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P R O C E E D I N G S

MS. FORD: To those of you who are joining us from Asia, I want to thank everyone for joining us for today's conversation on arms control and strategic stability between the United States and China. I am Lindsey Ford. I am a David Rubenstein fellow in the foreign policy program here at Brookings. And I have the pleasure of moderating this morning's conversation.

Our discussion topic this morning is one that has certainly been in the news of late. As many of you who are watching know, the United States and Russia have been engaging in talks over the new START Treaty, which is set to expire in February. And is at this point, the last remaining nuclear non-proliferation agreement between the two countries. Just this past week we've gotten signs of potentially a breakthrough in those negotiations, with Russia agreeing to a one-year extension of the treaty and a freeze on nuclear warheads, though there are still admittedly pretty important details on issues like verification that will need to be hammered out.

This is a bilateral discussion between the U.S. and Russia, but it is very germane to what we're here to talk about today because the Trump administration has been very clear that it views these discussions as the precursor to a broader multilateral agreement, one that they want China to be a part of. Chinese officials, as I'm sure our Chinese speakers here today will expand on, have been very clear that they have no intention of joining the U.S. and Russia in a trilateral agreement, pointing to quantitative asymmetries between the Chinese, Russian, and U.S. programs. And the disagreement points to a more fundamental problem, which is that at a time of growing military competition in which the U.S. and China increasingly view each other as geopolitical competitors, when levels of bilateral trust and communication are extremely frayed, there are no arms control agreements between the U.S. and China akin to the type of arrangements the U.S. and Russia negotiated over the years.

And for many in the United States, China's absence from key arms control agreements and the arms control regime has become deeply concerning. A recent Department of Defense report assessed that China could double its nuclear stockpile over the next decade. And U.S. military officials have expressed concern about a range of other capabilities including anti-satellite weapons and offensive cyber capabilities.

There are, however, as we will talk about today, some pretty significant differences between the two countries that make the prospect of coming to the table over arms control difficult. Differences over ideas about doctrine, transparency, what types of capabilities should be included in any future discussions. And those are some of the topics that we want to take up in today's conversation.

We are extremely fortunate to have a very experienced and knowledgeable panel here with us today. From China we have Professor Li Bin, who is a professor of international relations at Tsinghua University. He previously directed the arms control division at the Institute of Applied Physics and Computational Mathematics, where he also served as the executive director of the Program for Science and National Security Studies.

We also have General Yao Yunzhu, who is a retired army major general, the director emeritus of the Center on China-American Defense Relations at the Academy of Military Science of the People's Liberation Army, and a senior consultant for the China Association of Military Science. She is a prominent analyst on nuclear issues and has published and translated numerous books and articles on military and security affairs over the years.

And finally, but certainly not least, we have my colleague Frank Rose, who is a senior fellow here at Brookings, and the co-director of our Center for Security, Strategy, and Technology. Prior to his time here at Brookings, Frank served as the assistant secretary of state for Arms Control Verification and Compliance from 2014 to 2017, in the Obama administration, as well as the deputy assistant secretary of state for Space and Defense Policy from 2009 to 2014.

This is obviously an extremely competent panel and so, I want to get straight to their remarks. We're going to give each of them the chance to make some comments at the top and then we'll go into a question and answer time. As a reminder, if you want to submit any questions during the event, you can either email them to events@brookings.edu or you can submit them on Twitter where you can use the hashtag #ChinaArmsControl. With that, I would like to turn the conversation over to Dr. Li Bin to kick us off with some remarks.

MR. BIN: Thank you, Lindsey. It's my great honor to speak to many American friends, Chinese friends, and friends from other countries in the audience. I like the topic strategic stability and

arms control. That is very important. I do not worry that my government does not join the U.S.-Russia negotiation on New START. I worry a lot that the U.S. government will leave or has left with another arms control agreement that is a much more serious problem than, you know, whether or not China joins New START negotiations.

I'd like China to make a more commitment, but certainly not include the participation into New START negotiations. I will focus my talk on strategic stability between China and United States. I'm a frequent visitor to the United States. I talk a lot to Americans, including experts, you know, at Brookings and at other (inaudible) universities. You know, today, we have to use online meeting now. That's very unfortunate. You know, I very much, you know, look forward to go to the United States and talk to our American friends, colleagues in person.

