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Background Guide

General Assembly First Committee

**Topic : Prohibition of the Development and Manufacture
of New Types of Weapons of Mass Destructions
and New Systems of Such Weapons**

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Welcome Letter

Welcome, distinguished delegates! In this committee, it is now your duty and obligation to discuss the prohibition of the development and manufacture of new types of weapons of mass destruction and new systems of such weapons.

Under the framework of the UNGA, the First Committee has long been focusing on the disarmament issue of WMDs. With its first official distinction from conventional arms in 1948, the WMD issue had been mentioned several times, and eventually reached a sort of consensus in the Program of Action part of the Final Document¹ that nuclear disarmament should be of priority in the disarmament of mass destructive weapons (followed by chemical weapons, biological weapons and conventional weapons that can cause destructive effects to human lives). In this committee, delegates are warmly welcomed to continue reaching more consensus on this topic. However, because of the experience accumulated during the years of negotiating a ban on non-existing weapons, it might be advisable to consider the rationale for keeping this item on the agenda of this committee seriously. Also, it should be recognized that although delegations indicated that the item "New weapons of mass destruction and new systems of such weapons" should be kept on the agenda of the Conference for review and update, they did not envisage any possibility for the commencement of substantive work, and rather preferred the appointment of a special coordinator to explore the potential of this item. And it is noticeable that some countries, due to their positions, aren't interested in discussing radiological weapons, though it is the only weapon left on the committee agenda table.

The historical process of solving this problem is very long, and many difficulties have been encountered in the process of finding a solution by the general assembly. So far, the solutions proposed in the past have been divided into two solutions, namely, the establishment of a special Treaty on specific new types of WMDs that may arise or the prevention of the production of any such weapons through consensus or convention. We the Directors sug-

¹ General Assembly Resolution, *Final Document*, A/RES/S-10/2(30 June 1978), available from <https://documents-dds-ny.un.org/doc/RESOLUTION/GEN/NR0/107/51/img/NR010751.pdf?OpenElement>.

gest that no matter what kind of solution, the committee may examine four important factors. First of all, we hope that delegates can explore the possibility of solving the relevant standard problems caused by the lack of official authoritative supervision and establishing unified standards. Second, we hope that the delegates can resolve the crisis of trust and suspicion between the two governments. Third, it would be great if delegates could establish a mechanism to eliminate monopoly violence without authoritative supervision. Finally, we sincerely hope that delegates will make full use of the existing mechanisms and improve them as much as possible. We hope that the delegates will fully understand and adhere to their national position and strive to find a more appropriate way to solve the problem.

We the Directors wish great success to this conference, and we sincerely hope that everyone can learn and improve therein.

Best Regards,

Directors of GA-DISEC
BIMUN 2022

Acronyms

AM	Additive Manufacturing
BWC	Biological Weapons Convention
CCD	Conference of the Committee on Disarmament
CD	Committee on Disarmament
CTBT	Comprehensive Nuclear-Test-Ban Treaty
CWC	Chemical Weapons Convention
DISEC	Disarmament and International Security Committee
ENMOD	Environmental Modification Convention
IAEA	International Atomic Energy Agency
JCPOA	Joint Comprehensive Plan of Action
MAD	Mutually Assured Destruction
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
P5	The 5 Permanent Members of the Security Council
UNDC	United Nations Disarmament Commission
UNGA	General Assembly of the United Nations
UNSC	United Nations Security Council
WMD	Weapon of Mass Destruction

Introduction to the Committee

The UNGA is responsible for the consideration of issues concerned with “disarmament, global challenges and threats to peace that affect the international community”.² Acting as the highest platform within the UN system for the member states to find consensus and strike systematic deals on armament-related issues, the First Committee has facilitated some of the most pivotal mechanisms and treaties that are essential to the development of the international peace regime, such as the NPT.

Specifically speaking, the First Committee is dedicated to providing advice to the Secretary-General of the United Nations and to assisting the Secretary-General in fulfilling his responsibilities under the Charter of the United Nations and the mandates of the General Assembly, the Security Council, and other bodies of the United Nations system in disarmament and security-related matters, and to represent him or her when necessary. It also has to provide advice to the Secretary-General to assist him/her in carrying out the substantive responsibilities entrusted to him/her by multilateral disarmament agreements, identify emerging issues and challenges, analyze their impact on the role of the United Nations in maintaining international peace and security, and make recommendations to the Secretary-General on possible strategies and measures related to arms control and disarmament.

The First Committee also assists member states in multilateral disarmament negotiations and deliberations to develop disarmament norms and agreements and promote, strengthen, as well as consolidate them in all areas of disarmament.

The First Committee provides substantive organizational support to the UNDC and other subsidiary bodies of the general assembly, CD and its subsidiary bodies, review Conferences of States parties to multilateral disarmament agreements and other meetings, as well as expert groups mandated by the general assembly; promote and support multilateral

² General Assembly First Committee, “Disarmament and International Security (First Committee),” *United Nations*, accessed 2 December 2021, <https://www.un.org/en/ga/first/index.shtml>.

efforts for disarmament and non-proliferation of WMDs, especially nuclear weapons, including global counter-terrorism efforts, and to this end cooperate with organizations and specialized agencies within the United Nations system and other intergovernmental organizations; to promote and support disarmament efforts in the field of conventional weapons, including landmines, in particular to curb the illicit proliferation, destabilizing and excessive accumulation, illegal trafficking and manufacture of small arms or light weapons, and to provide substantive support and expertise for a regional moratorium on the acquisition, production and transfer of small arms and other conventional weapons.

General Introduction to the Topic

Capable of dealing apocalyptic damage to civilian targets and thus civilization as a whole, the WMDs have always been at the epicenter of the First Committee's agenda. In the first resolution of the Commission for Conventional Armaments, adopted in 1948, the WMD was defined to include "atomic explosive weapons, radioactive material weapons, lethal chemical and biological weapons, and any weapons developed in the future which have characteristics comparable in destructive effect to those of the atomic bomb or other weapons mentioned above."³ As the discussion on the disarmament of known WMDs, such as the nuclear bombs, has never been halted, the terrifying power of such weapons has prompted member states to gradually commence the explorations into the means to prevent the birth of their yet-unknown future variants. However, under the framework of the existing UN First Committee, the voting principle and the way of consultation have a lot of drawbacks, which cannot be substantially implemented against the disarmament of WMDs. Lack of supervision and weak enforcement that result in a deficit of trust among nations are probably still the major existing obstacles for most countries.

