



## Nuclear Risk Reduction Developing a Practical Agenda 2021 Carnegie International Nuclear Policy Conference

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**James Acton:** Well good morning, good afternoon and good evening and welcome back [inaudible music]. Okay, let's try that again. Good morning, good afternoon and good evening and welcome back to 2021 virtual Carnegie International Nuclear Policy Conference [inaudible music]. We apologize for some technical challenges we're having at the moment. As I said, welcome back to the conference. Before I introduce our next panel, I wanted to just give a quick reminder about the way to ask questions using the conference platform. On the far right-hand side of your screen you'll see a toggle between stage and event. Event is the general discussion for the entire conference. You'll want to be on the stage tab in order to ask questions that will then be seen by our moderators and by our speakers.

And with that, it's my pleasure to introduce you to the next panel, which is on the subject of nuclear risk reduction, developing a practical agenda. As relations between the great powers have worsened, increasing amounts of time and energy are being focused on preventing problems from getting worse, rather than actually making positive progress forward. And I couldn't think of a better panel today to discuss and to analyze those issues. So let me introduce this panel's speakers. Firstly, we have Ambassador Maleeha Lodhi who formerly served as the representative of Pakistan to the United Nations. I'm also pleased to welcome Izumi Nakamitsu who is currently the United Nations Under Secretary General and High Representative for Disarmament Affairs. And the third panelist today is Janneke Vrijland who is Deputy Head of Non-proliferation Disarmament and Nuclear Affairs at the Netherlands Ministry of Foreign Affairs. Chairing this panel is George Perkovich whose most important position is being my boss but he's also the Vice President for Studies at The Carnegie Endowment for International Peace. George, over to you.

**George Perkovich:** Thanks James. And thanks everyone for joining wherever you are. It's really my pleasure to be moderating or hosting this discussion. We have three terrific respondents or presenters. And I was saying at the beginning, we kind of range in acquaintanceship. I first met ambassador Lodhi almost 30 years ago in Rawalpindi and so it's great to be seeing her again. And I've had the pleasure of being in meetings with Izumi Nakamitsu, the High Representative, and that's one reason why we're so glad to have her here today. Is that she's a very, very candid and insightful diplomat. And then I've had the pleasure and honor of working with Janneke Vrijland in the CEND process where she has astutely and wonderfully co-chaired one of the working groups. So it's a real pleasure for me. Let me jump in and ask kind of each of you a beginning question as it were. And I'll start with you Izumi.

But the question is, risk reduction in a sense is an end goal. And you could say that arms control and disarmament are means to reducing risk. And there are lots of other kinds of risks. There's risk of war, risk of nuclear war, risk of accidents, whether it's accidents with nuclear weapons or otherwise. Terrorist acquisition of nuclear weapons is a risk that people talk about. The collapse of the NPT is a risk. So when each of you think about nuclear risk, I'm curious which ones are foremost in your thinking and how you prioritize them. Okay.

**Izumi Nakamitsu:** Okay. Thank you very much. Thank you for the invitation. The first thing that really comes to my mind of course, is that the risk of a nuclear weapon actually being used, whether that is intentionally or accidentally or by miscalculation perhaps is indeed highest since the darkest days of the Cold War, that is the previous Cold War. And we are indeed very concerned about that prospect and the reasons are of course, we all know it, a confluence of factors. The relationship between nuclear arms states, increasingly multipolar nuclear order, regional tensions definitely, qualitative nuclear arms race, growing role of nuclear weapons in national strategies and nexus between nuclear weapons in emerging technologies and also new domains. This is cyber and outer space, et cetera.

And against that background of course we have the absence of dialogue, decreased transparency and I can say probably multi-lateral mechanisms for disarmament talks are paralyzed. And the regime itself, arms control regime is continuously eroding. So the most immediate risk that we are worried about is a shorter and more pathways to misperception, miscalculation and possibly also escalation. And of course, other concerns are there but priority must be to preserve the norm against the use of nuclear weapons. And I hope we will all be able to agree that the best way to eliminate all nuclear risks is to eliminate nuclear weapons themselves. So those are some of the first thoughts that I have when we talk about it and looking forward to getting into more details.

**George Perkovich:** Great, terrific. Thank you so much. Maleeha, do you want to jump in here. And you can say whatever you want obviously I'm going to come back at some point to specific India-Pakistan dynamics but just jump in. I think you're muted. I don't know if that we control that or if you do.

