



ENHANCING SOUTH ASIAN NUCLEAR DIALOGUES: THE IMPLICATIONS OF COVID-19

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The Covid-19 pandemic has affected international efforts in nuclear arms control and disarmament in many ways, including the work of the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (Non-Proliferation Treaty, NPT). Having entered into force in 1970, the year 2020 was the NPT's fiftieth anniversary and yet it saw the postponement of the 2020 NPT Review Conference (RevCon) due to Covid-19.¹ Furthermore, in South Asia, where there were no official, ongoing India–Pakistan, China–India or China–Pakistan nuclear dialogues prior to Covid-19, the pandemic effectively stopped all in-person, non-official contacts.

Meanwhile, nuclear risks in South Asia remain as high as they were before the global pandemic started. In fact, the nuclear competition between China and India and between India and Pakistan has gained momentum recently. China is modernizing and increasing the size of its nuclear arsenal, and India and Pakistan are expanding their nuclear warhead stockpiles and developing new delivery systems.²

¹ Kimball, D. G., 'NPT Review Conference postponed again', *Arms Control Today*, Nov. 2020.

² Kristensen, H. M. and Kile, S. N., 'Indian nuclear forces', *SIPRI Yearbook 2020: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 2020), pp. 362–68; Kristensen, H. M. and

The developing military cooperation between China and Pakistan is also contributing to India's security concerns. With cancellations, postponements and moving online due to the global pandemic, the existing, unofficial efforts to remove nuclear risks related to the growing nuclear arsenals, atmosphere of mistrust and erupting political tensions have been called into question.

This SIPRI Policy Brief provides an overview of the problems in South Asia concerning building, with the participation of China, India and Pakistan, bilateral and multilateral dialogues on nuclear challenges in the region. It then assesses the effects of the Covid-19 pandemic on existing dialogue tracks between states and offers policy recommendations to focus on critical arms control issues and ways of continuing the dialogue efforts in South Asia.

CHALLENGES IN DEVELOPING NUCLEAR DIALOGUES IN SOUTH ASIA

In the context of rising concerns about recent developments in the doctrines and capabilities of China,

Kile, S. N., 'Pakistani nuclear forces', *SIPRI Yearbook 2020*, pp. 369–74; and Kile, S. N. and Kristensen, H. M., 'Chinese nuclear forces', *SIPRI Yearbook 2020*, pp. 354–61.

SUMMARY

● Before the global spread of Covid-19, nuclear-armed China, India and Pakistan lacked official diplomatic exchanges to address nuclear weapon-related issues. The pandemic then halted even unofficial dialogues between these countries, which had existed in various bilateral and multilateral formats. As a result, China, India and Pakistan are faced with the challenge of keeping a desirable level of predictability concerning each other's nuclear postures and capabilities.

This SIPRI Policy Brief explores ways of dealing with this challenge and enhancing nuclear dialogues in South Asia. It considers both longer-term developments in the region and the recent implications of Covid-19. The paper finds that bilateral dialogue remains more feasible than trilateral dialogue between China, India and Pakistan. Nevertheless, it argues that these countries may need to address specific issues in broader formats. Emphasized by the Covid-19 crisis, such issues notably include emerging technologies and autonomy. On the one hand, these technologies support diplomacy digitalization, allowing nuclear-armed states to use online and mixed formats to develop nuclear dialogues between them. On the other hand, if applied in the military area, these technologies may affect nuclear postures and capabilities, and contribute to military escalation.



India and Pakistan, it is crucial to consider the role that regional nuclear dialogues can play in preventing and mitigating nuclear risks between them and developing nuclear confidence-building measures (CBMs). Analysing this role helps to identify the obstacles to, and institutional limitations of, such dialogues.

