

**16<sup>th</sup> Republic of Korea-United Nations Joint Conference on  
Disarmament and Non-proliferation Issues**

***Strengthening Disarmament and Non-proliferation in a Changing World***

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for Disarmament Affairs**

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Ms. Youngju Oh, Deputy Minister for Multilateral and Global Affairs  
Distinguished participants  
Excellencies, ladies and gentlemen

It is an honour to open this joint Conference on Disarmament and Non-Proliferation Issues, the sixteenth such Conference in this useful and thought-provoking series, and – may I add – my first as High Representative.

I would like to extend my sincerest gratitude to Deputy Minister Youngju Oh and her colleagues at the Ministry of Foreign Affairs for their support and assistance in making this Conference possible and for their continued beneficial collaboration with the United Nations Regional Centre for Peace and Disarmament in Asia and the Pacific (or UNRCPD). I would also like to recognize the exceptional list of speakers from governments, non-governmental organizations, academia, and international organizations and look forward to their presentations and discussions.

Over the year, this Conference has served as an important forum for the exchange of views on key disarmament and non-proliferation issues, at both the global and regional levels. Its goal should not be simply to recount the challenges we are facing, but to seek to identify practical steps forward in addressing them through open and candid discussions.

This year's Conference addresses regional and global developments in the area of disarmament and non-proliferation as well as technological advances and their challenges to peace and security. These are issues that are very much on the minds of leaders and citizens not just in this region, but throughout the world, including Secretary-General Guterres.

As the Secretary-General said in his address to the General Assembly, “Today global anxieties about nuclear weapons are at the highest level since the end of the Cold War.” The threat posed by nuclear weapons is not abstract.

### Crisis in Northeast Asia – Democratic People’s Republic of Korea

I want to start by addressing the shadow that hangs over this conference, this region and, indeed, the entire international community. That is, the crisis posed by the Democratic People’s Republic of Korea’s nuclear weapon and missile programmes.

Secretary-General Guterres has stood firmly with the international community in condemning the nuclear weapon and ballistic missile activities of the Democratic People’s Republic of Korea.

The crisis in Northeast Asia must stand as a stark reminder of the need to ensure the global nuclear non-proliferation regime is robust and adaptable to address evolving challenges, and, above all, of the need for global unity in the face of those challenges.

The unity shown by the United Nations Security Council has been a welcome display of international leadership. The continuation of that unity is a prerequisite for the emergence of a political solution and we urge all Council members to keep working together towards this result.

The crisis in Northeast Asia is also an admonition of the need for constant vigilance and the universal and full implementation of all non-proliferation commitments. This includes the requirements of all Security Council resolutions, but also commitments made under the Treaty on the Non-Proliferation of Nuclear Weapons – the NPT.

I have already mentioned the need for a resilient non-proliferation regime in the face of crises such as the DPRK, but I also want to state clearly that a healthy non-proliferation regime also depends on concrete progress in nuclear disarmament. This is a key bargain upon which the NPT was struck. They are two sides of the same coin and mutually reinforcing elements of a world free of nuclear weapons.

Resolving the crisis on the Korean Peninsula will undoubtedly require at a minimum a comprehensive political settlement involving the DPRK’s nuclear weapon and ballistic missile programmes. What is often overlooked is that it will also require the political will of all parties to achieve sustainable peace.

Beyond its clearly outlined steps for denuclearization, it is important to recall that the Six Party Talks recognised the value of creating a regional security architecture to ensure the sustainability of peace on the Korean Peninsula and beyond. The 2005 Joint Statement affirmed the commitment of the Six Parties to “joint efforts for lasting peace and stability in Northeast Asia”, including by exploring ways and means for promoting security cooperation in Northeast Asia”.

The six parties subsequently took these ideas one step further when they agreed to establish a working group on a Northeast Asia Peace and Security Mechanism. They also affirmed the need for the parties to increase mutual trust and for separate negotiations leading to a permanent peace on the Korean Peninsula.

The establishment of such a mechanism would be fully consistent with the UN Charter, which in Chapter VIII also encourages the creation of regional arrangements for the maintenance of international peace and security.

Such arrangements have played a vital role in stabilizing relations and promoting peace through trust, confidence-building and cooperation in many regions. Yet Northeast Asia remains the missing link. If we hope to realize our common aspiration for a peaceful solution to the situation on the Korean Peninsula, we will have to give serious thoughts to the broader regional security architecture that will be needed to maintain peace and security in Northeast Asia.

In time, this will also require us to carefully consider the relationship between peace and denuclearization as well as tackling other WMD in the context of the current crisis facing the region.

### Emerging technology and international peace and security

Ladies and gentlemen

I am going to move now to the other major focus of this conference: how advances in technology are challenging international peace and security, but also how they can be better utilised to help us – practitioners of disarmament and non-proliferation – to better achieve our missions.

As the Secretary-General recently said, “technology will continue to be at the heart of shared progress” but also that the “dark side of innovation” is a threat we must confront, and one that has “moved from the frontier to the front door”.

Even the most casual observer is now aware that we are living in an era of unprecedented innovation that is transforming healthcare, education, transportation and manufacturing in ways that will bring massive societal benefits.

Unfortunately, those same innovations also either have military applications or can be re-purposed for unintended malicious purposes.

And unlike other major leaps in weapon capabilities, often it is the cumulative impact of technology, rather than a single system, that challenges security and other norms. It is a suite of innovations that includes enabling technologies such as machine learning or information technologies, dual use technologies such as synthetic biology and unmanned vehicles, and specific military innovations such as new types of long-range precise weapons.