You know, traditional definition of strategic stability include two elements. The first element is crisis stability, which means that there's no incentive to use nuclear weapons in crisis. And the second element is arms race stability, which means that there's no incentive to have a nuclear arms race. I very much like this definition and I use it in my research. Actually, I learned the definition from my American professors, teachers. So, I believe that it still works today.

There's no reason for our two countries to fight a nuclear war or to have a nuclear arms race. But today, your country and my country are facing some challenges to our strategic stability. We can divide the challenges and some other factors into three groups. The first group of factors include elements in the strategic force structure. You know, they may change our calculation result on any nuclear exchange. And, therefore, encourage or discourage the incentives in nuclear weapon use. If a country believes that it can win a nuclear war, it would have some incentive to do so. If, you know, countries believe that no one can win a nuclear war, then, you know, we have some chance to avoid nuclear war.

And in our two countries, you know, I do not believe there's any tiny chance that China could threaten the U.S. nuclear deterrence, the U.S. nuclear retaliatory capability. But we worry a lot that the United States could threaten China's nuclear retaliatory capability. So that is something we need to worry.

One example is the nationwide U.S. missile defense. The United States claims that it needs a missile defense system to counter missile threat from North Korea. But such a missile defense system poses a threat to China's nuclear deterrence. So, we have to deal with the issue. In the past some years, we have had some serious discussions on this issue, but we did not yet produce a solution.

The second group of factors are associated with various political and normative restraint over nuclear weapon use. This restraint contributes to strategic stability (inaudible). You know, we should not fight a nuclear war. There is the international law that stopped (inaudible) makers from using nuclear weapons.

I believe that both our two governments understand the importance of the no-use law and the tradition. You know, we should reemphasize that a nuclear war should never be fought. You know, the circle of factors generate large uncertainties in our nuclear calculations and may cause overreactions. For example, you know, cyber attack against nuclear weapons. No matter the attacks are successful or not, they may generate worries and anxieties about the effectiveness of nuclear weapons systems and cause overreactions.

We need to carefully manage these factors into three groups and enhance U.S.-China strategic stability. If United States or other countries who have nuclear weapons like to discuss with China our strategic stability and any, you know, concrete proposals, I don't think China has any reason to reject that. I personally believe that strategic stability is a good principle to guide U.S.-China nuclear relations. I suggest that the United States acknowledges this principle in its nuclear relations with China. I personally heard a lot from the Obama administration about U.S.-China strategic stability. I do not hear much from the Trump administration about this principle. So, our American colleagues could advise us what is going on here.

I also suggest China to commit not to seek a qualitative nuclear parity with the United States, right? So, we have two principles. One is strategic stability between the United States and China, and, two, is that China commit not to seek nuclear parity. You know, you have many thousands of nuclear weapons. We have a few hundred nuclear weapons. We're comfortable with this (inaudible). So, on these two principles, strategic stability and the no parity, I think we can explore and develop many

arms control initiatives. You know, I look forward to talking with my American colleagues. Thank you.

MS. FORD: Thank you very much, Dr. Li. You've certainly given us a lot of food for further conversation there. I appreciate your remarks. With that, I would like to turn the floor over to General Yao Yunzhu.

MS. YUNZHU: Thank you, Lindsey. It's an honor for me to be here tonight to talk about China's perspective on arms control and disarmament. But it's only a Chinese one perspective from one Chinese. I will make three brief points. I think first China strongly supports nuclear arms control and disarmament. China, back in 1964, where it tested its first nuclear device, has had designed its official nuclear policy as no-first-use policy.

Inside that no-first-use, China promised to keep its nuclear arsenal at the minimum level for safeguarding national security. That is arms control. And it will not enter into nuclear arms treaties with any country. That is again arms control. And it calls for complete elimination of nuclear weapons. That is disarmament. China has been acting in accordance with its promises. It has since signed into multilateral agreements relating to nonproliferation arms control and the limitation of nuclear weapon development and employment such as NPT, CTBT, and no targeting agreement among nuclear weapons space and no-first-use agreement with Russia.