Trilateral dialogue

Considering potential frameworks for nuclear dialogues between China, India and Pakistan, some regional observers suggest the format of a nuclear triangle, sometimes referred to as the 'Asian triangle'.³ However, this concept does not seem to be

equally attractive for each country in the equation. While India may be attracted to trilateral dialogue, China and Pakistan do not acknowledge a

nuclear aspect to their relationship. As a result, the likelihood of official trilateral negotiations occurring is not high. In contrast to India's vision of relations with China and Pakistan as an actual or potential joint threat, China and Pakistan do not see these relations as being triangular.⁴

China and Pakistan do not have official military alliance relations or

any mutual assistance agreement in armed conflict. However, these two countries do have deep military-technological cooperation, a joint military exercises programme, and continue to develop a network of roads and other dual-use infrastructure connecting them, as part of the China–Pakistan Economic Corridor (CPEC). In early 2018, China was reportedly planning to create a military base in Jiwani, near a major port in Gwadar, which is a part of the CPEC.⁵ Later, China refuted this information and stated that there was no military component of the CPEC.⁶

Despite considerable evidence of cooperation between them in strategic technologies and conventional military exercises, both countries publicly dismiss any suggestion of joint efforts in the area of nuclear weapons.⁷ Thus, in the absence of reports on China and Pakistan's joint nuclear training, the military interoperability of their nuclear forces does not seem to be under consideration.

Although it is unlikely that China and Pakistan are considering the possibility of a joint or coordinated nuclear attack on India, some observers in India see the threat of a nuclear war with both China and Pakistan as a potential.⁸ Previous conflicts and current territorial disputes with China and Pakistan, as well as similarities between some of the two states' strategic

In contrast to India's vision of relations with China and Pakistan as a joint threat, Pakistan does not see these relations as being triangular

³ Chellaney, B., *The India-Pakistan-China Strategic Triangle and the Role of Nuclear Weapons* (French Institute of International Relations: Paris, 2002); and Tannenwald, N. and Acton, J. M., *Meeting the Challenges of the New Nuclear Age: Emerging Risks and Declining Norms in the Age of Technological Innovation and Changing Nuclear Doctrines* (American Academy of Arts & Sciences: Cambridge, MA, 2018), p. 35.

⁴ Bhaskar C. U., 'Comparing nuclear pledges and practice: The view from India', ed. L. Saalman, *The China-India Nuclear Crossroads* (Carnegie Endowment for International Peace: Washington, DC, 2012), p. 36.

⁵ Gertz, B., 'Inside the ring: China plans Pakistan military base at Jiwani', *Washington Times*, 3 Jan. 2018.

⁶ *Express Tribune*, 'China rejects speculations of military base in Gwadar', 10 Jan. 2018.

⁷ National Security Archive, 'The Pakistani nuclear program', 23 June 1983.

⁸ Badri-Maharaj, S., *Indian Nuclear Strategy: Confronting the Potential Threat from both China and India* (KW Publishers Pvt Ltd: New Delhi, 2020), p. 2.



capabilities, explain the fact that India considers them its primary threat.⁹ Therefore, the nuclear triangle concept appears to be in line with some views in India.

Bilateral and multilateral dialogue

Since a nuclear triangle is far from being universally accepted by China, India and Pakistan, the question is whether they would perceive bilateral and multilateral approaches as more feasible. Bilateral approaches, on the one hand, highlight the dyads of India–Pakistan and China–India nuclear deterrence relations. Multilateral approaches, on the other hand, raise the need for an appropriate framework for dialogue between the three states, with specific goals related to nuclear risks reduction.

The bilateral track between India and Pakistan was reduced to unofficial contacts after the Mumbai terror attacks of 2008. Before this assault, from 1998–2005, both sides held several ‘composite dialogue’ meetings, which included peace and security as part of the agenda.¹⁰ Nevertheless, these meetings did not exclusively cover nuclear CBMs and instead focused on predominantly conventional forces and weapons. Furthermore, China and India have never had official-level consultations or negotiations on nuclear weapon-related CBMs, in contrast to multiple meetings on conventional measures. Indeed, the latter lead to several agreements, although they remained mostly

unverifiable.¹¹ Without similar instruments in the nuclear domain between India and Pakistan, or between China and India, a high potential for conflict remains embedded in the relations between the three states.