**Maleeha Lodhi:** I unmuted myself, that should work.

**George Perkovich:** Yeah.

**Maleeha Lodhi:** So I was saying that I agree with Izumi that what nuclear risk reduction aims to do. I mean, for a start, what comes to my mind of course that it is really, although it has a very important agenda which is to minimize the risk of the use of nuclear weapons because that's essentially how I see it. But I also see it of course as a place holder for the real stuff. I mean I see it both as an interim approach if you like to what should really happen in the long-term which is of course nuclear disarmament and non-proliferation efforts. But as Izumi pointed out, and you as well and James started with that, we're looking at an environment, a strategic environment or a strategic landscape where we have seen reversals rather than progress in arms control, nuclear non-proliferation.

So I think what we have to then focus on is how we can reduce nuclear risk because strategic competition between nuclear weapon states continues. So does acquiring more sophisticated arguments. So all of which sort makes for a very, very difficult situation. So I think for me really nuclear risk reduction also has to do with the kind of vulnerabilities that are being created by emerging technologies, cyber, artificial intelligence, hypersonic glide vehicles, that sort of stuff. Because what these have the potential to do is to change the severity and nature of risks associated with nuclear weapons by creating, as I said before, new vulnerabilities during crisis. So I think the aim really, whether it's done at the global level and of course I know George, you will ask me about South Asia and I'll be focusing on that later. But I think the aim of course is to ensure that in a crisis, first of all, that a crisis is averted of course, but then there is a degree of crisis stability in terms of the non-use of nuclear weapons.

So I think this is what I would see. And I also think that risk reduction efforts do of course, they're aimed at preventing the most dangerous and escalated behavior in crisis time as I said. But the measures have to focus both on nuclear forces as well as conventional capabilities and dangerous doctrines. Because all of this is in a way, these are all elements of an environment of an unstable environment which can lead to escalation up the nuclear ladder so to speak. So let me end there and hand it back to you, George.

**George Perkovich:** Great. Janneke, please.

**Janneke Vrijland:** Thank you very much. Of course I can only add to that. I couldn't agree more to the risk [inaudible 00:10:55] is of course the worst. But talking risk reduction I think the first and biggest worry apart from an actual detonation, the risk reduction and crisis stability, crisis management are all these major areas that require a lot of attention. What I think is also important to talk about is the trust, the layer that covers that all is are we doing enough? Do we trust? Do we understand each other enough? Are we making sure that we are understood each other? So I think apart from the risk reduction and the practical measures that we have to take, we can take all the steps we need to take to keep moving. There's a lot to be done today on the increasing the trust levels by verification, increasing dialogue, understanding we have a couple of important milestones that have been achieved.

It's not enough way to keep moving. So for that, I think there's a number of platforms that we are creating where we stimulate, also the non-nuclear weapon states, the dialogue that's so needed to improve all this, there's mutual trust for each other's systems. Also, as a citizen will have confidence that all the risks are being reduced enough to feel safe. Is enough being done to analyze and to take away, to eliminate the risks that are there? Thank you.

**George Perkovich:** Great, thank you. Thank you all three. I'm struck in a sense because I think in some corners one hears frustration that risk reduction has been highlighted now both in multilateral fora and various initiatives. And there's some disappointment that some express that that's like a poor substitute for arms control and disarmament. So it's kind of a sign of a retreat in a way. And yet when I was listening to all three of you in various ways, you talked about, and Maleeha has kind of laid out a chain. You talk about averting crisis or the need to avert crisis. Then if a crisis occurs, how to stabilize it, prevent it from escalating. And then it was mentioned in if a war happens, how to keep that from escalating to nuclear war. And then the complications of new technologies interacting with nuclear forces.

It seems to me all of those things which fit in the risk reduction matrix have to be addressed before you get to arms control and disarmament in a way. So it's hard to think of how to skip over the various risk reduction elements that you were talking about. So I guess my question is is that kind of right? And then secondly, then how does one address those who feel that risk reduction in a sense is a retreat or it's going backwards. And so I'd just be curious. And we don't have to go in order. If anybody wants to lead, just go ahead and raise your hand and jump in on that.

**Izumi Nakamitsu:** Yeah. If I could perhaps start. Yeah. So I think this risk reduction, perception that risk reduction as a deflection or you could a poor substitute, that's the word that you used, is both reasonable and also misplaced. And on the one hand, a nuclear weapons state, especially those

parties to the NPT have seen nuclear weapons states either partially or entirely failed to implement disarmament commitments under the Article Six. So in recent years and months, I hear a lot of no nuclear weapons states. And I actually also have been told by some that conditions are not right for progress in disarmament or even for implementation of previously agreed commitments. So despite the fact that arms control and disarmament can be major contributors to international security, they are some indeed who argue that disarmament is not possible at the moment.