China has not withdrawn from any of the arms control agreements it has signed. Which brings me to my second point that China is not responsible for U.S. withdrawal from disarmament agreements. The Trump administration has imposed a request for China to join its negotiation with Russia in both INF and New START saying that the two treaties cannot continue if China is not in them. I suspect that the U.S. government is using China as an excuse to get itself out, not to get China in. There seems to be no relevance between China's getting in the treaty and America's getting out of a treaty.

For instance, when the United States withdrew from the Iran Nuclear Deal, the JCPOA, China state when the United States unsigned the ATT, the Arms Trade Treaty, China signed the ATT. Both the United States and China are signatories of the CTBT. When China keeps its promise not to test, the U.S. is discussing how to restart testing. China is not a member to the INF Treaty nor to the Open Skies Treaty and to the earlier ABM Treaty. And U.S. has withdrawn from all of them. Now, China is not

a member of the New START and the United States has been requesting China to join and at a times even linked the extension of that treaty to China's participation.

China rejected the idea to join the New START extension negotiations for many reasons. I will give a few of them. China thinks the request is unfair for a huge gap exists between Chinese and American nuclear arsenals. They are simply incomparable. According to the latest "SIPRI Yearbook" that was released in 2020, January 2020, the U.S. has 5,800 nuclear warheads and China has 320. And the report that U.S. Department of Defense released not long ago, which was mentioned by Lindsey in her opening remarks, that report -- I think Lindsey quoted the report's assessment that China is going to double its nuclear force in one decade. But she failed to mention the report assessed Chinese nuclear warheads at lower 200.

So, one side has almost 20 times as many nuclear weapons as the other. Is it fair to impose a quantity-based disarmament negotiation on China? Does China first has to increase to the American level to qualify itself or does the United States have to reduce to the Chinese level?

China also thinks the U.S. request for participation is unreasonable. The best way to keep an existing treaty alive is to discuss the issues already covered by it. Not to expand the scope of the issues or to include other parties and make it even more difficult to achieve. If United States cannot have agreement in the already existing bilateral framework, why should we expect it to succeed in the trilateral approach?

And then China also thinks the imposed participation is unfeasible and I think Professor Li Bin can give you examples. The categories of weapon systems, the counting rules of the weapons under the verification regimes cannot be readily applied to China's nuclear arsenal. Therefore, imposition of this unfair, unreasonable, and unfeasible request upon China will no doubt bring about a failure of a very important disarmament treaty. However, to my great pleasure, I see that United States and Russia will at last come to an agreement to extend the New START for one more year and at the same time, freezing their current first level. I am happy we still have time for this very important treaty to survive at least for one year.

And my last point is that China actually supports both existing and the new approach to

achieve arms control objectives. China supports continued effort from the United States and Russia to further cut down their numbers, their nuclear numbers. As the two nuclear superpowers, they have a special responsibility to reduce substantially first. And China supports United Nations led arms control mechanisms. The Conference on Disarmament, the M5 discussions on nuclear weapon related issues, which China participated actively.

And China also supports new approaches to supplement traditional disarmament regimes. When the two superpowers are cutting numbers, we can explore ways to limit the use of nuclear weapons. China supports discussions of a universal legally binding agreement on no-first-use of nuclear weapons. Or a joint declaration that a nuclear war cannot be won, and it should never be fought as Professor Li Bin just now mentioned.

And so that together we can enhance the nuclear taboo and make nuclear weapon use extremely unpopular and costly. Or we can try the discussion of de-alerting, that is to lower the alert levels of nuclear weapons. There are still many weapons on high triggering alert status which increases the probability of accidental launch. And we can also discuss whether we should abandon such operational doctrine or concepts as launch-on-warning or launch-under-attack. And China is strongly against the weaponization of outer space and has long called for a treaty in that regard. And China is waiting to talk with any state in bilateral framework on extensive issues regarding strategic stability, respect to security concerns, and the ways to address them. In sum, China is all for dialogues and talks on arms control and the disarmament. But it will never yield to unfair, unreasonable, and unfeasible requests. I will stop here. Thank you.

MS. FORD: Okay, thank you very much, General Yao. With that, I'm going to turn to Frank for our final set of comments.

MR. ROSE: Great. Well, thanks so much, Lindsey. And let me begin by thanking Dr. Yao and Dr. Li for participating in today's event. They are two of China's leading experts on arms control and strategic stability and we are very delighted to have them here with us today.