The fact that there are no nuclear arms control regimes or verifiable CBMs among China, India and Pakistan can be explained by a lack of interest on behalf of any of them in having each other involved in controlling their nuclear arsenals through bilateral or multilateral agreements. And the reasons for this seem similar in each case. The capability of these three states to build nuclear weapons is more or less clear. Thus far, however, a dramatic change in the number and structures of the

Without verified nuclear CBMs between India and Pakistan, or between China and India, risks of conflict remain embedded in their relations

¹¹ These agreements between China and India include: Agreement on the Maintenance of Peace and Tranquillity along the Line of Actual Control in the India-China Border Areas, signed 7 Sep. 1993; Agreement Between the Government of the Republic of India and the Government of the People's Republic of China on Confidence-Building Measures in the Military Field along the Line of Actual Control in the India-China Border Areas, signed 29 Nov. 1996; Protocol between the Government of the Republic of India and the Government of the People's Republic of China on Modalities for the Implementation of Confidence Building Measures in the Military Field Along the Line of Actual Control in the India-China Border Areas, signed 11 Apr. 2005; Agreement between the Government of the Republic of India and the Government of the People's Republic of China on the Establishment of a Working Mechanism for Consultation and Coordination on India-China Border Affairs, signed 17 Jan. 2012; and Agreement between the Government of the Republic of India and the Government of the People's Republic of China on Border Defence Cooperation, 23 Oct. 2013. On these and other agreements between China and India, see Zhang, L., ‘Past bilateral border agreements between China and India and the June 15th Clash’, Library of Congress, 17 July 2020.

⁹ Paul, T. V., ‘Chinese-Pakistani nuclear/missile ties and balance of power politics’, *Nonproliferation Review*, vol. 10., no. 2 (Summer 2003), pp. 4–6.

¹⁰ *Business Standard*, ‘Timeline of dialogue process between India, Pakistan’, 22 Aug. 2015.



nuclear arsenals of China, India and Pakistan remains unlikely. Instead, the apparent trend is the gradual modernization and development of their corresponding nuclear arsenals. They remain committed to more or less restrained nuclear postures. Furthermore, the deficit of trust between the three countries has fuelled concerns that increased India–Pakistan transparency may make India more vulnerable to China, given the information sharing between

China and Pakistan. Similarly, China might be concerned that the data obtained by India in the framework of bilateral CBMs would travel to India's strategic

partners, namely Australia, Japan and the United States, under the Quadrilateral Security Dialogue (a strategic forum for these four countries, known as the Quad).¹² In the meantime, India's search for strategic autonomy involves ensuring China that cooperation with the USA and its allies will not jeopardize relations between itself and China. It might be a compelling message for China that India went forward with an S-400 air defence deal with Russia in 2018, despite US opposition.¹³

¹² Saalman, L. and Topychkanov, P., *South Asia's Nuclear Challenges: Interlocking Views from India, Pakistan, China, Russia and the United States* (SIPRI: Stockholm, Apr. 2021), p. 6.

¹³ Chaudhry, D. R., 'India upholds strategic autonomy principle despite close ties with USA', *Economic Times*, 30 Oct. 2020; and US House of Representatives, *US Interests in South Asia and the Fiscal Year 2020 Budget*, Hearing before the Subcommittee on Asia, the Pacific and Nonproliferation of the Committee on Foreign Affairs, House of Representatives, 13 June 2019, Serial no. 116–47 (Government Printing Office: Washington, DC, 2019), p. 43.