So there is that perception that risk reduction was introduced as a substitute for disarmament discussions. So it's some people even talk about responsible nuclear weapons state. So all these perception I think adds to that. Perhaps these two are mutually exclusive actions. What we need to do, what we feel very strongly at the United Nations is to make sure that these two discussions, one, risk reduction and the other one disarmament measures, would not be mutually exclusive. In other words, risk reduction discussions will be, if you will, springboard to something that will contribute to Article Six implementations and nuclear disarmament overall.

**George Perkovich:** And Maleeha go ahead. It just seems what you said just seems so clearly reasonable and accurate to me. But Maleeha go ahead. Oh, you're muted again I think.

**Maleeha Lodhi:** I keep unmuting and it starts to work. Can you hear me now?

**George Perkovich:** Yes, yeah.

**Maleeha Lodhi:** I think it was the host who mutes me and not me.

**George Perkovich:** I think that's right.

**Izumi Nakamitsu:** No, I just wanted to say that I agree with Izumi. I think, but I do think it would be a mistake to see this as a substitute or as a deflection or a digression from the real debate. I mean, it's realistic I think to focus on what you can focus. There is the urgent and there's the important. Of course the important is what we all need to get to which is the goal of nuclear disarmament and nonproliferation measures that actually work. But the urgent is nuclear risk reduction because we cannot wait until the big powers are able to sort out the differences and until the strategic competition somehow fades away. We are looking at arms races that are proceeding a pace. We are also looking at, I mean I won't focus on this right now, but in South Asia, the situation is particularly perilous.

So nuclear risk reduction measures both at the global level and at the regional level make absolute sense. So long as the big powers, I mean the P5, so long as they don't regard this as an excuse or a pretext and shifting

their entire energy and political capital on this. That I think we have to prevent in a way we have to be careful that that doesn't happen. So long as that doesn't happen and there's enough pressure, diplomatic pressure for those states to also keep the broader global disarmament agenda in mind. But I do think frankly, we don't have a choice. We do need a practical, as you put it yourself George earlier, practical risk reduction measures that countries can sign up to, to avert the kind of risks that confront us in times of crisis.

**George Perkovich:** Great. Thanks. Janneke you take this on, but I mean your country is very influential and located centrally in a dynamic with four of the five NPT nuclear weapons states. So pick up on what Maleeha was saying, you think about risk reduction in the context of kind of NATO-Russia relations especially.

**Janneke Vrijland:** Yeah, of course. I would like to add to that. Of course, risk reduction will never legitimize the continued existence of nuclear weapons, it will be a substitute. What I would like to highlight also the very important function that it can have when the experts continue to have the dialogue and the cooperation, it can actually create the very platforms that we need to increase the trust that is needed to make more progress on disarmament. So it's not a chronological matter.

It's in fact something that needed to be done to ensure they keep the progress and we keep this architecture that the work that's being done by [inaudible 00:19:48] is very important in this as well. And I would also like to thank Izumi Nakamitsu for all the work that is being done. Of course looking at the NATO context, I think very wise words have been said by Minister Søreide this morning already, I cannot add much more to that. I think the main goal for where NATO has well is to make sure that the risk reduction stays very high on the agenda. More so that it's at a firm place in the new strategic concept that being developed to the years to come. Yeah, I think that's where we stand now.

**George Perkovich:** Okay. Thanks. I want to turn to Maleeha and ask a question because I think people at once have exaggerated for 30 years in a way the risks in Asia between India and Pakistan. I'm setting China a bit to the side that which is problematic to do, but I'm doing that. So on the one hand, there was always the talk that South Asia is the nuclear flashpoint where they're most likely to be nuclear wars. And I think a lot of that was relatively uninformed, and we can say lots of other things about it. And at the same time, there are lots of risks that arise from the dynamics in that region. So Maleeha when you think about risk reduction along the logical change of kind of any kind of stimulus for conflict all the way up to nuclear use, what do you think, for example, Pakistan could most directly do that would reduce risk? And then also then what you think India could most directly do to reduce risk? And those two may not be the same things.

**Maleeha Lodhi:** I think George if I can take a little bit of time in answering this question. First of all, I think unilateral action by Pakistan is simply not realistic. So it would have to be mutual and negotiated between the two countries. And sadly, there is no dialogue at the moment between the two countries, there hasn't been for several years now. Plus the last time that the two countries actually had a conversation or negotiations on nuclear and conventional CBMs was back in 2012. So what I want to do is to illustrate the fact, in a way play to what you just said George. The glass is both half-full and half empty. And I think the most recent crisis between Pakistan and India, which was in February 2019, underlines this. It also underlines the continuing risks of escalation. And of course the need for the two nuclear neighbors to consider practical nuclear risk reduction measures.