In my brief remarks, I'd like to do two things. One, I want to outline why I believe the current arms control and strategic stability framework is under stress. And two, I'd like to provide the

audience some recommendations on how that framework might be updated to reflect the evolving security environment. The thrust of my argument is that the future of arms control and strategic stability ultimately depends on finding a way to integrate China into that regime.

Now, there's no doubt that the existing U.S.-Russia arms control and stability framework is under severe stress. Part of this is a result of the Trump administration's approach to arms control. But many of the problems with the current framework predate the Trump administration and are a result of deeper structural problems.

That current framework was essentially designed to regulate bilateral nuclear competition between the United States and Russia. It was not designed to regulate a strategic environment that includes new actors like China and emerging technologies like anti-satellite weapons and offensive cyber capabilities. If you review the Cold War Era treaties that have collapsed in recent years, especially the ABM Treaty and the Intermediate Nuclear Forces, or INF Treaty, I would argue that they collapsed because they were not responsive to the evolving security environment.

In the case of the ABM Treaty, the U.S. withdrew from the treaty in 2001 because it believed that the treaty prevented it from effectively deploying missile defenses to deal with threats from North Korea, Iran, and other regional states. In the case of the Intermediate Nuclear Forces Treaty, which Russia violated with its deployment of the SSC-8 missile, Russia had long said that it was very difficult for them to deter threats in Eurasia when they were constrained from deploying intermediate range missiles while countries like China, India, North Korea, and Iran were not. And as a result, they violated the treaty and the U.S. in response, withdrew.

But here's another point I would make. Even if the United States had been successful in bringing Russia back into compliance with the treaty, China would have remained free to continue to deploy large numbers of medium and intermediate range missiles. And they have been doing that over a decade now and have deployed thousands of these capabilities.

Therefore, I believe the Trump administration's desire to bring China into a future arms control and stability framework is strategically sound from the U.S. point of view. As I've noted on numerous occasions, it's neither strategic or politically viable to have the United States' most significant

geopolitical competitor, China, sitting outside of a future arms control and stability framework. On the other hand, I believe that the Trump administration has fundamentally mishandled the diplomacy with China around this issue. It appears that the Chinese found out about the Trump administration's trilateral arms control proposal not from the U.S. State Department, but from the Washington Post. So, it's not surprising at all that China has categorically refused to join the current U.S.-Russia arms control negotiations.

Let me spend a little bit of time talking about Chinese nuclear and strategic capabilities. As Lindsey and General Yao noted, the Pentagon's 2020 Chinese Military Power Report notes that, "Over the next decade, China is likely to at least double the size of its nuclear stockpile." And right now, they have -- it's estimated that they have around 200 warheads, so, it would jump to around 400. This very well may be true, but it does not necessarily mean that China is seeking strategic nuclear parity with the United States.

While China is certainly increasing the size of its nuclear forces, my view is that that modernization program is largely consistent with a desire by China to one, maintain a survivable second-strike nuclear capability. And, two, have the capabilities necessary to penetrate any U.S. missile defense system. Honestly, my bigger concern about China is its development of asymmetric capabilities like anti-satellite weapons, offensive cyber capabilities, and medium and intermediate range conventionally armed ballistic and cruise missiles. These capabilities are designed to prevent the United States from projecting power into the Western Pacific.

So, given all of these challenges, what's the way ahead? Here's what I would recommend. First, I think the United States and Russia should extend the New START Treaty in order to buy time to begin to develop a new arms control and strategic stability framework that includes new actors like China and emerging technologies. Second, the United States and China should begin substantive talks on a full range of strategic issues. While the United States has been open to such talks for many years, China has been a bit reluctant. I hope this changes.

Third, instead of beginning that discussion by trying to integrate China into a legally binding nuclear arms control regime like New START, I think a better approach would be to discuss

potential rules of the road for managing emerging technologies like outer space. Indeed, the United States and China had some very substantive discussions on outer space security during the Obama administration. And regarding the nuclear piece of the puzzle, I really like the proposal that Li Bin has put on the table potentially to have some joint statements between the United States on issues like parity.