There have been two tracks in dealing with the issue: one that seeks to identify the possible new WMDs and thereby formulate specific agreements on the prevention of them, and the other that introduces a more general prohibition approach which expects a mechanism to inhibit states from developing new types of WMDs in the first place. This topic was once marginalized by the international community as the world became seemingly more peaceful and thus less likely to witness a new type of WMD after the Cold War, but recent escalations in regional and global tension have brought this issue back to where it was. At the same time, the weapon of mass destruction has become an important bargaining chip in the geopolitical game between countries.

Since World War II, on the basis of nuclear deterrence and nuclear balance, the international system has formed an overall stable relation by virtue of the fact that nuclear weap-

³ Commission for Conventional Armaments, "UN document S/C.3/21/Rev.1," *United Nations*, published 12 August 1948.

ons have constituted a dynamic balance in the power and deterrence of the existing major states. Thankfully, from the initial nuclear confrontation between the United States and the Soviet Union to today's Nuclear Non-Proliferation Treaty, the nuclear weapons have been reasonably controlled, and chances of them being used remain relatively low. However, owing to the rapid development of digital technology, the uncertainty of new types of WMDs has suddenly increased. To prevent a new type of WMD from being produced and to save the current peace regime from collapsing, the refinement or establishment of more effective international institutions could be championed to resolve country's distrust of each other and thus bring them back to the course of cooperation.

Should the delegates choose to address this challenge with the specific agreement approach, further clarify the definition and testing methods for new types of weapons of mass destruction on the basis of the existing international consensus on the identification of nuclear, chemical and biological weapons, followed by relevant arrangements to prevent them. Otherwise, a comprehensive general prohibition mechanism is expected to be formulated based on common consensus and multilateral cooperation.

Current Situation

Overview of the Current Situation

After the discussion on the possible new weapons in the General Assembly in 1969 by Malta, the negotiation on the prohibition of development and manufacture of new types of WMDs and their systems has commenced since then. However, the vagueness of its definition and controversies over the possible approaches to the prohibition brought the discussion to a standstill.

Generally speaking, there exist two approaches to prohibition. The first one is welcomed by the then Soviet Union and other Eastern European states, where they maintained that the prohibition entails a general prohibition applying to new types and systems of weapons of mass destruction at the research or experiment.⁴ However, this broad scope of disarmament, which banned unspecified future weapons, was not supported by the United States as it held the belief that arms control, including new types and systems, requires specific agreements with a definite scope and with adequate verification of compliance.⁵

Based on these two approaches, the General Assembly First Committee holds regular discussions on new types of WMDs. The CCD has listed among its seven focuses of work to keep under review the question of the development of new WMDs and any identified new weapons and facilitating discussions and negotiations across countries.⁶ The recent decade has witnessed the resurgence of right-wing forces and the intense regional and international conflicts, which further warns countries of the danger of new types of WMDs and their systems. Some in the United States have at one point claimed that the policy of strategic patience should be practiced to re-establish its global hegemony by its possession of new types of WMDs and their systems.⁷ Therefore, the world has called for the urgent set-

⁴ United Nations Institute for Disarmament Research (UNIDIR), "New Types and Systems of WMD Consideration by the CD", May 5, 2011, Jan.8, 2022 Accessed, <https://unidir.org/publication/new-types-and-systems-wmd-consideration-cd>.

⁵ Ibid.

⁶ United Nations Office for Disarmament Affairs, "Conference on Disarmament", Jan.1, 2022, Jan.13, 2022 Accessed, <https://www.un.org/disarmament/conference-on-disarmament/>.

⁷ Limin Lin and Yake Cheng, "Some Key Questions about the DPRK Nuclear Issue," Contemporary International Relations, no. 3 (2020): 1-10+56.

tlement of the issue once again.

Status Quo of WMD Disarmament

Through years efforts, the pre-existing WMDs including nuclear, chemical and biological weapons have already been regulated and controlled by a series of interlocking international treaties, bilateral undertakings, and multilateral inspections aimed at halting their development and spread. Meanwhile, countries have recognized that the current system of international security is very much underpinned by the non-proliferation regime of nuclear weapons and nuclear deterrence as they fear the retaliatory use of nuclear weapons. However, such regime based on nuclear powers is very fragile. Once new types of WMDs and their systems emerge, the current balance of power will be broken, thus causing new global security crisis.

On the other hand, the development of modern technology makes the disarmament of new types of WMDs and their systems more urgent. The likelihood of applying cutting-edged technology such as Artificial Intelligence, cyber, high power microwave electromagnetic pulse technology to the development of WMDs has enhanced to a large extent. Such development makes the existing weapons more destructive and more difficult to identify and defend. However, most attention has been put on radioactive weapons in recent decades.

Past Efforts

a. Attempts of Drafting Specific Agreements

Since the establishment of CCD in 1979, it has started the negotiation on specific agreements concerning new types of WMDs and their systems, and most of its discussion centers specifically on radiological weapons.⁸

To foster negotiation, in 1980, the CD established the Ad Hoc Working Group on Radiological Weapons. However, although countries agreed to negotiate a treaty on the subject, countries cannot reach an agreement on its priorities, role and scope, definition, and pro-

⁸ General Assembly (GA), "Final Document of the Tenth Special Session of the General Assembly", Jun.30, 1978, Jan.10, 2022 Accessed, <https://digitallibrary.un.org/record/218448>.

cedures for verifying compliance. For instance, Sweden claimed that deliberate damage to nuclear installations that might cause the release of radioactive substances should be covered by the treaty, and the definition of radiological weapons should incorporate particle-beam weapons.⁹ However, the Netherlands believed that since weapons like particle-beam weapons were not included in the definition of the WMDs in 1948, they should be addressed within a particular context.¹⁰

To converge different sides, later discussions adopted a two-track approach, organizing separate groups to examine radiological weapons in their traditional aspects and the prohibition of attacks against nuclear facilities at the same time. However, discussions remain inconclusive. In 1986, these two groups were replaced by groups on issues of scope and definitions, peaceful uses and definite cessation of the nuclear arms race and nuclear disarmament, and verification and compliance, respectively. Meanwhile, the deployment or dumping of radioactive wastes was added to the agenda in 1988, which would be reviewed by the General Assembly annually.¹¹ The prohibition of the dumping of radioactive wastes was still on the provisional agenda of the General Assembly in 2021. However, little progress has been achieved in recent years.¹²

b. General Disarmament Attempts

To be more specific, the Soviet Union claimed that disarmament should include new weapons that might evolve based on evolving scientific principles and achievements other than those that have already come into existence. Therefore, based on this principle, the Soviet Union proposed to establish an ad hoc group of experts to achieve the goal in 1980. However, it was then frustrated and been regarded as an enlargement of the scope of the convention. Still, several arms control treaties and consensuses are achieved which places limitations on new types of WMDs and their systems without any distinction.