The situation is slightly better for regional security in terms of unverifiable CBMs, with communications systems that could be activated during confrontations and crises to prevent escalation in the event of a conflict. India and Pakistan have several such agreements: not to attack each other's nuclear facilities (1988), to pre-notify on testing of ballistic missiles (2005), and to reduce the risk of accidents and unauthorized use of nuclear weapons (2007).¹⁴

Unlike India and Pakistan, however, China and India lack even such loose constraint measures. Being the signatories of the 2005 Treaty of Friendship, Cooperation and Good Neighborly Relations, China and Pakistan do not see reasons for introducing similar bilateral CBMs.¹⁵

In 2017 India and Pakistan acceded to the Shanghai Cooperation Organisation (SCO) and, although their accession may not have been aimed at settling territorial disputes or managing nuclear relations among its members, it has created prerequisites for avoiding negative security scenarios through bilateral and multilateral tracks. For instance, during the recent border tensions between China and India, the SCO provided a platform for

¹⁴ Agreement on the Prohibition of Attack against Nuclear Installations and Facilities between India and Pakistan, signed 31 Dec. 1988; Agreement between the Republic of India and the Islamic Republic of Pakistan on Pre-notification of Flight Testing of Ballistic Missiles, signed 3 Oct. 2005; and Agreement between the Republic of India and the Islamic Republic of Pakistan on Reducing the Risk from Accidents Relating to Nuclear Weapons, signed 21 Feb. 2007.

¹⁵ Embassy of the People's Republic of China in the Islamic Republic of Pakistan, 'Major events in development of China-Pakistan ties', 21 Dec. 2010.

If India and Pakistan increase mutual transparency, it may make India vulnerable to China, given the information sharing between China and Pakistan



meetings in Moscow between the two countries' defence and foreign ministers (on 4 and 10 September 2020).¹⁶

In light of existing political tensions, territorial disputes, misperceptions and the growing strategic capabilities of China, India and Pakistan, some level of ambiguity seems to serve the practical strategic purpose of preventing nuclear vulnerabilities between themselves and third countries. With the nuclear arsenals of each remaining limited, excessive transparency might make them more vulnerable to potential attacks. However, the lack of nuclear dialogue also elicits the potential for a destabilizing arms race and escalation, impacting South Asia and beyond.

THE IMPLICATIONS OF COVID-19 FOR NUCLEAR CBMS AND DIALOGUES IN SOUTH ASIA

The global pandemic has highlighted the pre-existing trends of a strengthened appeal for nuclear disarmament, the digitalization of nuclear diplomacy, and the actualization of autonomy technologies, including military ones. In the context of China, India and Pakistan, this means new obstacles and complications, but also opportunities. Combining online and offline activities, a hybrid approach to nuclear diplomacy would allow these countries to keep a desirable level of transparency and predictability and explore the

¹⁶ *Indian Express*, 'Rajnath holds talks with Chinese counterpart in Moscow amid heightened border tensions', 5 Sep. 2020; and Laskar, R. H., 'India, China reach 5-point consensus on easing border tensions at Jaishankar-Wang meet', *Hindustan Times*, 11 Sep. 2020.

possibilities for further measures to prevent nuclear risks in the region.

Nuclear disarmament efforts and the global pandemic

In a broader context of nuclear disarmament diplomacy, the postponement of the tenth NPT RevCon from 2020 to 2022 raised questions about how other multilateral activities and events carried out under the auspices of the United Nations may be affected. Within the context of relations between China, India and Pakistan, such activities play a secondary role in managing nuclear weapon-related issues. Nevertheless, the three countries' nuclear weapons policies may be impacted by broader arms control trends, both at the UN and in the wake of Covid-19.

As the global pandemic has highlighted interdependence and mutual vulnerabilities among all countries, there has been growing support for the NPT and broader disarmament efforts, including the nuclear ban movement that resulted in the 2017 Treaty on the Prohibition of Nuclear Weapons (TPNW), which entered into force in January 2021.¹⁷ In 2020, the High Representative for Disarmament Affairs, Izumi Nakamitsu, highlighted that 'this pandemic has the potential to unite societies, institutions and individuals, just as the hard lessons of the Second World War laid the foundation for deeper international cooperation and stronger institutions to support our common

¹⁷ Treaty on the Prohibition of Nuclear Weapons (TPNW), opened for signature 20 Sep. 2017, entered into force 22 Jan. 2021.