Fourth, while China has ruled out the idea of joining the U.S.-Russia bilateral arms control talks, I do believe that we must find a way to have a more substantive discussion amongst the major nuclear powers on arms control and stability issues. One option would be to use the P5 Process, which is comprised of the five permanent members of the UN Security Council as a forum to begin that discussion. Indeed, China has been an active participant in P5 discussions over the past decade and has expressed a willingness to have a broader discussion about strategic stability issues. So, again, I think the P5 may be a good place to start.

And, finally, we in the United States need to come to the understanding that China is not going to join a new framework out of the goodness of its heart. China will enter into such a framework when it believes it is in China's national interest. So, one of the questions that we in the United States need to think about is what are we prepared to exchange with China as an incentive to bring them into a future framework? And I don't necessarily know there's an answer here in the United States on that really key question. So, let me stop there. Thanks very much, Lindsey.

MS. FORD: Great, thank you, Frank, so much. Well, we're going to move into some question and answer and Professor Li, I'd like to come back to you first. In the remarks that Frank just made, he outlined several ideas related to possible conversations between the U.S. and China. And I wanted to get your reaction to those proposals, but also a sense from you of what you see as potentially the precondition or the assurances that you think China would need to see from the United States in order to feel comfortable with conversations on strategic stability? Related, Frank has suggested that perhaps a conversation among P5 member states might be more useful than the trilateral conversations, which China has not been interested in. So, I'd like your reaction whether you see that perhaps as a more tenable approach and why that might be more productive.

MR. BIN: Thank you, Lindsey. I personally believe that Frank just mentioned some very

constructive proposals. I had a lot similar feelings with Frank. Let me address General Yao Yunzhu explained why we did not urge China to join U.S.-Russia negotiations on New START. I'd like to add one reason that is China does not have the category of nuclear weapons subject to the New START Treaty. That number in China is zero. So, you cannot ask China to reduce from zero.

I think Frank is right so that is not a right direction for China to do more. And for several other subject for example, space, cyber, and other emerging technologies, I do not believe that China would oppose any discussions on this subject. Actually, Yunzhu just mentioned, you know, China, you know, since early 1990s, China, you know, has been promoting the negotiation on arms control in outer space. Now, we have a lot of obstacles there. Why is that the U.S. Congress stops NASA from talking to its Chinese counterpart?

So, politically, I don't think China has any problem to have discussions with United States, with other countries on arms control in outer space. But in practice, we'd like United States to encourage its space organizations to talk to their Chinese counterparts especially, you know, the discussions among scientists. They could develop common languages. They could develop specific ideas if they could have working level discussions, then the two governments would have better chance to reach agreement on outer space.

And for other emerging technologies, I think the situation -- the situations are similar. And we should encourage the scientists to talk to each other and to develop trust and to develop concrete ideas. You know, I'd personally like to work with Frank to promote such kind of dialogue. Thank you.

MS. FORD: Thank you, Professor Li. General Yao, I want to follow-up with you on the proposal which both Professor Li and Frank have been discussing related to asymmetric capabilities and, in particular, thinking about arms control in the space context. Now, you mentioned and Professor Li both did that China's official position has been very much that it opposes weaponization of space and it thinks that space should be used strictly for peaceful purposes. I think that probably in the United States the counter argument to that would be that there's some concern about China's development of anti-satellite weapons, which seems perhaps inconsistent with this policy. So, how would you, I guess, explain the purpose, the aim of China's anti-satellite capabilities and how those are consistent, perhaps, with future

conversations around space?

MS. YUNZHU: First, I actually agree with Frank on most of his suggestions, approaches. I think that if China and United States is going to have dialogue or discussions on strategic stability, we should expand the talk to include the new factors, the new technologies, because there's new strategic capabilities. And we can build upon the traditional strategic stability concept that is crisis stability and arms control -- arms race stability. But now we have grown out of the maybe Cold War last century arms control environment or context. So, we need some new things.

But personally, I'm not so optimistic because of the overall China-American relations. We need to build up a better political atmosphere to set things in motion. But now we just don't have that kind of political atmosphere. As to your last part of your question, the anti-satellite tests, China has been calling and together with Russia has been calling for the -- calling for the -- for a legal document to prevent weaponization of outer space. But this cause has not been responded positively. And at the same time, China needs capabilities to defend its space assets and to have comparable or to have similar capabilities to be used in missile defense and other weapon systems.

