

Indian Pugwash Society (IPS) Webinar on ‘China’s Nuclear Doctrine’
October 20, 2020

Chair: Amb. Sujan R. Chinoy, Director General, MP-IDSA; Convener, Indian Pugwash Society (IPS)

Panellists:

- **Dr Tong Zhao, Senior Fellow, Carnegie Tsinghua Center, - ‘China’s Nuclear Policy: Is there a change?’**
- **Dr M.S. Pratibha, Associate Fellow, MP-IDSA - ‘Role of PLA Rocket Force’**
- **Dr Manpreet Sethi, Senior Fellow, Centre for Air Power Studies - ‘China’s nuclear doctrine and its regional implications’**
- **Mr M.V. Rappai, Institute for Chinese Studies - ‘China’s changing nuclear posture and its impact on US-China relations’**

Amb. Sujan Chinoy (Convener Indian Pugwash Society and DG Manohar Parrikar Institute for Defence Studies and Analyses) welcomed the panellists for the webinar on China’s Nuclear Doctrine conducted on October 20, 2020. Amb Chinoy gave the opening remarks and initiated the discussion.

Amb Chinoy expressed that China’s Nuclear Doctrine is a pertinent topic and the webinar intends to draw on the current trope over Covid-19 and other debates unfolding around us today. First and foremost is the impact of Covid-19, on global economic contraction. The world has become on one hand very competitive and on the other hand, it is crying out for dialogue mechanism structures that can address the current challenges. Yet the older debates on Nuclear, Non-Proliferation and Disarmament will continue to be relevant for global peace security and stability. On China's part, it maintains that it follows a No First Use policy as China became a nuclear power way back in 1964, of the P5 members it was the last to acquire nuclear capability. When China tested there was a fair bit of criticism from both the USA and the then Soviet Union because both the superpowers had a difficult relationship with China at that point of time. The patching Review had an article which had then said that the mandarins can burn down houses but the common folks cannot even light candles. China’s Nuclear regime was discriminatory in that the superpowers had acquired nuclear capabilities but it was objecting to large and populous countries like China to have acquired nuclear weapons. Fast forward to 1998, when India acquired its nuclear weapon status in a publicly demonstrated manner, again there was a fair bit of international criticism and China was no exception. Just as China had tested their sovereign right so had India, in any case, India was not a signatory to NPT so the question of abiding by NPT rules did not arise. In the 1950s when China had difficult relations with both the USA and the Soviet Union, the then leader Mao often spoke about nuclear war and what it could entail. Amb Chinoy brought to the attention of the audience Chairman Mao’s statement in the context of the 1954 and 1958 Taiwan Straits Crisis that China was not afraid of the atomic bomb and that Chinese people cannot be bombed out of existence. He highlighted the evolution of China’s nuclear policies and postures, in the aftermath of its first nuclear test

in October 1964, its enunciation of the NFU policy and initial opposition to the NPT (China signed it only in 1992) and China's criticism of India's 1998 nuclear tests.

Amb. Chinoy stated that despite China maintaining that it continues to follow an NFU policy, it is important to highlight recent reports that call attention to the ambiguity enveloping China's nuclear posture. The 2020 US DoD report on 'Military and Security Developments Involving the People's Republic of China' for instance points out that the PRC is developing new ICBMs (apart from the approximately 100 it has in its current inventory), and is increasing the peacetime readiness of its nuclear forces. China will have up to eight SSBNs by 2030 (from the four in its current arsenal).

China in October 2019 also revealed the H6-N — its first nuclear-capable air-to-air refuellable bomber. China therefore is modernising and increasing the sophistication and lethality of all the three elements of its nuclear triad. The PRC's 2019 Defence White Paper affirmed that the PLA Rocket Force (PLARF) was "enhancing its credible and reliable capabilities of nuclear defence and counter-attack". It further states that the PLARF is strengthening long-range strike forces, and is engaged in building a strong and modernised rocket force. Due to China's rapid military modernization, there is speculation amongst analysts about a possible deviation from its original nuclear policy postures. China's rapid modernisation of its nuclear forces, apart from the development of advanced early warning capabilities, could lead to the abandonment of its NFU policy in favour of a 'launch on warning' (LoW) posture in the future.