So very quickly, let me just say that there was a suicide bombing in occupied Kashmir, Indian warplanes crossed the border. They carried out attacks, air force attacks deep in Pakistani territory. As it turned out, these attacks in a place called Balakot. There was no terror camp there but Pakistan was obliged to respond, which it did by sending its air force planes across the international border to bomb a military depot I think it was in India. Now the crisis could have escalated, but like previous ones, George the point that you have made, both countries desisted from further escalation and confined their actions to limited retaliatory strikes. In fact, the crisis was diffused when Pakistan unconditionally handed over the captured pilot of an Indian aircraft, a short down in a test space. So what we also saw in this crisis was the lack of any third-party intervention, which has been the case in previous crises.

Now, the most important takeaway from this was of heightened risks from the notion and execution of a limited war or a military action under what is called a nuclear overhead. In other words, the danger of conventional tasks being undertaken for limited military or even political objectives below the nuclear threshold but which can easily spin out of control and then lead to an escalatory cycle. This of course didn't happen in the 2019 crisis but there is no guarantee that it won't in the future, especially as the prior crisis showed that the initiating country in this case, India was willing to take much greater escalatory risks than it has in the past. I think another dimension when we need to keep this in view for its border application and risk reduction measures, was the role of the media in fanning the crisis. Because during the crisis, the Indian media contributed considerably to whipping up a war frenzy and creating the hysteria for an attack on Pakistan.

So I think if I was to step back from that, there is a compelling need for both countries to undertake nuclear risk reduction measures. And I know you will want to know, well, what is it then we can do? Well for a start, I think the two countries need to resume a dialogue because this then can only be discussed as part of a broader dialogue or peace process, which is

not there. And for a start, it has to involve discussions on threat perceptions, force configurations, military capabilities and postures as well as military doctrines so that we can have greater transparency which of course will help to reduce nuclear risk. Our colleague from the Netherlands talked about the trust. Well, here we see a complete and utter absence of trust and that for nuclear neighbors who have unresolved disputes between them and periodically there is a crisis in the sub-continent.

So there is a need, clearly, to look at what could be practical nuclear risk reduction measures. Of course, there are a number of nuclear CBMs that the two countries have negotiated. One of them stays in place, has been there since decades now which is both countries in January. It's a non-attack on each other's nuclear facilities. So both countries exchange lists of nuclear facilities with each other. And they've done that even at times of crisis, they've continued to do that. So that shows that a nuclear CBM can also work. But of course, the fact that there is frequent crises shows that you can't leave anything to chance. This has to be dealt with in a very purposeful and serious way.

**George Perkovich:** That was very helpful in many ways. And I want to let Izumi and Janneke could come in on this if they wish, but I just want to add that the kind of processing layer that you're talking about that's missing in South Asia is also missing between the US and China and China's other neighbors with whom it has territorial disputes let's say. And to some extent, and Janneke should correct this, I mean it's not clear how much engagement there is with Russia on these issues at a higher level. I mean we had a summit between President Biden and President Putin but kind of post-Ukraine kind of interactions about stability and crisis management seems missing. So it strikes me that there's a rich agenda, not just in South Asia for what you've called for, but also in the other two regions that are most likely to produce a conflict that could escalate to nuclear use. So Izumi and Janneke, anything on that? Go ahead Izumi, yeah.

**Izumi Nakamitsu:** Okay. So I think they are actually variety of issues that you are asking, but let me just respond specifically to South Asia situations. But to begin with, we think that nuclear issues definitely need to be very much looked up now at the regional level. They will have to be regionally tailored strategies for both risk reduction and of course, nuclear disarmament. And India, Pakistan, for example you could already do expand information sharing and transparency mechanisms, political and military hotlines, establish habits of engagement starting with sharings of best practices on nuclear safety and security. And you can also look at India, China, Pakistan, the triangles as well. Especially China, India could explore a possibility of something similar to Reagan-Gorbachev like statement. So there are already variety of very practical things that we think could happen. And those measures however will require political will. And at the

highest level we very much want those leaders from all these countries at the regional level to commit to moving towards number one, risk reduction and then gradually also for nuclear disarmament. So there are things that we believe they can be done.