Covid-19 has enforced the trends of a strengthened appeal for disarmament, diplomacy digitalisation, and the development of autonomy technologies



The global pandemic has stimulated discussions about the growing role of emerging technologies, specifically those supporting autonomous systems

security'.¹⁸ While not yet directly impacting the nuclear arsenals of states, the pandemic has increased pressure on them to stay more restrained in the area of nuclear weapons. In South Asia, authoritative voices have appealed to decision makers to use the experience of vulnerability from the shared risk of Covid-19 to draw attention to 'the folly' of arms races to build large nuclear arsenals and war-fighting capabilities, which may lead to humanitarian, economic and social crises.¹⁹

As a result of the pandemic, digital diplomacy and mixed formats, combining online and offline activities, prevailed in 2020 and 2021.²⁰ Due to their cost effectiveness, logistical ease and regularity in comparison to in-person meetings, these online interactions are likely to remain in practice for the foreseeable future, despite the vaccination progress worldwide. Furthermore, new variants of Covid-19, such as the Delta one, are an indication of the potentially long and hard

path to travel and in-person meetings, including offline nuclear dialogues.²¹

New technologies have also supported the digitalization of nuclear diplomacy. More importantly, they have impacted the focus of arms control and disarmament efforts, and the global pandemic has stimulated discussions about the growing role of emerging technologies, specifically those supporting autonomous systems.²² This focus on the impact of emerging technologies and autonomous systems on strategic stability and regional nuclear risks had already begun before the outbreak of the Covid-19—as had debates about new opportunities for enhanced arms control verification and transparency—but the pandemic highlighted these analytical efforts, including in South Asia.²³ Indeed, there is concern that applications of artificial intelligence, machine learning and autonomy to enhance strategic weapons, coupled with dangerous postures, would increase strategic instability and nuclear risks in the region.²⁴

¹⁸ United Nations, Office for Disarmament Affairs, 'The UN Office for Disarmament Affairs remains active and committed—how the Covid-19 pandemic is affecting the work of disarmament. A Message from High Representative Izumi Nakamitsu', 3 Apr. 2020.

¹⁹ Sethi, M., 'What India's Covid-19 fight means for its nuclear strategy', *Sunday Guardian*, 18 Apr. 2020. See also Lüdeking, R., 'Nuclear disarmament and nonproliferation in times of the coronavirus pandemic', *Arms Control Today*, June 2020.

²⁰ Jaramillo, C., 'Arms control diplomacy a worrying casualty of COVID-19', *Project Ploughshares*, 1 Apr. 2020; and Gaub, F. and Boswinkel, L., *The Geopolitical Implications of the COVID-19 Pandemic*, European Parliament (Policy Department for External Relations, Directorate General for External Policies of the Union: Brussels, Sep. 2020), pp. 36–39.

²¹ World Health Organization, 'Tracking SARS-CoV-2 variants', [n.d.].

²² OECD, 'Why accelerate the development and deployment of robots?', *OECD Science, Technology and Innovation Outlook 2021: Times of Crisis and Opportunity* (OECD Publishing: Paris, 12 Jan. 2021).

²³ Boulanin, V. et al., *Artificial Intelligence, Strategic Stability and Nuclear Risk* (SIPRI: Stockholm, June 2020); and Arms Control and Disarmament Centre (ACDC), Institute of Strategic Studies Islamabad, 'COVID-19 and military technologies', *Special Brief on COVID-19*, 14 Apr. 2020, p. 5.

²⁴ Sial, S. A., 'Military applications of artificial intelligence in Pakistan and the impact on strategic stability in South Asia', ed. P. Topychkanov, *The Impact of Artificial Intelligence on Strategic Stability and Nuclear Risk, Volume III, South Asian Perspectives* (SIPRI: Stockholm, Apr. 2020), pp. 49–51.