China's general lack of transparency regarding its military strategy and postures also extends to the nuclear domain, which accentuates existing uncertainties and could lead to miscalculations on its part as well as on the part of its antagonists. Another significant issue of contention is China's role in nuclear arms control. The only bilateral nuclear arms control mechanism between the US and Russia is the 2010 New Strategic Arms Reduction Treaty (New Start). This treaty will expire in February 2021. The US and Russia are engaged in negotiations for a possible extension of the treaty. Russia supports the New START extension. The Trump administration however is insisting that any future arms control agreement should include China, given its rapid nuclear modernisation and lack of transparency.

China, however, is not very keen on tri-lateral arms control arrangements. China maintains that the US and Russia still possess close to 90 per cent of the world's nuclear arsenals and China with its limited numbers should not be expected to be bound by restrictions that could equally apply to the US and Russia. China maintains that the US and Russia bear "special and primary responsibility on nuclear disarmament" and that it is "neither reasonable nor realistic" to insist on Chinese participation in tri-lateral arms control negotiations. China also warns against the deployment of US ballistic missiles and anti-ballistic missiles systems in the Asia-Pacific region as threatening regional strategic stability. China, along with the other NWS is also rapidly modernizing their nuclear forces, which is increasing global insecurity, despite the Article VI injunction of the NPT requiring NWS to "pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date."

In the context of a contracted global economy as a result of the COVID-19, multilateralism and globalization are in disarray. As we fight the pandemic and work towards economic recovery,

the need of the hour is to ensure global peace and cooperation. This webinar, being organised by the Indian Pugwash Society and MP-IDSA, seeks to better understand and comprehend a significant global security issue, namely China's evolving nuclear force posture, and its regional and global implications.

Dr Tong stated that in terms of China's Nuclear Policy, what has not changed is that China has always sought to acquire and maintain a second-strike capability so that China can deter use of nuclear weapons by other countries. However, if you look at China's previous nuclear thinking, it appears that for some time China was willing to accept an uncertain second-strike capability, in the 1980s when China acquired the capability to target the US homeland with its DF-5 liquid-fuelled ICBMs which were very less as compared to US and Soviet Union Nuclear rivals at that time, China was not concerned about the reliability of its nuclear deterrent and had an uncertain second-strike capability with limited numbers of ICBMs which were not MIRVed and liquid-fuelled. Many decades later, China's Nuclear capability has improved and it has as many as 320 Nuclear Warheads based on open-source research. China took great pains to develop an extensive underground system (the 'great underground Wall of China') to transport these missiles to protect their limited numbers. Now, China's nuclear capacities have increased, with more than 300 warheads and 116 ICBMs and SLBMs, some of them with multiple warheads. China's nuclear weapons technology has also improved, it is a much more advanced nuclear arsenal, whereas US and Russia's nuclear warheads have plummeted to 12000 warheads. However, today China is less comfortable about its nuclear deterrence, its nuclear deterrence is not survivable enough in other words China seems to have had a higher threshold for its nuclear sufficiency. China pursues an assured second-strike capability whereas earlier China had an uncertain nuclear deterrence.

What are the reasons behind Chinese nuclear force modernisation?

China has redefined itself as a rising great power. President Xi has said that China's strategic missile process is a key parameter of China's great power status. It sees its modernising nuclear forces as an essential element of such redefinition. China feels that it deserves a more assured nuclear deterrence and therefore it deserves a larger nuclear arsenal.

China's threat perceptions have changed; sees a greater hostility from the US and that requires China to have higher nuclear sufficiency. Analysts like the Editor of The Global Times have called for an increase in the Chinese arsenal to better take on the US and only a larger nuclear arsenal could deter a nuclear attack from the US but if you analyse this argument, it does not make sense from a military perspective, even if US is more hostile against China it does not mean that the US is willing to take more civilian casualties in a nuclear exchange with China. The mutual deterrence relationship between the two countries has always been based on the worst-case calculations. The current nuclear arsenal is already capable in the worst-case scenario to deter a nuclear attack, it shouldn't require more nuclear weapons to deter the US even if China faces greater political hostility from the United States. There are some real threats within the Chinese security community about the external threats from American technologies, especially since 1990, China has been impressed by US's pursuit of missile defence and global

conventional strike capabilities and during that time china started developing underground "great wall" which is an extensive system of underground tunnels in which china could deploy its nuclear weapons and its delivery vehicles, such weapons will be protected from the precedence strike of the United States. US's development has complicated Chinese nuclear choices, rapid US strides in non-nuclear military technology (space communications), unmanned weapons systems, AI, cyber, have added to China's anxieties.