I like to use as an example of this cumulative effect the possibility of a networked autonomous drone using space-based systems for guidance and facial-recognition software for targeting.

This technological revolution is occurring at a time of growing geopolitical instability and inflamed regional disputes. The combination of this combustible situation with potentially revolutionary new weapons could have grave consequences for peace and security.

The combined military applications of these advanced technological breakthroughs could, in the longer term, increase the likelihood of armed conflict due to perceptions of casualty-free warfare or reduced decision-making time leading to a failure of escalation control. Their reach and speed could increasingly place civilians and civilian infrastructure in harm's way.

The possibility of destabilising arms races should not be ignored, as advanced States seek to build or negate perceived advantages. We can already see echoes of this in recent statements about artificial intelligence and defence strategies based on unmanned and autonomous technologies.

Serious questions are being raised about how these innovations could impact stability, and their abilities to conform to international humanitarian law and human rights law. Concerns have been raised about attribution and accountability, especially in the context of cyberattacks and autonomous weapons systems.

The portability, availability and relative ease with which much of this technology can be re-purposed raises proliferation concerns, including for non-state actors. Innovations such as additive manufacturing (or “3D printing”) could aid the evasion of non-proliferation mechanisms and the so-called ‘dark web’ already functions an enabling marketplace.

Ladies and gentlemen

The international community, including through the UN, is attempting to grapple with these challenges. However, we are faced with a dangerous paradox – on the one hand, we do not necessarily have a clear understanding of the combined impact of these innovations, yet on the other, the development of these technologies moves at a much greater pace than our deliberations.

Clearly, we need to start asking questions now about how we can mitigate potential risks and implement the norms and frameworks that will prevent these potentially game-changing innovations from sparking conflict or being used for unintended purposes.

However, we also need to ensure that any new norms or frameworks do not act as brake on innovation or stifle the equitable transfer of technology for peaceful purposes and sustainable development.

In the United Nations disarmament machinery, some action is already underway. As many of you may know, the Convention on Certain Conventional Weapons (CCW) is convening this week a formal inter-governmental expert process to deliberate on how to approach lethal autonomous weapons systems (or LAWS). There have also been five General Assembly mandated groups of governmental experts on cyber security.

The United Nations Disarmament Commission this year held an informal exchange on the proposal for a new item on the implementation of transparency and confidence-building measures in outer space activities, for the purpose of preventing an arms race in outer space.

The Secretary-General’s Advisory Board on Disarmament Matters has proven a valuable incubator for ideas on how to address the challenges posed by emerging technologies, including LAWS, UAVs, conventional long-range weapons and the strategic impact of artificial intelligence.

However, all those are a piecemeal approach and I think we all agree that our work needs to pick up the pace, achieve more depth in analyses, and obtain a broad and strategic overview on the interlinkages of the challenges we face.

We need a clear picture of the ramifications of these new weapons – including their combined effect or how they will be used – to make a proper judgement about how to respond.

We need to get better at building twenty-first century coalitions to meet twenty-first century challenges. Unlike previous evolutions in military technology, the innovations I have listed are largely being driven by industry, not by governments. We have to get better at bringing the private sector into the tent and developing a two-way communications mechanism. Likewise, civil society and academia have obvious roles to play.

Going forward, we need to consider what kind of governance or even regulation is required to ensure these innovations do not become destabilizing, and that they are not used either for unintended purposes or in contravention of international law. In this context, we should consider how the current regime can be adapted to address these challenges and whether we are properly utilizing all the tools at our disposal. If not, we should ask ourselves what is needed to fill these gaps.

Finally, we must ensure we utilize these new technologies breakthroughs for our own disarmament and non-proliferation objectives. Innovative technologies have the potential to improve verification and compliance and, in turn, confidence and trust-building.

Some work in this direction is already occurring and I am particularly impressed with the way in which the Preparatory Committee for the Comprehensive Nuclear-Test-Ban Treaty Organisation has incorporated machine learning into its verification work.

The benefits for verification, including of nuclear disarmament, stand out, but there are other possible applications such as enhanced detection of WMD use and the ability to mark, trace and manage stockpiles of conventional weapons.

United Nations Regional Centre for Peace and Disarmament in Asia and the Pacific

Ladies and gentlemen

In closing, I would like to say a few words about the United Nations Regional Centre for Peace and Disarmament in Asia and the Pacific (UNRCPD), located in Kathmandu, Nepal.

In recent years, the Centre has strengthened its capacity to undertake regional activities related to disarmament and non-proliferation, including taking into account the specific and practical needs of States in the region. It also continues to promote regional dialogue and confidence building for disarmament, non-proliferation and security matters. In addition to advocacy and outreach activities, over the past year, the Centre has focused its activities on enhancing the capacity of the States in the region to control the illicit trade in small arms and light weapons, implement Security Council resolution 1540 (2004), as well as promoting the implementation of other relevant international instruments. The Centre will also soon embark on an ambitious disarmament education programme in collaboration with Member States, teachers, universities, students, parliamentarians, and civil society.

On behalf of the United Nations Office for Disarmament Affairs, I would like to thank all states, in particular those from the Asia-Pacific region, for their financial and in-kind support and assistance to the Regional Centre, whose programmes rely entirely on voluntary contributions. These financial and in-kind contributions enable it to carry out its mandate effectively, and enhance its ability to serve the interests of all States in this vast—and enormously important—region. This is indeed a worthy investment in our common future.

I wish you all the best for a successful conference.

Thank you.