**George Perkovich:** Great, thank you. Janneke, your eye on this.

**Janneke Vrijland:** Yes, I agree. I think in this continuously changing environment and as you talk about Russia and NATO, of course, it's clearly there are destabilizing factors in nuclear capabilities that they increase the risk of nuclear use. We have to continuously make sure to eliminate whatever we can. But as long as there are weapons there will be nuclear risks. We can focus on a lot of practical steps that have been mentioned already also by Izumi. But at the same time, what's also very important is to keep the dialogue going, the P5 dialogue is essential but also the communication about those dialogues to those other countries that are not in the actual dialogue. A lot of platforms are being created by NPDI, IPPNW, stepping stones, CEND which I think is very important as it includes non NPT states as well where we continue to create all kinds of different platforms, dialogues at different levels to ensure that we increase exactly that transparency and enhance the dialogue to understand each other's doctrines, understand each other's on a deeper level, each other's reasons for changing or increasing capabilities.

And that said, I think there's apart from those areas, there's areas that have been quite successful in the past as well in also in very difficult times, we can mention successful initiatives like the Nuclear Security Summit process, the ever continuing global initiative against nuclear terrorism, GICNT. This always continues its important work with experts. They always find each other to convene and that will always help at a deeper level to understand each other's doctrines and motives and capabilities.

**George Perkovich:** You three are all very experienced and you've been in multilateral, bilateral forms... I guess one of my questions it strikes me that for how serious these problems are and the risks are, and in order to get the countries that we're talking about that are most directly involved to really address these challenges and give some reassurance to the rest of the world. Doesn't it require at least kind of cabinet level military, chief of staff level, if not head of state level interaction to show the seriousness and then motivate the bureaucracies to actually get off the old talking points and do something? And so I guess my question is if that's remotely the case, then wouldn't there be value in processes like the NPT and other formal process?

If that became a demand. In other words what usually is a demand is Article Six or a conference in the Middle East or something as opposed to like your leaders need to talk to each other and address these issues and

you're not doing it and there's no excuse why you can't do that. Naive, what's the objection to making that a much more pointed demand?

**Izumi Nakamitsu:** No objection whatsoever. Yes, no, we have, thank you for that question. I think it is actually quite important. Obviously, last week from the Geneva Summit talks, there was a reaffirmation of a famous Reagan-Gorbachev principal. And we really welcomed them. That's exactly what we have been advocating for, for the past couple of years. And that's a declaratory measures. So at the highest level, that sort of a political statement, reaffirming that there is no winner for the nuclear war and therefore it should never be fought is important because it inspires, it gives a signal at the political level. And we also hope that they will be an explicit reaffirmation of the commitment to pursue a world free of nuclear weapons. That has been a shared objective of the international community. And then from there, you can actually look at military doctrinal posture related measures.

There are a number of actions that you could take. They are communication measures. Again, a huge number of very practical ideas that have emerged. And measures to prevent accidents. And of course they are also arms control, more sort of politically binding agreements that nuclear weapon states could pursue jointly through a variety of mechanisms. So at the political level, that statements will be quite important. And at least at that two super nuclear superpowers level, that has now been done. So let's hope that that will be repeated by all other nuclear weapons states and nuclear possessing states as well.

**George Perkovich:** Great. I'm going to move to some of the questions that we've received from our colleagues. Some of them we actually have addressed. So Izumi just addressed a comment that Darrell Kimball made and a question that he had asked about what the pragmatic policy implications are of the statement that nuclear war cannot be won, one must never be fought. We have two questions that in on the issue of conventional military stability. And I would say even below that because there's the problem of terrorism or whatever let's say Russia did in Ukraine, was that a conventional military operation or something else? But changing the territorial status quo or introducing violence in a relationship. How does stabilizing those dynamics and trying to tame conventional competition now, how does that help reduce nuclear risk? And should it be a higher priority?

**Maleeha Lodhi:** I can, for me, the context obviously is South Asia. And I think and this has been a long standing belief that given the conventional asymmetries between the two nuclear neighbors, and then of course the emergence of new technologies, which as I said much earlier, is creating new vulnerabilities. We need to have a more holistic approach to this. I think a way it has to be found at the regional level, also at the global level. Global

of course has different dynamics. But at the regional level certainly, a strategic approach to practical nuclear risk reduction measures would have to involve dealing with the conventional force dimension as well as the nuclear dimension because. Of the classical sort of escalatory ladder. And because if there is a complete absence or the lack of let's say transparency, absence of trust, the room for miscalculation is much higher.

And then of course the role of the media and the social media come back to that. I mean we're now operating in a completely different environment and this environment creates a real and present danger of the kind that we perhaps didn't see. In fact, we didn't see during the Cold War, this is completely different. So new technologies, new vulnerabilities, environment completely different. The politics of this are being unleashed by the media, putting pressures on the political leadership to kind of act. And in the absence of having to act then having to pay a political price. All of this, I think this is tough. This is very tough to address but I think it will be incomplete, our effort would be incomplete and inadequate if we didn't factor all of this in.