9 Ibid

10 Ibid

11 General Assembly (GA), "General and Complete Disarmament: Dumping of Nuclear and Industrial Wastes in Africa", Oct. 31, 1988, Jan.13, 2022 Accessed, <https://documents-dds-ny.un.org/doc/UNDOC/LTD/N88/277/21/img/N8827721.pdf?OpenElement>

12 General Assembly (GA), "Resolution adopted by the General Assembly on 6 December 2021", Dec. 10, 2021, Jan.13, 2022 Accessed, <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N21/382/03/pdf/N2138203.pdf?OpenElement>

In recent years, some restrictions focus on preventing the combination of traditional WMDs and new technologies. Emerging technologies enable the rise of new and agile threats to international security. Take the drone swarms which numerous militaries are developing and conceptualizing as an example. These uncrewed systems working together are capable of conducting multiple tasks both on air or ground at once. Israeli's application of a true drone swarm in combat during the conflict with Hamas in Gaza in 2021 further proved its potential implications.¹³ However, the development of drone swarms is not regulated by any specific agreements unless pre-existing treaties and agreements are involved, such as the BWC and NPT, etc. However, it is still at a premature stage and encourages more efforts to find appropriate ways of development.

¹³ Modern War Institute, "Strengthen in numbers: Russia and the Future of Drone Swarms", Apr.20, 2021, Jan.14, 2021 Accessed, <https://mwi.usma.edu/strength-in-numbers-russia-and-the-future-of-drone-swarms/>

Key Issues

Overview

In essence, the international community's decades-long effort to completely get rid of the WMDs has always been backlashed by the doctrines of strategic superiority that derived from the thoughts and claims described by the school of realism in international relations theory. In the anarchic system of international relations where national security is manifestly a scarce resource, it could be impossibly hard to restrain self-serving countries from attaining excessive military power, for when there is no overseeing mechanism for a country to know how powerful its competitors are, the only course of action it can resort to is to keep investing in its military department so that its strategic superiority can hopefully be sustained. As the WMDs are defined by their apocalyptic potentials to destroy, it wouldn't be surprising that countries would invest in new types of WMDs to maximize their power of deterrence and thus their strategic superiority. This fundamental logic of developing new types of WMDs underscores the key issues of this field that await to be considered and addressed.

Firstly, the emergence of new types of WMDs introduces new variables to the equation of international security, which may be a destabilizing factor for the maintenance of global peace that has been narrowly sustained by the balance of nuclear deterrence since the end of World War II. As the nuclear deterrence system has already been deemed precarious by many critics, a new type of WMD that is more powerful than nuclear weapons could single-handedly overthrow the delicate balance of power of the international community. Secondly, the existing disarmament mechanisms and institutions that are supposed to prevent countries from developing new types of WMDs are functioning less effectively than desired as a result of countries' reluctance to be true to each other in terms of WMD disarmament. Lastly, to make matters worse, the international community has witnessed a deficit in political will to keep discussing the prevention of new types of WMDs due to the return of global conservatism and strategic contraction.

Harms of New Types of WMDs and Their Systems

a. Catastrophic Destruction Power and Humanitarian Concerns

Although countries desire to achieve interest by striking the civilians of their rivals, the principle that war should not harm civilians has been underlined since Ancient Greece.¹⁴ Given the unknown potential of WMDs, the intention of developing and using them should be thus questioned.

Generally, the fear of unknown crises, the suspicion of other countries' defense forces, and implications on health have distressed generations. The discouraging example of the Chernobyl Accident in the Soviet Union in 1987 has proved the great psychological trauma it may pose on people, with some even choosing to commit suicide.¹⁵ Therefore, same to the WMDs, never should countries neglect their concurrent psychological implications.

Secondly, the damage caused by WMDs may greatly undermine the ecological environment, infrastructure, and even the development of the economy and society in the long term. The existing nuclear weapons have already manifested their devastative power, especially their far-reaching impact on biodiversity and ecological conversation, which may even last for centuries. In the meanwhile, the trend of centralization of national infrastructure would exponentially increase the damage nowadays and in the future. Besides, one thing that needs to be noted is that the harms of WMDs are actually difficult to be estimated. Often being colorless, odorless, and imperceptible, the damage is thus hard to be mitigated correspondingly.

Also, it is worthwhile to note that once WMDs are possessed by terrorist groups, they will bring about an uncontrollable global crisis.¹⁶ Traditional acts of terrorism tend to be decen-

¹⁴ Joseph S NYE and David A Welch, *Understanding Global Conflict and Cooperation* (Pearson, 2011),19-22.

¹⁵ Ibid.

¹⁶ 夏治强, 王曼琳, 滕珺, “国际反大规模武器杀伤策略”, 第五届全国“公共安全领域中的化学问题”暨第三届危险物质与安全应急技术研讨会论文集, (Oct.2015): 24-29, https://kns-cnki-net-443.webvpn.cfau.edu.cn/kcms/detail/detail.aspx?dbcode=CPFD&dbname=CPFDLAST2016&filename=ZGHY201510002004&uniplatform=NZKPT&v=ATIETSGcRIN0yEar7goN2ahvHcNVuGjm97MhbXNinPD91kg5pJPD_YD1RoZKj5RELFxho2NQYaA%3D

tralized for their activities mostly being assassinations and kidnappings. However, different from the traditional model, modern terrorism has fixed organizations and strong financial resources. The poisonous gas release by the Japanese cult Aum Shinrikyo in 2014 has set the alarm to the world, and the "ricin" incident in London is reported by the British security services to be the first identified case of using biological and chemical weapons by terrorist groups after the 911.