There is also a growing influence of the military-industrial complex (MIC) on China's nuclear choices. It has become easy for the MIC to justify new weapons systems like newer generation ICBMs, MIRV warheads, air-launched cruise missiles, hypersonic weapons, SSBNs, among others.

China's nuclear scientists had influence earlier in the formulation of the country's nuclear policies. Now, they do not have such an influence. In a centralised system of governance, where the Chinese President has a lot of influence, there seems to be no internal checks and balances to moderate the development of advanced weapons systems.

There is a growing intent to acquire LoW capability. China is modernising its theatre nuclear weapons, like the DF-26 and F-21 — with a focus on Guam, US military bases in South Korea and Japan. Such a focus is obviously against its policy of using nuclear weapons only for deterrence.

There is no significant attention focussed on the escalatory potential of its nuclear pursuits.

While nuclear-conventional entanglement exists for all NWS, it is particularly so for China, specifically as it pertains to dual-capable missiles like the DF-26.

Dr Tong stated that China will not delegate launch authority to SSBN commanders but instead develop a robust command and control system. He clarified that China was not adopting a Launch on Warning posture but could do so as and when technology and/or capabilities mature. He further added that Chinese leaders will ensure that they will not get into an arms race with the US as it will lead to bankruptcy.

DG Remarks: China is at the forefront of an arms race, and nuclear weapons are like a prestige according to some people in China. When the UN Security Council was formed in 1945 only one country out of the five possessed nuclear weapons in a demonstrable manner, the other four got their nuclear weapons after they were inducted in the UN Security Council, in China's case it was dichotomous as China was not in UN Security Council until it took the seat of Taiwan and that came much later. Amb Chinoy commented on regional military targets, the concept of targeting regional weapons of the United States in the Indo-Pacific theatre by China but he emphasized that the US will not make any distinction between a nuclear attack on any of their bases in South Korea or Japan and the mainland United States.

Dr Pratibha thanked the DG MP-IDSA; Convenor Indian Pugwash Society for the opportunity to present on the topic "Role of PLA Rocket Force". Dr Pratibha traced the upgradation of Rocket Force from the second artillery to the current form of PLA-RF, at that time a lot of questions were asked concerning the main of the structure, whether it wants to be a purely nuclear or conventional organization which is in charge of the nuclear weapons. PLA-

RF up-gradation got clarity and visibility in aid of their deterrence. One of the major strategies was to display the organization to get visibility in deterrence against the United States. The choice of the name of PLA RF is very specific as it distinguishes the organization from the US or Russia as the Russians have a very purely nuclear organization but by naming it PLA RF, it gives a clarity that all the missile forces are under this organization, whether its ballistic missile or cruise missile. Hence, they don't have a fully nuclear role when it comes to the organization, they have a much broader role in their relationship with military strategies. Role of Rocket Forces is limited by the political leadership, on one hand, President Xi had exhorted the PLARF in 2016 to maintain the balance between conventional and nuclear forces according to strategic requirements. whereas on the other hand, China does not want to get into the trap of nuclear arms race with the United States, they understand the level of United States readiness is quite high. Dr Prathibha stated that it does not make much sense for China to go beyond the limited nuclear deployment narrative but within this limited deployment they are making some changes and this is where testing of many of their rocket forces come into play. Even if China's policy of limited nuclear deployment is changing, it is continuing to maintain the balance between conventional and nuclear as well as between silo-based and road-mobile missiles. She stated that it will take a long time for China to fully field a Launch on warning (LoW) nuclear posture, even if they are pursuing capabilities that will allow them to do so. She added that the nuclear role was only one part of the PLARF's role.

DG Remarks: Amb Chinoy thanked Dr Prathibha for her lucid remarks which added value to the webinar. The standout phrase that he took away from the webinar was how much can technology keep up with a strategy? Pointing out that it was a valid question apart from budgetary aspects. Of course, China has increasingly deeper pockets today. Another point made by the speaker was about US, MRBMs and that it has freed itself from the INF treaty and was no longer hobbled by the intermediate-range ballistic missile treaty that too changes the configuration. He pointed out that there will be regional implications not just in terms of just South Asia but Japan, theoretically and technologically a potential nuclear-capable power. This begs the questions at what threshold would Japan decide to go overtly nuclear which may change the threat perception for China completely? It may alter the regional situation in North-East Asia completely? He then invited Dr Manpreet Sethi Senior fellow centre for airpower studies to throw light on China's Nuclear Doctrine and its regional implications.