**George Perkovich:** Can I pick up on a couple of things that you said, I think that are super important Maleeha. That is when you talked about the role of media and the dynamic that it produces, it seems to me that ends up being less about conventional arms racing and more about changing territorial status quo, introducing violence. In other words, it's that kind of disruptive act that then produces the frenzy that in the state that's been attacked as it were, or had its territory encroached upon, it produces a reaction there and then a counter reaction. So that as much as the issue is technology and convention motive, but its actions like changing territorial status quo, isn't it that drives us or supporting terrorism or other forms of violence, that that's where the trigger is. That has to [crosstalk 00:39:36]

**Maleeha Lodhi:** I mean very quickly, I think the lack of communication then becomes fundamental because it's all very well to say, well, there's been a bomb blast in country A. But if country A doesn't even wait to talk to country B and rushes to judgment, that hardly speaks of being a responsible state, much less a responsible nuclear state. So I think there is a need, there are lots of intervening variables here which we need to factor in. So it cannot be that black and white that attack, reaction, has to do something because the media is putting pressure. No, you have to first ascertain and have incontrovertible evidence before you take, before you resort to any kind of military force.

So I think, one of the things that I think Pakistan and India should do, I don't speak as a official, I'm not an official, I speak in my private capacity is a mutual renunciation of any kind of conventional attack on the other, under a nuclear overhang. So you kind of think that you can attack because

it's below the nuclear threshold and you can get away with it. But the danger is that the other country will also be forced then to take counter measures. So I would leave it there.

**George Perkovich:** Okay. Janneke, Izumi, anything on this?

**Janneke Vrijland:** Yes, well maybe. Thank you very much for that question. Also, I think Maleeha also included a lot of very important topics to that. I think one is the destabilizing acts of changing territorial status quo. Of course, in the bigger sense anything that contributes to mistrust, misunderstanding only emphasizes the importance of the multilateral for a of the architecture of the things that are actually there that are made to increase the trust or keep at least the vital go in even at the most difficult stages without going into actual individual cases. The new technologies is in fact also very much in the forefront of my country's agenda as well. And I think in most of us as it should be. It has a very new effect. It has a new dynamics to the old discussions and also to the existing frameworks.

It's challenging in many ways. First of all because new technologies, it's such a basket concept, there's so much included. As soon as you have one conversation, there's already 12 or 14 different dimensions to it as mentioned. And that's something that we need to tackle right away, already got the semantics. And do we talk about the some things that we know each other, do we find each other? Do we have those forum where we can meet and talk about this? Because of course there is the nuclear context but is it not the conventional context as well? And do we have to still make that sort of very clear distinction even through the demands, is that realistic? And with the nuclear, does a nuclear architecture actually answer the demands that we have now, the threats.

Are there also challenges or are there chances that there are created by new technologies in actual defense. It's a very important item that needs to be done politically, diplomatically but militarily as well. Of course the weaponization of new technologies is very important. I can inform in my country, my parliament and they're very much onto that. Of course, we need to take this seriously and put a lot of effort in that. We are also increasing staff here, we are also making sure to promote a lot of civil society activity on this and creative thinking and improve the understanding of this field because it's still very, very broad.

**George Perkovich:** Can I ask, Janneke I want to stay with you for a sec because Matthew Bun asked, he points out that Russia has rejected various NATO risk reduction proposals and NATO has rejected various Russian risk reduction proposals. And so we wondered, is there a way to get productive dialogue going in the region? And my question is kind of a process one. Would you assess that it's more likely to improve the dynamic and kind of break that stalemate if heads of state in their kind of bilateral interactions

with Russia proposed this and urged this. Then if NATO as a block, does it or is there not kind of a tactical way like that to make a difference, are we just stuck?

**Janneke Vrijland:** Well it's an easy and not very easy question. Of course, we need to do everything that we can to improve the dialogue and to keep the dialogue. I cannot speak for NATO here, but rest assured that NATO is very much trying to keep and stay involved on this very matter. And individually as countries as well, my country certainly is always trying to have the dialogue over this as well, next to all the other things that we can do. And we are very clear about that as well. Whilst at those very high political level, we need those messages that we've actually been hearing last week which is a very important process I think. And of course a step up to more work.

We need to make sure that we find those areas and terrains where we need to work together and cooperate. I'm a positivist in this issue here so I think yes, we need to do all that and we need to do more. And there will always be a way to find a dialogue somewhere, even in the most harsh times. And we need to make sure it's from all the corners, from bilaterally not necessarily from NATO but also from civil society. I hope that we do everything that we can to make sure that well in fact we reduce the nuclear risk.