Finally, WMDs are the only means which may destroy an entire civilization. Nazi Germany's gas warfare against the Jews during World War II is a direct example of killing a human race by using WMDs. In the future, once genetically edited biological weapons are used, everything will be changed from infancy onward. As what have said by the UN Secretary-General Guterres at the First UN General Assembly, "any harm from WMD must ultimately be shared by all of humanity."¹⁷ The toll they have on human beings is greater than one can imagine, which definitely outweighs the benefits countries gain by defeating and deterring the rivals.

b. Security Dilemma and Proliferation

The security dilemma refers to the situation where the action taken by one country may reduce the sense of security of the others, which in turn undermines the sense of security of the original state. To be concise, the major stakeholders in such a dilemma have always been trapped in a downward spiral where one party's move to address its lacking sense of security would eventually become a source of that of the others.

The reality of the first U.S.-DPRK nuclear crisis proved that this view is not only theoretically correct but also possible to happen in real life as long as the prerequisites exist. The DPRK needed the nuclear program as a bargaining chip in exchange for political, lifting of economic sanctions and energy assistance from the U.S. So it showed its sincerity in cooperation at the beginning, reciprocated when the U.S. gave cooperation in return and retaliated unmercifully when the U.S. betrayed it by strictly implementing the strategy of "tit for tat". The DPRK, which is far less powerful than the U.S., succeeded in forcing the powerful country to make concessions¹⁸.

¹⁷ General Assembly (GA), "General and Complete Disarmament: Dumping of Nuclear and Industrial Wastes in Africa", Oct. 31, 1988, Jan.13, 2022 Accessed, <https://documents-dds->

¹⁸ 王帆. 朝核问题: 美国退一步又何妨 [N]. 环球时报 Dec 7th 2009

The result of such a paradoxical situation is bound to be a rapid expansion of military arms, a continual escalation of regional tension, and eventually a potential threat to international security. Therefore, according to the theory of security dilemma, when countries face external danger, they will be very much willing to devote themselves to the scientific research of weapons such as WMDs and not willing to destroy the existing ones.

Balance of power is another important factor to maintain the stability of international society and has been affected by the enormous destructive power of nuclear weapons. In essence, the peace of the post-World War II world often called "the peace of terror", was maintained based on nuclear parity, and people have been living for decades now on top of a huge "nuclear powder keg" that could destroy the entire human civilization. For instance, the Cold War arms race had allowed the U.S. and Soviet nuclear arsenals to grow to a level sufficient to destroy the world.¹⁹ With the development of means of delivery, attacks on strategic nuclear weapons are still like a "spear without shield" that is indefensible so far.

Compared to the possession of WMD by the two major powers, the emergence of new types of WMDs means that the original balance of power based on equal retaliation capabilities is broken, which is not conducive to maintaining peace and will definitely influence the existing international system.

Firstly, the emergence of new types of WMDs will inevitably lead to intensified regional arms races and severe conflicts. The potential or existing conflicts with other countries often make them more eager to obtain WMDs as the possession of WMDs by one country means absolute advantages in conflict. Furthermore, considering the damage and the possible arbitrary use of WMDs, it will offer countries more space and initiative in negotiations, thus mitigating or even altering the disparity of strength between countries.

Secondly, such emergence where people attempt to produce weapons based on technologies that are yet to be fully understood will make proliferation more possible than before;

¹⁹ 胡高辰, 和红梅, 胡华忠, "核均势视角下的印巴冲突研究", Jan,5,(2021), <https://kns-cnki-net-443.webvpn.cfau.edu.cn/kcms/detail/detail.aspx?dbcode=CJFD&dbname=CJFDLAST2021&filename=LAYA202101006&uniplatform=NZKPT&v=wX1mg9lj8WobsLFnTLHvtlg6idM20uLKIPR016h-dzBLS-dP-v5A1LnTei4uMxf85>

thus, it will facilitate terrorist activities and make them easy to obtain these weapons. Since terrorists are representatives of extremist forces, who may indiscriminately kill innocents, their possession of WMDs thus poses a great potential danger to international security.

Thirdly, the proliferation of WMDs is also bound to subvert the Realist theory. WMDs make it impossible to practice a winner-take-all strategy between states. Since the construction of the Westphalian system, Realist scholars have defined war as one in which there are winners and losers. In the future, if new, faster, and more widespread WMDs are used simultaneously by both sides, winners and losers are only determined by the time range of evaluation. In this situation, countries will try to avoid large-scale wars and resort to new weapons like new types of WMDs and their systems. Also, the collective security mechanism guaranteed by alliance relations is also impossible to be practiced, which makes it extremely difficult for negotiations.

c. Stockpile

The larger the stockpile of WMDs, the more variables that exist in today's system of international security. The more variables there are, the more chaotic the system becomes, and this yields a bigger chance of a WMD misfire caused by strategic misjudgments or even a mechanical malfunction. Given the fact that current WMDs are already stockpiled in overwhelming numbers, the emergence of a new type of WMDs is bound to add more entropy into this already insurmountable chaos of WMDs, making the matter worse.

An important reason why the current UN General Assembly and Security Council have passed draft resolutions on such topics is that the stockpiles of WMDs are far greater than the quantities needed to be used and even stand a great burden on major powers. For instance, the huge military expenses of the Soviet Union account for its collapse to a large extent. Also, 32% of the U.S. defense budget has been used on the transportation and maintenance of WMDs.²⁰ However, since the 1960s, WMDs have been unable to be used normally

²⁰ 徐振伟, "论大规模杀伤性武器的扩散与国际和平与安全的维护", Aug,02(2019), <https://kns-cnki-net-443.webvpn.cfau.edu.cn/kcms/detail/detail.aspx?dbcode=CJFD&dbname=CJFDLAST2019&filename=T-PYX201908002&uniplatform=NZKPT&v=TI34rk05dNAs1tbzuyZ-Z-qCNRJRKTAybe2PRe54GG7wPKKR85P-SUDhusfy8RLgJ>

as conventional weapons. Countries have gradually recognized that it is not cost-effective to spend such a high cost just for military defense and reduced the irrational stockpile of WMDs. For instance, in the second half of the 1990s, Russia has revised its national nuclear policy and abandoned its "no-first-use commitment". In 2002, the United States issued the Nuclear Posture Review and the National Security Strategy Report, which also hopes to decrease the cost of storing WMD.²¹ Therefore, countries generally realize that blindly storing will only increase the likelihood of accidents and calls for actions accordingly.