So, sometimes I think that if you don't have that capability, you cannot just persuade others to talk to a negotiating table and that's very sad. But sometimes it's just the fact. I don't know how to -- maybe Dr. Li Bin can express -- he can argue better than me because he is a tech guy. I am not.

MS. FORD: Professor Li, go ahead.

MR. BIN: Yeah, thank you. Anti-satellite technically anti-satellite is a by-product of missile defense. If we allow missile defense, we cannot stop anti-satellite capability. So, if we are really serious about a ban of anti-satellite, we should think about a ban of missile defense.

MS. FORD: Thank you. I want to ask one more question and then we've got a bunch of questions coming in from the audience and I want to turn to those. It's clear in today's conversation there are certainly different, I think, both priorities and concerns between the United States and China when it comes to the topic of arms control. And so, I'm curious whether in the future, is there a grand bargain to be had or is there not? Should we focus on things maybe like small baby steps? And what I mean there is, is there space for a conversation that includes China's concerns about advantages that the United

States may have in the strategic space alongside U.S. concerns about the advantages that China may have right now when it comes to conventional missile capabilities and intermediate range missiles. Is that possible? Or should we focus perhaps on smaller more miniscule steps that maybe feasible in the near term?

Perhaps, General Yao, I can come to you on this one and then maybe Frank, offer you a opportunity to respond as well.

MS. YUNZHU: I'm not sure that United States is sincerely concerned about China's nuclear capabilities. As Frank pointed out that even China doubles its arsenal, it's still maybe one-tenth according to Open Source Information. So, in China, we used to talk a lot about China-American relations in military fields. But nuclear weapons had really been a real concern for the United States.

And the conventional missiles you mentioned, while we have conventional missiles, I think we still -- United States still has an advantage in that range. INF range strike capabilities because it has much more air and maritime and sea-based strike capabilities. Missiles, cruise missiles, air launched, and sea launched, which still outnumbered what China has. So, just to compare to pick out one category of weapon systems against -- China has -- because of China's defense, I have to say because of China's defense, national defense policy, it has more land-based capabilities for homeland protection purposes. And it has more neighbors that has similar missile capabilities. So, how much land-based conventional missiles, maybe China has more, but the same range of missile strike capabilities, I don't think United States is at this advantage.

MS. FORD: Frank, would you like to respond? Thank you, General Yao.

MR. ROSE: Yeah, let me just say I think the strategic relationship with China is fundamentally different from the relationship that the United States has with Russia. So, we should not try to recreate that. So, I don't, Lindsey, believe that there is "a grand bargain" with China to be had.

But I think there are pragmatic things we can do with China to reduce risk and build confidence. Some of the proposals that I have put on the table is the possibility of negotiating a bilateral missile prelaunch notification regime. The idea of working with China to develop and strengthen the norm against debris generating events in outer space. The potential for establishing a link between the U.S.

Nuclear Risk Reduction Center and a similar organization in China. So, that's really where I would focus my attention with this relationship. Pragmatic steps that are designed to reduce the risk of conflict.

MS. FORD: Yes, General Yao, you have two-finger remark?

MS. YUNZHU: Yeah, I forgot to answer the question about your grand deal. I think we have to, first both sides has to be very constructive. And we want to do -- we have to have the desire to do things together and to do whatever we can. But not just as I said, if we -- the United States has just picked China as a strategic competitor and strategic adversary. So, China, how can China trust that any proposal or initiative and vice versa, how can United States trust China any initiative and proposal from China would be sincere. So, we have to have a good attitude, a correct attitude first that we want to cooperate. We want to get something done.

MS. FORD: Thank you, General Yao. I want to go to some questions from folks who are watching online. We have some great ones. I want to start here with a question we have coming in from Colonel Steve Shinkle, who is a professor and an officer in the U.S. Air Force. And this gets to the question, I think, the issue, General Yao, you raised about China's neighborhood. And his question is, "How does China conceptualize the difference perhaps between deterring strategic nations such as the United States and Russia and regional deterrents against regional nuclear powers such as India? And does China see a need for regional nuclear arms control with countries like North Korea, India, or Pakistan?" Professor Li Bin, we haven't heard from you in a few minutes, so, perhaps I can come to you first on this one.