**George Perkovich:** Can I, there's a question that Malinda Meegoda asks that picks up on what Janneke was just saying about civil society. She says South Asia is notable for not having robust civil society organizations dedicated to nuclear disarmament. Do you think that the growth of such civil society groups could be an element of nuclear risk reduction? I want to broaden that and I want to point out that Russia and China entirely lack civil society organizations dedicated to nuclear disarmament. So does Israel by the way and so does North Korea. So does France for the most part. So basically, the only places where you really have civil society pushing hard on this are the UK and the US and then some other NATO states in terms of nuclear weapon states. So broadening it beyond South Asia, the role of civil society in pushing this. Could you address, and what those groups could do that would be most effective because maybe what they're doing isn't the most effective way in your opinion. Thank you.

**Maleeha Lodhi:** I can come in.

**George Perkovich:** Maleeha, please Yeah.

**Maleeha Lodhi:** Yeah, because Melinda sort of asked specifically with reference to South Asia but of course, one has to discuss it to the more broader sense. I think from my perspective, and I've spent years in the media as well as in diplomacy. To be honest, I think, okay civil society organizations have a

role to play, but more important in today's dynamic and very fast moving universe is the role of the media. And the need to educate people about nuclear risk. Because all too often at crisis times as I was just explaining, it's sort of ultra nationalist sort of sentiment gets expressed very quickly and before it, the crisis is sort of getting or not quite out of control, but it's sort of progressing. So I think we need to think a little more proactively and perhaps creatively in how to involve the media.

And now the social media has such enormous as we all know, such enormous impact. I mean it takes only a couple of people on the social media to create a certain impression. And sometimes of course the role of false and fake news, so dangerous. So considering there is no regulation. Nobody can regulate falsehood. I mean, I think we've been trying since the universe was created. But as far as the social media is concerned, imagine a situation. I don't think we've ever factored this into our notion of what a crisis can look like. If there is false news that is spread on the social media that begins to impact on the way leaders behave. So the behavior of leaders is so crucial at crisis times. Now, how do we address that as well... So I think civil society organizations, I perhaps, I don't want to sound skeptical, they've done good work in the UK and in the United States. But I frankly think in my part of the world, the media's impact is that's what we need to sort of focus on.

**George Perkovich:** Yeah, Janneke.

**Janneke Vrijland:** Yes, thank you very much. And I agree that there's a very important role to play for the media. At the same time to add to that, I think social media it's not done by journalists, which only raises the importance of transparency, vital leadership directly to everybody with a device. Actually everybody should understand and the trust you'd be getting from the whole society in the strategies that are being taken. So the need to create, understanding and reach out and be transparent, it's not only towards the peers or other nuclear weapons states but it's very much also to society in general because there is not one player or one layer that you can educate and leave more informed. It's very important that everyone is informed.

**George Perkovich:** Go ahead Izumi, yeah.

**Izumi Nakamitsu:** No I mean, I think it's been all said. But even if there is this really hot social media remarks being made. Even if they are inflaming sort of media reports there, I agree very much with Ambassador Lodhi that nuclear weapons will need to be protected from those. And then there, I think there are still quite a lot of things that we could do together. They are different responsibilities between nuclear weapon states, non-nuclear weapon states. But I think we need to focus on all. In other words, we need to do everything simultaneously to protect. And especially those emerging technologies, cyber, et cetera. There are discussions now taking place at

the United Nations, quite detailed discussions about responsible behavior of states, behavior of governments. There is an emerging quite detailed guidance, still voluntary, but these are developments of strong norms starting to happen at the multilateral level.

I think they are, for example. So what I want to say is that we need to actually have an overview of those different discussions and then look at the linkage between those discussions with nuclear weapon issues. For example, would it be useful, I think so, to have some sort of politically binding the agreements to start with, not legally binding, but start with a politically binding agreements to not to interfere with nuclear command control and communications, NC3. And that can start with nuclear weapons states, but non-nuclear weapons states can also join in that. So that would contribute to nuclear risk reduction. So I think there are still a number of quite practical and yet hugely important actions that we could do, discussions that we could pursue.

Someone asked about conventional and nuclear. Indeed entanglement, hugely a big issue. So disentanglement and conventional and nuclear forces is a key issue for risk reduction in nuclear field. There are again, quite a number of quite impactful actions that could be taken if we are, for example, to pursue an agreement. And that would definitely have to be a mutual agreements for example, not to deploy destabilizing weapon types in especially hot areas.