On the other hand, the proliferation of WMDs would also increase the risk of WMDs in the transport, storage, and usage process. WMDs are often used as an important bargaining chip for political trust and winning support from major countries. One case is how the major countries use nuclear weapons to protect the regional security of smaller countries. For example, since there is no need for the U.S. and Russia to ensure security by stockpiling WMDs, the U.S. maintained the right to make decisions about the nuclear missiles deployed in Turkey. This is still the trend in the 21st century, and the world now is still witnessing an increase in the proliferation of WMDs from large powers to small powers, and some small powers have started to develop WMDs on their own.

d. Threat to international security

Today, with the rapid evolution of information technology and biotechnology, the development of new types of WMDs is still going on, which have two main directions.

First of all, the interoperability of global network information has increased the offensiveness and speed of new WMDs. With the rapid development of network information and its extensive military applications, attacks and defense against network information are changing the mode of combat force generation and interpreting new warfare patterns. Information weapons are the product of information technology applied to war in an advanced form, marking the transition from mechanized warfare to information-based warfare.²²

21 蔡华堂, 孟江虹, ‘构建国家安全之网: 美国生物国防安全计划评估’, Mar,04(2003), <https://kns-cnki-net-443.webvpn.cfau.edu.cn/kcms/detail/detail.aspx?dbcode=CJFD&dbname=CJFD2003&filename=-JFJW200303027&uniplatform=NZKPT&v=zrd7j09mbTeRlcxxVGyWPOwstpDVqRDKG708u5Zzr1x3ZQYk-MxM7bba80Xd5Y171>

22 Peterson D . Offensive cyber weapons: construction, development and employment [J] . The Jour-

Besides, biotechnology has made progress in the field of genetic technology and ecological pollution. Biotechnological WMDs have received more attention than traditional poison gas warfare and bacterial warfare.

From the perspective of contemporary global governance, the possession of WMDs by a few major states is an important means of maintaining basic international security and stability. However, in order to seize the opportunity, major countries strive to continue their control of the international community, while small countries will try to overtake during the process. Due to the restrictions of the existing international order and treaties, such research and development must be conducted in secret. Once the new WMDs are invented, it means that the collapse of the nuclear balance of power since World War II and the balance of power between the major powers will also be broken. At the same time, countries that were not dominant in the previous international system will thus take advantage of this chance to enhance their international credibility. Therefore, it is worthwhile for the world to consider how to build a new global military balance.

After the Cold War, the developed countries, led by the United States, combined technology with nuclear technology and information technology to create a new "trinity" strategic deterrence system. The U.S. has developed a new "trinity" strategic deterrence system, utilizing the information advantage of space to develop the deterrent effect of military information support and then developing a space strike deterrence system. Fundamentally, the evolution of the U.S. strategic deterrence system is aimed at seeking absolute security and maintaining world hegemony. However, the acceleration of the space deterrence system has reduced global strategic stability. Anti-satellite weapons cause fear among potential adversaries and reduce the stability of the first strike.²³

As Obama writes in his memoir, "all peace is built on the idea that we have the same ability to do harm above all else. We never trust our enemies; we simply trust their ability to destroy us"²⁴ According to the Realist theory, the role of deterrence as a means of maintaining in-

nal of Strategic Studies, 2013, 36(1): 120-124 .

23 Robert P. Merges and Glenn H. Reynolds, "Rules of the Road for Space? Satellite Collisions and the Inadequacy of Current Space Law," *The Environmental Law Reporter (ELR) News & Analysis*, Vol. 40, Issue 1, 2010.

24 Barack Obama, *A promised land* (World Knowledge Publishing House, 2008), 187-221

ternational order cannot be ignored. At the same time, according to Constructivist thought, it takes time for the international community to develop a consensus on the fear of WMDs. Therefore, preventing the emergence of new types of WMDs is the best means to maintain the international order.

Challenges to Existing Disarmament Mechanisms

Even if a country understands that the emergence of new types of WMDs could lead to the collapse of the global balance of deterrence which would eventually pose threats to its own national security, it may still choose to be the one who commands such new WMD first. When it comes to the cause of such irrational behaviors of the perfectly rational countries, a wide variety of reasons could be enumerated, among which the lack of trust among countries is agreed to be at the epicenter. Since no country could ensure that it wouldn't be cheated by another country in terms of not developing new types of WMDs, they have no choice but to conduct preemptive acts on other countries to avoid being cheated.

To tackle such a dilemma, several disarmament mechanisms have been established to restore trust among nations and thus remove their rationale of developing new types of WMDs in the first place, but they don't seem to be functioning as effectively as expected. If one examines their experiences combating currently existing WMDs, several deficiencies can be found in them.

a. Status Quo of the Current Institutions

The international community as a whole seeks to exclude WMDs from international competition and conflict, whether the existing ones or the development of new types of WMDs. In the final document of the General Assembly first special session on disarmament, the concept of discernment machinery has been brought up, which is constituted by four principles to negotiate and draft treaties involved.

Under the current circumstances, the structure of institutions regulating WMDs is similar to other UN entities—a deliberate commission, a consensus-building platform, and the main body for negotiating treaties. There is a commission that all members can participate to focus on deliberate principal—UNDC, and requires the United Nations First Committee to conduct negotiations in principal and build consensus, whereas the main and the only institution are empowered with multilateral disarmament negotiation is the CD in Geneva.

In such a main framework, it is highly predictable that the disarmament process could be hard to advance since barely a few countries show political wills. The first committee has more or less failed its function by the deeply divided votes of the international community in relevant topics while several nations claimed that the consensus making mechanism is a heritage of the Cold War which no longer fit this decade since, under such voting procedure, no resolutions can be conducted in the coming future. Meanwhile, the CD requires a unanimous consensus to advance a result, making the process impossibly hard. These are common issues shared by most concerning institutions, which can somehow give the international community a clear target to tackle down for making regulations for new types of WMDs by reviewing loopholes in the current.

