at the national level. As technologies mature with time, the indigenisation would be a time-consuming process despite huge financial investment. The other way is to adopt a regional approach. Pakistan should join hands with friendly countries like China and Malaysia and grow regionally. Pakistan should sign treaties based on the mutual sharing of capabilities to achieve win-win technological solutions. He stressed on the horizontal scaling-up of technology adoption and vertically scale-up the technological infrastructure. Due to this vertical scale-up policy, companies like Google and Zoom survived COVID19 pressure.

Talking about the significance of Artificial Intelligence (AI) in the post-COVID19 world, he said that region is investing in AI especially China and Russia. AI works on a huge amount of credible data. So, in order to build national AI capacity, Pakistan must take control of its own data. These big technological giants are giving free access to technologies because we are giving them the most valuable asset of the 21st century which is data. Currently, our data is being stored in the cloud services of other countries and they are benefiting from it. They are earning on this data and becoming a knowledge economy. Pakistan must smartly engage with technological giants by negotiating treaties on its own terms and make them realise that the country is providing them business. Pakistan must also harmonise its national legal structure keeping in view the prevailing regional and international legal norms. The existing law which dictates the behaviour of technology companies is internationally nonresponsive and impractical because Pakistan does not own those companies. In cybersecurity studies, the strategy AIC (availability, integrity and confidentiality) was being used but now it has been reversed. States and organisations must ensure the availability of the systems first. So, Pakistan must think first about ensuring the cybersecurity of the critical infrastructure.

Concluding Remarks by Ambassador Khalid Mahmood, Chairman BoG ISSI

After an interactive question and answer session, Ambassador Khalid Mahmood, Chairman BoG ISSI, in his concluding remarks said that COVID19 pandemic has affected every facet of life. He

said that emerging technologies are providing innovative solutions for the management of pandemic. These emerging technologies were at their nascent stage and COVID19 has accelerated the pace of their development. The world has now reached a before-and-after moment in the history of technologies. Keeping in view the dual-use of these technologies, he stressed, on the peaceful uses and regulation of these technologies at regional and global levels.

Recommendations

- Pakistan must identify the trusted countries and start negotiating bilateral treaties in the field of information and communication technologies.
- Pakistan should build its own national digital framework.
- Pakistan must have to understand the scope and applicability of the General Data Protection Regulation (GDPR) and California Consumer Privacy Act (CCPA) before passing a national data protection bill.
- To increase the number of internet users, data cost needs to be brought down in Pakistan.
- Manufacturing and assembling of digital and mobile devices needed to be upscaled to cater for the Pakistani market and for increasing tech-based exports. Special attention to the utilisation of Special Economic Zones and Technology Parks under the CPEC must be given a strategic focus by Ministries of Commerce, Information Technology and Telecommunication and PTA.
- There is a need to develop digital literacy courses in Urdu and regional languages. These courses should cater to textual, technical and conceptual components of digital literacy. Such courses should be coupled with minimum monetary incentives as rewards for course completion. Furthermore, partial or complete subsidised distribution of digital devices needs to be undertaken in suburban and rural areas. Overall, the government should increase the literacy rate and net enrolment for both boys and girls. To ensure compliance with these courses, facial recognition and other technological solutions can be used for attendance.

- Pakistan needs greater investment to ensure digital migration of Small and Medium Enterprises to e-commerce platforms, particularly shop owners. Initiatives like HumQadam and Daraz University by Daraz are a welcome step. Other partners need to replicate them. E-commerce platforms, government regulators, logistic companies need to work closely to smartly adapt to future new-normal.
- The educational sector should feel comfortable to launch online education programmes for students. And the government, in response, should register online-schools in future.
- In health and manufacturing sector, Pakistan should encourage market-driven R&D for the adoption of 5G enabled solutions and equipment. This certainly requires fast-pacing procedural requirements to tap 5G spectrum services in Pakistan.