Exploring these aspects, Ray Acheson, director of the disarmament programme Reaching Critical Will, emphasized the connection between the global pandemic, the expanding role of autonomous systems and the risk that these technologies might be weaponized in the future.²⁵ Covid-19 has not necessarily accelerated the development and introduction of lethal autonomous systems, but the connection may have provided an additional impulse to military research and development programmes in this area. In particular, Covid-19 and the risk of other pandemic crises in the future have raised questions about troop deployment and led to the consideration of using autonomous systems to substitute or minimize 'boots on the ground'.²⁶ However, in the disputed border areas between China, India and Pakistan, the introduction of lethal autonomous systems for patrolling and combat missions may increase conventional escalation risks, with the possibility of triggering nuclear use.²⁷

Prospects for South Asian nuclear diplomacy in light of the global pandemic

The political relationships between China and India, and India and Pakistan were already experiencing significant difficulties before Covid-19. However, the global pandemic affected regional diplomatic

²⁵ Acheson, R., 'COVID-19: The risks of relying on technology to "save us" from the coronavirus', Women's International League for Peace and Freedom, 15 Apr. 2020.

²⁶ Bin Nasser, N., 'Will COVID-19 hasten the rise of lethal autonomous weapons?', Middle East Institute, 15 Sep. 2020.

²⁷ Roy, K., 'Rationales for introducing artificial intelligence into India's military modernization programme', ed. Topychkanov (note 24), p. 23.

activities further, both bilaterally and multilaterally. In essence, it created additional obstacles for diplomatic efforts, making any official negotiations even less feasible than they were before the crisis. For instance, Pakistan's proposal to host the South Asian Association for Regional Cooperation summit was put on hold because other countries in the region considered such an event untimely due to the pandemic.²⁸

Given the longstanding challenges for conducting official exchanges on nuclear weapon-related issues between China, India and Pakistan, semi-official and unofficial dialogue activities can be effective means for channelling nuclear security concerns and exchanges. Such activities help establish and develop an inclusive and diverse network of practitioners and scholars from the three states, dealing with particular aspects of nuclear deterrence.

Nonetheless, when held online under Covid-19 restrictions, these activities do not always allow for full consideration of the questions of mutual concern

among these countries. Due to the sensitivity of some aspects of China, India and Pakistan's nuclear weapons policies, online formats are an insufficient substitute for comprehensive nuclear dialogues. They are neither acceptable nor attractive to some high-level diplomats and practitioners, even when such discussions stay behind closed doors. For technical and organizational reasons, the risk of leaks to the public and

Covid-19 has raised questions about troop deployment and led to the consideration of using autonomous systems to minimize 'boots on the ground'

²⁸ Mohan, G., 'Proposal to hold 19th Saarc summit in Pakistan on hold for now', *India Today*, 25 Sep. 2020.



third countries from online meetings is higher than during offline endeavours.²⁹ Also, due to national regulations, various video conferencing platforms may be fully or partially unavailable in some countries.³⁰ This raises the question of agreed reliable instruments for planning and conducting sensitive conversations internationally.

As a result, using online formats for working out concrete arms control and CBM solutions that China, India and Pakistan would be ready to implement is overly ambitious. Instead, online dialogues may serve several purposes without compromising the sensitivity of nuclear deterrence-related issues. With the lack of official contact between the three states on nuclear weapon-related problems, they provide an opportunity to jointly

challenge existing misperceptions about doctrines and postures—just two examples of which are India’s alleged Cold Start doctrine and Pakistan’s full-

spectrum deterrence.³¹ Unlike the offline events in South Asia before the Covid-19 pandemic, online dialogues provide convenient platforms for networking efforts, diversifying participants and audience, and facilitating a more visible role for emerging voices. With their flexibility, online formats can even support educational activities, such as public lectures and events aimed at informing a broader audience.

Some countries make various video conferencing tools unavailable within their borders; this raises the issue of software for conducting nuclear dialogue

However, no less important than the format is the critical question of the focus of nuclear dialogue between China, India and Pakistan. Based on the experience of prior India–Pakistan and China–India interactions on nuclear deterrence, online dialogues could serve two primary purposes. First, to address strategic misperceptions and miscalculations based on lack of information or incorrect assumptions; and second, to reduce the risk of using or threatening to use nuclear weapons in accidents or escalation scenarios.³² In the framework of these efforts, the three states could consider bilateral or trilateral tracks to address the Covid-19-related trends mentioned above: the strengthened global appeal for nuclear disarmament, the digitalization of arms control diplomacy, and the actualization of autonomy in weapon systems.