Dr Manpreet Sethi: Dr Sethi started the presentation by thanking the IPS and DG MP-IDSA. She pointed out that the previous presentations gave a fair idea of what China's Nuclear Doctrine claims as its main attributes. She pointed out that 20th of October marks 56 years and four days of the nuclear test by China, and over these last 5 decades China has continued to hold on to the Doctrinal principles in a declaratory form that Premier Mao had laid out then. The 2019 white paper on National Defence mentions both minimalism in terms of numbers and the nuclear weapons only for defensive purposes as indicated in its NFU posture. Even more recently last week Mr Fu Cong the DG of China's dept of arms control in an interview to a Russia News Agency reiterated minimum deterrence and NFU as China's Nuclear Policy of what he called strategic choice. He claimed that this policy would not change because China views nuclear weapons as weapons of ultimate deterrence, and not something that can be used on the battlefield. Despite these consistent pronouncements why is there a perception that

China is not going to be loyal to its nuclear doctrine? Why is it that the US is convinced as it seems to indicate through its DOD report of 2020? In some of the recent statements made by US officials like Mr Billingslea said that there is an imminent shift in China's nuclear posture, Washington claims that China is involved in a crash nuclear build-up where they were talking about large numbers growing in their arsenals and that its capability is outpacing their strategic thinking. Is the capability outpacing strategic thinking or is there a gap? She states the following points to analyse the above-mentioned questions.

US assessments of China's nuclear build-up has not always turned out to be true and for the last two decades because the US has been talking about China's numbers burgeoning to as high as 1000-1500 but that kind of escalation has not been seen in China's nuclear arsenals. She, on the contrary, pointed out that the arsenals had grown at a measured and an intelligent pace, with its focus not on nuclear numbers but in ensuring the survivability of the delivery platforms to signal assured retaliation while they were satisfied with a more uncertain retaliation in the past, they are looking for certainty of retaliation in the current times.

1. One should not take the US estimation of China's arsenals at face value because Washington has its considerations while making the threat assessments including a vested interest in ramping up the threat for garnering budgetary allocations. Therefore, India must make its assessments concerning China and not rely on the US's assessments.
2. The second reality, however, is that nuclear modernisation is underway in China and nobody has any doubt about that. While evading the question on numbers Fu Cong admitted that his country is engaged in strategic modernization, of course, he squarely placed this motivation on the US doorstep by pointing to American actions such as the deployment of ballistic missile defence, development of hypersonic missiles and other intermediate missiles now that the US is out of the INF treaty as well as the current emphasis of the US nuclear posture review which has been on low yield nuclear weapons to conduct limited nuclear war.

Now all of this is perceived development happening in the US is perceived to erode China's nuclear deterrence which is based on a small nuclear arsenal. Therefore, China argues that it is having to focus on developing capabilities that can restore strategic stability that has been disturbed by the US and China and claims that it is restoring the strategic stability within the frame of minimalism and defensive capabilities. Hence it is staying with (credible minimum deterrence) CMD and (No First-use Policy) NFU but it's changing its capabilities. When one begins to identify China's capabilities trends one finds a mismatch between the claims of minimum deterrence or NFU and what is appearing on the ground. She substantiated this by highlighting four capability trends.

1. A relative increase in the number of warheads and missiles, while China doesn't officially declare any figures one can see from the guesstimates made by several agencies that the numbers are on the move and in the last couple of years. They have grown at-least by 50 warheads. This growth may be for two reasons (i) For having to participate in arms control negotiations in the future and China wants to create some

parity before it gets there, and if this is the motivation then one can expect a rapid build-up in the coming years. (ii) deployment of MIRV missiles so when one missile will be carrying multiple warheads the number of warheads goes up as a result of that. The DF 41 is claimed to carry as many as 3-10 warheads and therefore the numbers will increase.