Likewise, the current treaties governing the WMD related issues have displayed some deficiencies as well, and such deficiencies could serve as important lessons when facilitating the new regulations regarding future WMDs and their systems. For instance, only the first five nuclear-weapon states are permitted under international law to possess nuclear weapons, and they are bound by Article VI of the 1970 NPT to work towards the abolition of all nuclear weapons in the context of general and complete disarmament.²⁵ Biological and chemical weapons are prohibited to all state parties by the BWC of 1975 and the CWC of 1997, respectively. There is, however, an exception in the CWC for non-lethal chemical agents used for law enforcement purposes, which may expand in the future. Interestingly, no comparable treaty exists to ban radiological weapons, although there have been efforts to do so.

²⁵ United Nations Office on Disarmament Affairs, "Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare," n.d. <https://treaties.unoda.org/t/1925>.

Current mechanisms do to some extent show their capacity for self-correction. Since one of the NPT protection mechanisms conducted by the IAEA, which serves as a supervision institution, was not able to tell and prevent when Iraq has taken the advantage of loopholes that allows this nation to embezzle facilities that have already been declared. The IAEA perfected this loophole while improving several other mechanisms by adopting a 93+2 project. This could be a counterexample if the international community simply loses its confidence in current safeguard mechanisms. Whereas the result is not satisfying since this capacity of self-correction is far away from containing the acceleration of the global nuclear crisis. Whether the current mechanisms are qualified for today's world is still being questioned.

b. Weak Enforcement & Supervision

Throughout all conventional institutions coping with WMDs, the NPT, the CWC, and BWC could be seen as the most essential institutions. As with the power and function of the Geneva convention, these three protocols share a common spirit similar to legislation to the international community.

Enforceability of such provisions determines the effectiveness of the initial intentions that the treaties were signed as well as the consequences of violating relevant conditions.

Bilateral and multilateral conventions could be seen as the commitment to ensuring trust between countries to resolve regional conflicts. It will be rather seen as a kind of strategic ambiguity when referring to restrictions and regulations concerning the use, development, and possession of WMDs, and to some extent to be a measure of shelving disputes. Consequently, these codes are less effective when regulating nations themselves conduct serious actions.

Unimagined circumstances were brought up in the previous decades and challenged the enforcement of current treaties. Speculations that similar situations would have come up after the implementation of a new treaty regulating new types of WMDs can be very reasonable. Enforcement crises like North Korea and Iran violating current adopting institutions might be an insight for future regulations' reference.

While the enforcement issue can be interpreted as more connected to current challenges, the urgency to consummate the role of supervision shall inspire more future regulations.

The lack of supervision under the context of new types of WMDs comprises two aspects. First, the currently existing disarmament institutions and regimes are not capable of tracking the developments of WMDs in the countries concerned. Second, the international community cannot effectively monitor and assess the impact of new developments in science and technology on security.²⁶

Combating the development of existing types of WMDs is hard enough, whereas the difficulties' patterns can be of importance in the guidance meaning of regulating new WMDs. Especially concerning technical issues, since the rapidly changing world seems not able to supervise and assess cutting-edge frontier technologies' developments that are even impossible to limit and regulate. It will still remain a question for the international community that how to confront this situation.

For instance, there is growing concern that rapid advances in the biological sciences are outpacing the ability to evaluate or mitigate their security implications. This concern has been accentuated for some by the absence of a standing scientific advisory board comparable to the one that supports the OPCW on chemical weapons issues.²⁷

The definition of weapons of mass destruction would remain uncertain and controversial in the coming future, and its value as an analytic category would be increasingly open to question. The ambiguity of whether technologies are threats can be one of the biggest blocks of adopting a supervision system of possible dangerous technologies. This requires a shared value but is conducted through flexible means. At the level of the United Nations, such things are difficult to be dealt with flexibly, so this also leads to an abstract and general measure

26 UN Geneva, "CONFERENCE ON DISARMAMENT DISCUSSES NEW TYPES OF WEAPONS OF MASS DESTRUCTION, A COMPREHENSIVE PROGRAMME OF DISARMAMENT, AND TRANSPARENCY IN ARMAMENTS," ungeneva, 12 June 2019, accessed 21 January 2022, <https://www.ungeneva.org/en/news-media/meeting-summary/2019/06/conference-disarmament-discusses-new-types-weapons-mass>.

27 Sebastian Robin, "The Pentagon Plan to Deploy an Arsenal of Hypersonic Weapons in the 2020s," Forbes, 30 April 2020, <https://www.forbes.com/sites/sebastienrobin/2020/04/30/the-pentagons-plans-to-deploy-an-arsenal-of-hypersonic-weapons-in-the-2020s/#67b9b5c33a5d>.

without concrete implementation, even if relevant provisions are made.

c. Arbitrary Withdrawal

Since this committee will focus on regulations concerning new types of WMDs and their systems, withdrawal issues could be hard to negotiate while certain codes have never been displayed. It is still possible to find some indications of a withdrawal crisis under current regulations on WMDs.

When the target nation is far too powerful, way too remote from the integrated international community or a one-man head of state, sanctions being conducted from the rest of the world (given that they are carried out) would fade in these circumstances. North Korea has caused an uproar by its use of this provision of the treaty. Article X.1 only requires a state to give three months' notice in total and does not provide for other states to question a state's interpretation of "supreme interests of its country". In 1993, North Korea gave the notice to withdraw from the NPT. However, after 89 days, North Korea reached an agreement with the United States to freeze its nuclear program under the Agreed Framework and "suspended" its withdrawal notice. In October 2002, the United States accused North Korea of violating the Agreed Framework by pursuing a secret uranium enrichment program and suspended shipments of heavy fuel oil under that agreement. In response, North Korea expelled IAEA inspectors, disabled IAEA equipment, and, on 10 January 2003, announced that it was ending the suspension of its previous NPT withdrawal notification. North Korea said that only one more days' notice was sufficient for withdrawal from the NPT, as it had been given 89 days before.²⁸

The IAEA Board of Governors rejected this interpretation. Most countries held that a new three-month withdrawal notice was required, and some questioned whether North Korea's notification met the "extraordinary events" and "supreme interests" requirements of the treaty. The Joint Statement of 19 September 2005 at the end of the Fourth Round of the Six-Party Talks called for North Korea to "return" to the NPT, implicitly acknowledging that

²⁸ JONES OGUADINMA JOSHUA, "INDIA-PAKISTANI RELATIONS FOR ASIAN PEACE IN THE NEW MILLENNIUM," repository.unn.edu.ng, October 2014, <http://www.repository.unn.edu.ng/bitstream/handle/123456789/2359/Oguadinma%20Joshua%20Jones.pdf?cv=1&isAllowed=y&sequence=1>.

it had withdrawn.²⁹

Expressions can always be interpreted into different meanings, and by claiming certain words are ambiguous and equivocal, countries who consider one step forward than the treaty itself are bound to find excuses in case of having the chance to violet them. How to prevent this situation is of importance when negotiating deals in terms of new types of WMDs.

d. Unpredictability of Future WMDs

Previous introductions of the deficiencies existing in current mechanisms have proven that the international efforts on regulating WMDs are constantly being challenged. These sectors, macroscopically speaking, combine together in contributing to a more unpredictable future, especially in the context of regulating future types of WMDs. Concerning the reliability of future institutions, a far more inclusive and extensive point of view shall always be adopted.