In order to address these trends, China, India and Pakistan may explore a variety of related issues. For instance, in response to the global appeal for nuclear disarmament, they could have a dialogue aimed at existing disarmament instruments, such as the NPT, TPNW and others. This dialogue could consider ways to increase the connectivity and inclusiveness of these instruments. When tackling the digitalization of nuclear diplomacy, the countries could progress in building a robust system of notification and data sharing in the area of nuclear weapons, as well as establishing

²⁹ Rogin, J., ‘The White House’s use of Zoom for meetings raises China-related security concerns’, *Washington Post*, 3 Mar. 2021.

³⁰ Yifan, Y., ‘Zoom suspends free service to individuals in China’, *Nikkei*, 19 May 2020.

³¹ Saalman and Topychkanov (note 12), p. 25.

³² See e.g. Banerjee, D. (ed.), *Confidence Building Measures in South Asia* (Regional Centre for Strategic Studies: Colombo, 1999); and Khawaja, A. S., *Shaking Hands with Clenched Fists. The Grand Trunk Road to Confidence Building Measures between Pakistan and India* (National Defence University: Islamabad, 2018).



online dialogue activities that preserve a desirable level of predictability and transparency among them. Finally, in relation to the actualization of autonomy in weapon systems, this trend could be covered by bilateral or multilateral dialogue with the participation of China, India and Pakistan, and may include a variety of issues related to emerging technologies. Such issues may consist of the impact of autonomy technologies on nuclear-weapon policies, the implications of the introduction of these systems for strategic stability relations in South Asia, and how to address each country's concerns as a result of their development.

More ambitious and distant goals for nuclear dialogues between China, India and Pakistan include the elaboration of concrete and verifiable transparency measures and CBMs, the joint adoption of doctrinal principles such as no-first-use, and joint nuclear testing moratoriums and limitations among the countries. However, in-person formats seem to be more suited for elaborating such solutions.

CONCLUSIONS

The Covid-19 pandemic has transformed our world in ways that were unforeseeable.³³ With this new global unpredictability, the long-term effects of the pandemic for international security and nuclear weapon-related problems remain unclear. However, some trends already existed before the crisis and were simply strengthened or highlighted by it, including louder appeals for nuclear disarmament restraint, the digitalization of

diplomacy and the expanding role of autonomous systems. Beyond these trends, the pandemic further exacerbated existing political tensions and mistrust among countries already beset by security dilemmas, including India and Pakistan, China and India. Finally, the crisis disrupted diplomatic efforts in many areas, including nuclear arms control.

Against this background, there needs to be broad support and political will in South Asia to develop bilateral and potentially trilateral or even multilateral efforts towards nuclear transparency and CBMs. These efforts also need to shift—as they have already begun to—from the long-standing offline formats to innovative and flexible instruments that mix online and offline tracks between China, India and Pakistan. With a clear understanding of the existing limits for progress on sensitive subject matter within an online format, the goals of these activities must focus on a suitable and feasible agenda. Online or mixed formats are not meant as substitutes for in-person bilateral negotiations and consultations to reach agreements on nuclear transparency, CBMs and arms control. However, while the Covid-19 crisis continues to roil international affairs, these formats can help preserve the continuity of unofficial efforts to prevent nuclear risks. Simultaneously, they lay the groundwork for hypothetical official negotiations in the future.

With new global unpredictability, the long-term effects of Covid-19 for nuclear weapon-related problems so far remain unclear

³³ United Nations (note 18).



ABBREVIATIONS

NPT	Non-Proliferation Treaty
RevCon	Review Conference
CBM	Confidence-building measure
CPEC	China–Pakistan Economic Corridor
SCO	Shanghai Cooperation Organisation
TPNW	Treaty on the Prohibition of Nuclear Weapons



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