2. Deployment of MIRV and MARV (manoeuvrable re-entry vehicles) China considers these necessary for defeating the US missile defence by being able to saturate it with numbers as well as evading interception through the manoeuvrability of the incoming missile. Now while this is Chinese justification for its MIRV's, this capability has traditionally been seen for 1st strike and not as an NFU strategy. because a country would want MERV missiles to be off its soil and to be launched before any kind of pre-emption from the other side takes place.
3. Development of early warning systems, again from the cold war experience it is known that countries that have 1st use strategies rely on an early warning to enable launch on warning or launch under attack kind of systems for their missiles. Recent reports that China was building such a capability with Russian help has put its NFU into doubt by hinting at the possibility that it is going to lower its alert postures to launch on warning. Last year Fu Cong in a conference in Moscow had indicated as much when he recommended that the US and Russia should either remove their missiles from hair-trigger readiness or that China would be compelled to follow the same strategy.
4. Damage limitation through its missile defence efforts in this direction has been underway for a long time and they don't fall in the same category as the US in terms of their scale of expansion.

In terms of regional implications of these developments;

1. Chinese nuclear modernisation vis-à-vis the US will have a downstream impact on India. The imperative of the survivability of its retaliatory capability will force India to increase numbers as well take other countermeasures and could pull India into an offence-defence spiral. This would create arms race instability in the region by pulling India into an offence-defence spiral, something that the country has sought to avoid by having a stabilising and the same doctrine that eschews the concept of large arsenals. With credible minimum deterrence and a no first use much like what China was doing India has managed to keep at the path of minimalism.
1. Chinese use of dual-use missiles and dual-use command and control blurs the lines between conventional and nuclear and creates ample scope for miscalculations. Arms race instability and crisis instability could occur So therefore, the risk of inadvertent escalation grows during the crisis periods. Up till now, for instance, she argued that there has been a sense of nuclear stability between India and China despite their military standoffs going on for nearly six months because of the similarities of approach that the

two had to nuclear deterrence and their doctrine, but when China begins to change that posture the chances for misperception and miscalculation would arise.

1. India would have to be mindful of the possibility of onward proliferation of advanced Chinese nuclear and missile technologies to Pakistan. Chinese analysts are ironically arguing that there is a conventional asymmetry between India and Pakistan and that China needs to help a militarily disadvantaged Pakistan. So essentially, the argument seems to be that China wants to proliferate to maintain regional strategic stability.

Dr Sethi ended by noting that while India does not figure in China's nuclear calculus currently, the consequences of its nuclear rivalry with the US will open up escalation pathways in its nuclear relationship with India and it will have to deal with this complication sooner than later.

DG Remarks: He started by thanking Dr Sethi for her competent presentation views and helpful remarks. He highlighted that she did not refer to the triad of forces being insurance against any kind of MERV's weapons being developed. He pointed out that the whole purpose of the triad has been to ensure that ultimately a country retains a certain credible minimum second-strike capability. The other great irony of geopolitics was that exactly around 50 years half a century ago it was the USSR that was seen by China as potentially threatening to take out its nuclear weapons installations. Which prodded Mao towards that reproach with the USA, so in the late 60s the discourse of the USSR being on the verge of conducting some kind of a strike against China. Especially around the time of Damansky Island and Ussuri river conflict it didn't happen as a one-off event, there were a series of friction points between China and the USSR. He invited the 4th speaker, Mr MV Rappai

MV Rappai: He thanked everyone. Interestingly, the changes in the context of the nuclear posture where he added that there isn't a larger change in the nuclear doctrine, but a change perhaps could be envisaged in the nuclear posture. China's actions are interesting at two levels

1. They were keeping to their age-old tradition that they don't want to spend a lot of money on their nuclear policies. However now they have a larger sum of money available for their nuclear policies, he opined that China intended to try and keep parity with the US because they believed to a large extent that a nuclear war cannot be fought and won. So, basing an argument on that situation what they are doing? They are combining their cyber and space capabilities to the ability to deter.

He pointed to the argument made by the previous speakers on regional parity as important. He spoke about the significance of the South Korean and Japanese military bases and pointed out that they had a role to play. China knows that if it can balance the forces in the region, then it will not deter totally but it will constrain America from launching an all-out war. China's concern is how to conserve their resources and limit the chances of America launching an all-out war. Therefore, the capabilities they are gaining in cyber where there is some ambiguity on the developments. On the other hand, there is substantial clarity in the space with the launching of a series of Yankan 60 satellites. This is just to see what America is capable of doing about China. They can track the nuclear missiles; they can track their other activities. Once they can

successfully connect their capabilities and AI. Of course, America too would continue with its research. He referred to a speech by Xi on quantum research how that was going to add to the AI capability of China. The whole thing would be to deter America from launching a debilitating attack on China. They know that they are not going to match the US in the numbers game. In the region what they are doing is they know that they have their limitations. But can China use the regional parity to counter the US because the Chinese were not looking at the mainland or an attack at the movement, so that is one set of issues. What India has to follow from an Indian point of view, is what capability China is gaining from space and cybersecurity and conflicting other military capabilities. These are the future possibilities, there is an ambiguity as to what will be the result of US elections but he does not think that will make any substantial difference in US strategy and long-term strategy in the weapons deployment patterns. In conclusion, he urged India to continue to champion risk reduction measures and continue the dialogue on disarmament and non-proliferation.