MR. BIN: Thank you. The United States and the Soviet Union had a lot of appearances in controlling their strategic arms. I believe the key concept is still alerting. From SALT I, SALT II, START I, START II, and Moscow Treaty, and New START, the whole idea is to reduce the numbers of nuclear warhead strategic delivery systems. You know, you could remove them for missiles then that's done. So, the whole idea is the alert nuclear forces.

But between China and India, I personally believe that we have a (inaudible) bilateral arms control consensus that is neither country, neither India nor China uses the inferences of their nuclear weapons in their bilateral relations. I'd never seen any of the two countries threaten to use

nuclear weapons against each other or, you know, or tries to say that their nuclear weapons are important to stabilize their bilateral relations.

So, for India and China, one good idea is that, you know, they emphasize that both the two countries have no full use. They should not use the inferences of their nuclear weapons to solve their bilateral relations. So, that is another path of nuclear arms control. You know, I hope that answered the question.

MS. FORD: Thank you very much. General Yao or Frank do you have anything you'd like to add on this question?

MS. YUNZHU: I don't have much to add. I think that China's nuclear policy is very clear. It will not strike first in any circumstances and conditions. So, its deterrence policy if it deters superpowers, nuclear superpowers, it deters regional powers. So, and I also agree with Professor Li Bin because China has announced no first use and India's nuclear policy is not so clearly declared. But it also has a no first use element in it. It is this kind of element is assuring in regional contest.

MS. FORD: Thank you, General Yao. We have another question from Bob Manning at the Atlantic Council is asking is the most important issue really the number of warheads? Because some people are far more concerned, I think, about some of the things Frank was talking about earlier, new threats to crisis stability from emerging technologies like artificial weapons, offensive cyber, anti-space capabilities that put assured second strike at risk. And he says these are mutual vulnerabilities that affect the U.S., Russia, and China. So, would China be willing to engage in a trilateral conversation in that space about rules, norms, and redlines that might allow us to manage those new threats?

MS. YUNZHU: So, if it's a common concern of all the nuclear states, nuclear weapon states, why shouldn't we talk it in P5 framework? Why China, Russia, and United States, China would feel underqualified to be with the super nuclear superpowers? And it's a concern of all the nuclear weapon states, right? So, we should -- if it's a common concern, we should deal it in the more, I think, in the multilateral framework maybe.

MS. FORD: Frank, you --

MR. ROSE: Yeah, Lindsey, I would say that Bob's question is right on target. What we

have seen over the last 15 years or so is that these emerging technologies like cyber, like space, are increasingly impacting strategic nuclear calculations, especially things like mobility. And as more advanced technologies come online, like artificial intelligence, quantum computing, that has the potential to make us reconsider many of our fundamental assumptions about strategic stability. So, I think there is a role for a forum like the P5 to begin discussing in a multilateral format the impact of new technologies on strategic stability, number one. And number two, potentially recommending some risk reduction measures designed to reduce the risk of miscalculation.

MS. FORD: Yes, we are at the end. And, so, Dr. LI Bin, I want to give you the last word then for us here.

MR. BIN: Okay, I like, you know, to have the discussion on cyber against nuclear weapons. I believe that it is a very bad idea to launch cyber-attacks against nuclear weapons. You know, that is bad for everyone. I'd like the forum of Nuclear Security Summit. I believe because many countries, not only nuclear arms states, many other countries and even individuals could launch cyber-attack against nuclear weapons. So, we need this forum like Nuclear Security Summit, and, Frank, you are very familiar with that forum, right? We use that forum to promote an international regiment on how to stop cyber-attacks against nuclear weapons. Thank you. I'm sorry.

MS. FORD: Thank you, Professor Li. I think certainly there are many things in the cyber space that will be important for both countries to discuss. With that, we are unfortunately at time. There is no shortage of issues we could continue discussing. And I'm sure we could go for hours. As I said at the beginning, this is not an easy topic and there are a lot of difficult conversations I think for the two countries to work through. But I greatly appreciate all three of you making time to offer such thoughtful analysis and recommendations today.

So, with that, we're going wrap up. I want to thank everyone who joined us for today's conversation. And have a wonderful day.

MR. ROSE: Thanks so much, Lindsey.

MR. BIN: Thank you.

MS. YUNZHU: Thank you.

MS. FORD: Thank you.

MR. BIN: Bye-bye.

MS. YUNZHU: Bye.

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