And those conventional weapons perhaps include for example, sea launched cruise missiles, hypersonic missiles, that have a strategic impact in Russian-European territory. Agreements not to deploy systems in crisis zones. I mean these are all very practical, pragmatic discussions that could be undertaken that will have a very important impact on nuclear risk reduction. One thing I also wanted to say is that I think in this discussion also really demonstrates that so far, there isn't any common agreement on the definition of risk reduction, nuclear risk reduction. And I think it's important that we pursue that. It will be a collective discussion. But if we have a little bit better common understanding of what we mean by nuclear risk reduction, I think our discussions could make further progress.

**George Perkovich:** Thank you. It occurs to me that in the NPT process. And Reto Wollenmann from Switzerland had asked a question about the NPT review conference which may happen, at some point. And so traditionally, going back from 1995 most obviously there lot of focus when there is a final document in the steps. So principles and objectives, or the action agenda for fulfilling Article Six. And those tend to be detailed. Now many, if not most of those commitments haven't been fulfilled. And so there tends to be an argument about continuing to push those. Whereas some of the states involved say, well, wait a minute, those have become outdated.

I guess my question is, would detailing risk reductions that would be both feasible and very important that may not directly involve nuclear weapons themselves. But the kinds of things we're talking about, does advocating for those in some detail, make sense to try to do in the NPT review process and to add that? Because some will say, no, no, don't do that. We have the list, just do the list, the nuclear disarmament list. So I'm just be curious for each of your reaction and Maleeha, that's more you not as a representative of Pakistan per se, but as a long time expert in the UN system. Izumi, any thoughts? I'm not letting Janneke off the hook either but.

**Izumi Nakamitsu:** Do you want me to start?

**George Perkovich:** Yeah, please.

**Maleeha Lodhi:** Oh, I wasn't sure. I thought you meant that you would come back to me. It's okay.

**George Perkovich:** Izumi go ahead and start and then we'll come back to Maleeha. Sorry, my bad.

**Izumi Nakamitsu:** Okay, yeah no, I think first of all, a NPT review conference will take place. I hope that the dates will be set soon, but someone said, actually this postponement has provided all of us with extra time to do the work, to prepare for a successful outcome. And in my view, and I have stated this in repeated times, in my view, any successful outcome from a NPT review conference will have to and should include a package of risk reduction, nuclear risk reduction measures. So I think it will be quite important as you suggested to explore what might actually constitute this particular package. And as I said, I think mutual understanding of risks I think will be important and predictability through common understanding, some crisis and escalation management and of course, crisis communication.

And I've already talked about declaratory statements and doctrines and postures that reduce the role of nuclear weapons. So these practical measures such as de-targeting and nuclear weapons or removing launching warning status, they are quite a lot of things that we could actually consider or states parties could consider. And those we hope, will be part of the discussions and indeed parts of a successful outcome of a NPT review conference. And I think most of states parties will agree to that. And indeed, they are quite a lot of work being done as we speak. So yeah, let's hope for that.

**George Perkovich:** We are I think at the end of our time but Maleeha and Janne, just any brief last thoughts and then we'll turn it back to James.

**Maleeha Lodhi:** So I would simply say that I don't share Izumi's optimism about the next NPT review conference, given the past sort of unedifying history in recent

years. But the issues that we have been discussing are so important that perhaps it's time to consider the different process, especially to enable non-NPT countries like mine to also be a player and a participant in shaping that agenda which is so very important.

**George Perkovich:** Janneke, last thoughts.

**Janneke Vrijland:** Yes, thank you. I actually agree with Izumi that there's a lot of work being done on risk reduction in running up to the next revcon and this will materialize in some form. I'm sure it will be concrete and hopefully it will definitely provide a great opportunity for weapons states to demonstrate their commitment to show their actions in this field. And hopefully it will also create some concrete actions that then can be applied more broadly than only the NPT states. Thank you.

**George Perkovich:** Well I want to thank all three of you and I know your schedules were not easy. And so I really appreciate your letting us encroach upon them. That was terrific. And we're all lucky to have you as public servants and former public servants who may come back and be public servants. So I want to thank you and turn it back to James Acton.

**James Acton:** George, thank you so much. Let me join George in thanking all the panelists for such a rich and stimulating discussion. In half an hour, at 12 o'clock Eastern daylight time, we'll be having our third session of the day with Russian Deputy Foreign Minister, Sergey Ryabkov. So we very much hope that you'll join us for that. If you're watching me currently on the YouTube livestream and you want to be able to interact with our participants and be able to post questions to panelists, you can still register for this conference at the Carnegie website. Otherwise, let me just thank you for your attention and say I hope to see you back here in half an hour.