DG Remarks: He thanked the speaker and extrapolated from his presentation that China is seeking to establish some kind of parity especially in the Indo-Pacific region against the USA. In his capacity as the chair, the DG invited ambassador Rakesh Sood to also share his inputs as the 5th speaker at the webinar as a commentator

Amb Rakesh Sood: After thanking the DG he started; Amb. Sood noted that if perceptions are driving Chinese nuclear force modernisation, the US and China need to figure out how to deal with these perceptions. Technological differences can be bridged but differences in perception can only be bridged by talking and negotiations. He stated that given similarities in India and Chinese nuclear policy positions (stress on credible minimum deterrence; NFU), China will find it easier to engage in a nuclear conversation with India, rather than with countries like the US or even Pakistan, which have first use policies and practise full-spectrum deterrence.

Another interesting question which is worth pondering over, clearly for China the most important concern is its neighbourhood namely South China Sea and western Pacific region. So, if China is going to strive to achieve deterrence vis-a-vis the US by pushing for parity in a sense its modernization leading to parity in the region of its concern. Is it in some way thinking that it can achieve regional deterrence as distinct from deterrence through a different technique at a global level vis-à-vis the USA? To prevent itself from getting engaged in an arms race. Is it possible to insulate a region admittedly a region of great concern to China, but the US sees itself as a global power and in a sense, the US has an intrinsic link to the Pacific? Are we seeing a strategic shift where China thinks that by doing this it can in some way loosen the links that the US has to the Pacific strategically? Does that enable regional deterrence to become operational? He dwelled over these questions which were addressed by the panellists.

DG Remarks: After thanking Amb Rakesh Sood for his insightful points the DG opened the floor for the Q and A session. He read out the question by Mane Singh Mamik who wanted to know how are Chinese SSBNs controlled, are they autonomous or is there a method to ensure strategic political control of their use, are they on constant operational patrol or they are only deployed based on nuclear readiness as the numbers are very small? Mixing conventional and nuclear missiles leads to strategic instability as a warning cannot decide if an incoming missile is conventional or nuclear, hence in this kind of a situation and especially given the short

duration of lights that missiles invariably have the kind of deterrence that is expected to exist between potential adversaries is bound to fail. The DG requested that Dr Tong Zhao addressed the question

Kanika Rakha asked China to learn from the US-Soviet relationship but still chooses to emulate some aspects of US nuclear posture. If this is the case what is the Asian or Chinese perspective it will bring into its deterrence vis-a-vis the US. This question too is addressed to Dr Tong Zhao.

The DG then requested the panellists to speak in order of their appearance and their final points and addressed any questions posed at them.

Tong Zhao: The Chinese SSBNs the current number of SSBNs is relatively small there is no public information on whether China maintains a constant deterrence and he expressed his doubt if China today deploys at least one nuclear strategic submarine at sea all the time it is more likely that China is conducting occasional patrols and if a crisis emerges on the horizon China will try to mobilize all of its SSBNs Given China's political adversaries tight control of nuclear weapons by the top political leadership. It is hard to imagine that China would embrace a doctrine which nuclear launch authority will be redirected to the submarine officers. He claimed it's likely that China will try to build a robust, liable communication system so that Chinese top leadership will be in constant touch with the submarines. He doesn't think that pre-dedication is a reasonable strategy for China. He agrees that mixing conventional and nuclear missiles would lead to instability, particularly at the theatre level. With China's dual-capable F-26 missiles there is a need to worry about the escalation implications. The concern is if the US adopts a launch on warning posture at the theatre level and US detects an incoming Chinese missile will the US immediately resort to nuclear retaliation. He pointed out that even if the risk is not high it cannot be completely ruled out. China does not have a launch on warning posture, but China is acquiring the capability and as the capability matures, China might consider adopting that posture when necessary.