Future WMDs are more unpredictable and dangerous because the nature of its development has lifted from pushing a certain kind of apparent destructive technology to the edge in its own perspective to a combination of technologies, which could be referring to certain civilian-use hotspot technologies that are powerful but oblique form helping the development of future WMDs. It is claimed by an NIU Presidential Scholar in November 2019 that AI, biotechnology, quantum systems, and AM are merging or disruptive technologies that could impact the very nature of future WMDs while some other technologies are still beyond the sight of the public.

For example, AI will be important to gleaning insights from relevant data sets to advance biotechnology, quantum systems, and AM. These four technologies also will converge with other emerging or disruptive technologies that are not mentioned, including cyber, 5G, space, and nano.³⁰ They are not WMD technologies perse but broad enabling ones with many civilian and military applications, only some of which concern WMD. Their influence

²⁹ Ibid.

³⁰ John P. Caves, Jr. and Carus W. Seth, "THE FUTURE OF WEAPONS OF MASS DESTRUCTION," *NIU Presidential Scholar November 2019 – November 2020* 2, no. 1 (2020).

is already being felt, though their direct impact on WMD may not manifest until beyond the current horizon. AI, biotechnology, and quantum systems also are explicit areas of great power competition,³¹ and these technologies can easily become catalysts when pushing the development of future WMDs.

The end of the Intermediate-Range Nuclear Forces Treaty and technological and engineering advances bearing on hypersonic and unmanned systems, remote sensing, and perhaps also nuclear propulsion are enabling the development and deployment of ways to deliver nuclear and conventional payloads over longer distances with greater speed, maneuverability, and precision. These developments are blurring the lines between nuclear and conventional operations and between strategic and operational effects. Emerging or disruptive technologies, including artificial intelligence, biotechnology, quantum systems, and additive manufacturing, are expected to enhance these capabilities, enable the creation of new ones, and make some existing capabilities more accessible.³²

It is apparent that this regular and irregular saltation have shaken the primitive foundation of current institutions, which could be seen as the slow fade of international credit on collaboration and commitments for a peaceful world.

Deficit of Political Will

a. Security Anxiety

The reluctance for substantial negotiation for certain regional powers can also be explained as the fear of security anxiety, especially for middle powers, because they neither can outweigh conventional military forces and traditional WMDs nor have the safety and crisis management mechanisms to prevent accidental use of traditional WMDs nor other means to achieve mutual deterrence. Therefore, they tend to consider the new types of WMDs and their systems as necessary means for redressing imbalances in military capabilities

³¹ Ibid.

³² Ibid.

to overcome the qualitative advantages in conventional military forces and traditional WMDs. For instance, the superiority of India in conventional weapon systems may lead to Pakistan's assertion that seeking new types of WMDs and their systems will be effective measures to balance the power of its neighbor.³³ Also, for those countries facing serious internal and external security challenges, like countries in the Middle East, the capabilities of new types of WMDs and their systems are obviously linked to their military imbalances and strategic competition. For example, Iraq, Syria, and Libya may see new types of WMDs and their systems as new sources to gain geo-strategic weight.³⁴ Therefore, given that some countries may seize this chance to undermine the existing power disparities and outweigh in strategic competition, negotiations of the disarmament of new types of WMDs are often frustrated.

Most importantly, the acquisition of new types of WMDs and their systems may serve as a powerful deterrence.³⁵ It can be best manifested by the attitude of North Korea as it is currently relating its nuclear program to the increase of Western aid to meet its economic problems. Traditional WMDs have already served as a bargaining chip for North Korea to wrest concessions and benefits, and even let it immune from any international response. For instance, North Korea could use the rising international fear of its nuclear power to pressure other members of Six-Party Talks to abandon its denuclearization goal and instead only impose some limitations on North Korea's nuclear programs in return for diplomatic and economic concessions.³⁶ In the meanwhile, it is worth pointing out that the deterrence of WMDs has intimidating psychological effects, even just small quantities. If countries like North Korea resort to new types of WMDs and their systems, it will pose more considerable security pressure and fear to the neighboring region and the world. Therefore, emerging new powers and lesser powerful countries like North Korea may seize this opportunity to extend security pressure to the region and undermine the existing balance of power.

33 Yannis A. Stivachtis, "The International System and the Use of Weapons of Mass Destruction", *Journal of Strategic Studies* 23, no.1 (2000):101-131.

34 Ibid.

35 Bruce W. Bennett, "Deterring North Korea from Using WMD in Future Conflicts and Crises", *Strategic Studies Quarterly* 6, No.4 (2012): 119-151.

36 The Heritage Foundation, "Summer 2018 Insider: Why Does North Korea want Nukes?", Aug.13, 2018, Jan.15, 2022 Accessed, <https://www.heritage.org/insider/summer-2018-insider/why-does-north-korea-want-nukes>.

b. Global Conservatism and Strategic Contraction

One of the most important features of the 21 century international system is the growing tendency towards strategic contraction of major powers. For instance, apart from withdrawal from Afghanistan, the United States of America has reduced its military presence in several conflict zones in recent years and lowered troop levels in Iraq from 170,000 in 2007 to 2,500 in 2021, and in Syria from 1,700 in 2018 to around 900 in 2022. The reduction of military bases and troops around the world generally undermines the superiority of conventional weapons. To maintain the existing military capabilities, many major powers resort to new weapons like intermediate-range ballistic missiles, hypersonic weapons, drone swarms, etc. Therefore, many countries are reluctant to disarm new types of WMDs and their systems, because they are conducive to maintaining the existing military capabilities and offsetting the influences of emerging new powers.