China has not adopted any launch on warning posture at the theatre level there is no risk of China escalating a regional war after detecting an incoming American missile, but there is a risk of China being able to distinguish the nature of American conventional attack if China's dual-capable missile systems are destroyed by conventional American weapons. Given the lack of Chinese attention to the issue, it is more likely that China has simply not become fully aware of the risks and that's the reason behind the massive production of its dual-capable missiles. China sees a military value in those systems because they are more flexible on the battlefield.

China's political leaders want to avoid an arms race, they want to avoid repeating the mistake of the Soviet Union trying to compete with the US and leading itself into bankruptcy. China thinks it is necessary to take countermeasures and to secure the second strike and the Chinese military may believe that to secure second-strike capability it has to acquire launch on warning posture. If this issue is left for the military to decide the Chinese political leaders will understand the implications to escalation and the military will push China to move in that direction.

DG Remarks: At no stage in the history of nuclear weapons has anyone been assured their security and no matter what the level of technology, strategy and evolving circumstances. All that nuclear weapons have ever achieved is to create insecurity. Including in the hearts of those who possess them. Hence, we continue to grapple with the same age-old issues as the world did 50-60 years ago.

Dr Prathibha: In terms of the question on the modernization of one's own changing self-perception and technical changes and how it affects the NFU policy. In the mid-2000s there were a lot of discussions as to how China can utilise its nuclear forces in the region including using nuclear forces against Taiwan. This kind of discussions has always been a part of their discourse and some of their conservative scholars have looked into all these issues including pre-emptive strikes of their nuclear forces, these issues have always been at the discussion level and it has not affected the NFU policy. Not because of a moral or an Asian value, but because NFU gives them a crucial military value which is crisis stability. They require crisis stability with the US as long as the US maintains this level of asymmetry with China. NFU satisfies certain military aspects of nuclear forces.

DG Remarks: Amb Chinoy thanked Dr Prathibha for highlighting the importance of NFU posture in maintaining stability, it is like an insurance against escalation intended or unintended.

Dr Manpreet Sethi: Dr Sethi commented on linkage made between nuclear weapons and prestige, while China had that motivation, in the beginning, has largely emphasized on security motivation for its nuclear weapons rather than prestige so it seems to have come a full circle and at a time when people are arguing towards the ratification of the Ban treaty so that it can enter into force which is stigmatizing Nuclear weapons. China in the past was taking pride in its nuclear weapons and nuclear deterrence, if it had to give that up under influence of US thinking on these issues then that is where China seems to link prestige with its nuclear weapons rather than its Nuclear Doctrine which was morally and ethically propounded by them to be more correct than what the western world was talking about.

Secondly, Dr Sethi pointed out the issue of nuclear risks as mentioned by Dr Tong that nuclear entanglement is happening in China not deliberately but because there is not much understanding of nuclear risks which are being created by this strategy and this is even more worrisome if it is not understanding the nuclear risks associated by this entanglement and strategy then it pushes you into the greater possibility of escalation happening inadvertently and stumbling into a nuclear war that nobody wanted. There is a need for getting political leaders to understand the kind of nuclear risks that strategies create particularly in today's time where emerging technologies are compressing timelines and adding to those risks. Nuclear risks with India and China should be emphasized even more as geographically but where China has an attitude problem with India as it does not see India as a legitimate nuclear weapon state and therefore not willing to engage with India on any of the dialogues on nuclear strategy, doctrine, risk reduction etc and this is the gap which must be fulfilled. Lastly, she stated that China can insulate itself from regional deterrence issues in its mind. Decoupled deterrence is making it difficult as China is worried about What is going on in the US but regionally not India and this strategic chain we see from US, China, India to Pakistan is not something that

can insulate from and it will have to acknowledge the kind of play that we see in the region as a result of its capability build-up.

DG remarks: Amb Chinoy thanked Dr Sethi for her insightful comments and then Amb Chinoy gave the panellists and attendees food for thought as to how China might regard the possibility of the North Korean Nuclear weapon arsenal and its delivery systems turning on China, hypothetically one day. He then invited Mr Rappai to deliver his last comments

Mr MV Rappai: Mr MV Rappai stated it is important for India to keep discussing the regional debates held in the past to be clear in future.

DG Remarks: Amb Sujana Chinoy thanked the panellists and the attendees and concluded the webinar.