Moreover, the development of new types of WMDs and their systems falls into the classic Prisoner's Dilemma logic. On the one hand, the key notion in the Prisoner's Dilemma is the inherent propensity to cheat in an anarchic system rife with uncertainty. Countries are thus bound to have reservations about their possession of weapons and be reluctant to put their cards on the table in negotiations about the disarmament of new types of WMDs and their systems. Therefore, to protect themselves and maintain the current balance of power, major powers may choose to arm themselves with larger and more sophisticated weapons, and new types of WMDs and their systems are clearly pivotal in this competition. In this regard, the Treaty between the U.S.S.R. and the U.S.A. on the Elimination of Their Intermediate-range and Shorter-range Missiles and the Treaty on Open Skies is crucial to avoid a potential military race. However, the Prisoner's Dilemma makes it difficult for such treaties to function in the long term.

On the other hand, Kenneth Waltz has pointed out that greater uncertainty makes it more likely that a decision-maker will misjudge the intentions and actions of a political opponent.

Therefore, the possession of new types of WMDs and their systems enable countries to be more confident confronting security dilemmas and even granted the chance to launch a preemptive strike.

Moreover, Prisoner's Dilemma can explain why some countries are active in the negotiation on certain key issues related to new types of WMDs and their systems while remaining passive in the others because actor's emphasis on the absolute and relative gains and losses corresponds to countries' major concerns. Therefore, it is not surprising that the attempts to sign up general and specific agreements of disarmament of new types of WMDs and their systems are extremely chaotic both in early times and today.

Possible Solutions

Even though no concrete agreements, either general or specific, have been reached on this issue, the progress on facilitating some first-step measures hasn't been as pessimistic as the realism school of IR theory projects. Since its first appearance in 1975, the prohibition of the development of new types of WMDs has been on the agenda item of the General Assembly once every few years. Also, the international community has stated on multiple occasions its determination to ultimately strike a deal on preventing the occurrence of new types of WMDs capable of claiming the lives of thousands.

The rationale behind such determination, as held by the neo-liberal institutionalists, is that the establishment of international institutions would reduce cheating and defection among countries and meanwhile force countries to make decisions with sustainability and long-term benefits in mind. By affirming principles, establishing confidence-building mechanisms, reinforcing sanction regimes, and making full use of the current disarmament platforms, the incentive behind countries' investments in the development of new types of WMDs would be removed, and thus a comprehensive agreement on the prohibition of such weapons could be facilitated.

Establishment of Principles and Norms

The establishment of principles governing the prohibition of the development of new types of WMDs and their systems should be highly prioritized.

Neoliberal Institutionalism holds that the establishment of principles helps formulate a set of common and constant expectations to the long-term relations among the players of the international community, correlating countries' obligations with their gains in the long run.³⁷ If a country lives up to the expectations of other countries by following the principles, the international institution will then sustainably award this country with positive feedback of

³⁷ Fan WANG and Bo QU, *Theories of International Relations: Thoughts, Paradigms and Hypotheses* (Beijing: World Affairs Publishing House, 2013), 144-145.

various kinds. On the other hand, should a country defy the principles and deceive the other states, the rest of the international community would then accuse the defiant of having broken the rules using the principles as a source. Therefore, whenever a country plans to turn rogue, international principles and norms could force it to weigh the possible advantages of such cheating behavior and the disadvantages of being punished and isolated by the international community. If the institution is capable of carrying out such effective punishments, the chances of countries' cheating each other will be reduced, and stable cooperation using the principles as a guideline could be facilitated among nations to realize their common interests without having to be concerned about being deceived.

To establish such principles, a negotiation involving all countries concerned should be held. In the anarchic international community where all countries are equal stakeholders in terms of sovereignty, it would be impractical to rely on binding powers to enforce the rules excessively. Therefore, the best and only effective way to establish substantially functioning principles is by reaching a widespread consensus among all relevant countries. In the field of new types of WMDs, principles should be affirmed to address the following issues.

First, the notion of new types of WMDs ought to be better defined to adapt to the changing nature of threats so that misbehaviors could be more effectively identified. Today, the international community employs the definition of WMD that was confirmed in 1948, stating that the WMDs refer to "atomic explosive weapons, radioactive material weapons, lethal chemical and biological weapons, and any weapons developed in the future which have characteristics comparable in destructive effect to those of the atomic bomb or other weapons mentioned above."³⁸ While such a definition covers the essence of WMDs in a theoretical sense, it could be rather deceiving in terms of defining the new types of WMDs, as one may deduce from this definition that a new weapon system must be capable of causing directly lethal damage to a large population to be defined as a new type of WMD. The recent development of technology, nonetheless, suggests that the damage done to a civilian population can be equally devastating even if no direct physical contact is made between the weapon system and the targets. That is to say, mass destruction to civilian

³⁸ Commission for Conventional Armaments, "UN document S/C.3/21/Rev.1," *United Nations*, published 12 August 1948.

targets could be achieved remotely and intangibly using some of the latest technology, and the forms of such weapons could be completely different from a nuclear warhead or a bio-hazard container. This may include cybersecurity breaches and weaponization of artificial intelligence³⁹ or any other weapon systems based on emerging technology that humankind has barely understood its true nature. Evidently, it would be very difficult to actually find a definition that satisfies every country when it comes to notions in the highly sensitive field of disarmament, for every country would lean toward a definition that grants it maximum strategic freedom. However, a first-step consensus should be formulated regarding the basic principles of identifying new types of WMDs and their systems, whether the committee decides to embrace a general prohibition attempt or a specific agreement attempt.

Second, the fundamental guiding principles in dealing with such new types of WMDs shall also be considered. To begin with, taking into consideration the booming developments in information and digital technology in recent years, are the existing approaches to this issue (namely the general prohibition approach and the specific agreement approach) still viable? If the development speed of potentially weaponizable technology has transcended people's capability to fully perceive and predict them, will it be too late to wait until the specific agreements are negotiated? Meanwhile, as the killing methods of the potential WMDs are getting more and more diverse, will a general prohibition approach effectively cover all of them? These questions bring us to the second dimension of the principles needed, which is the choice between responsive measures versus preventive measures. Should the former be employed, then how to prevent the responsive measures from becoming another NPT where the proliferation of such weaponry is strictly prohibited, whereas the nuclear arsenals of the P5 are left untouched? Conversely, if the preventive measures are taken, the international community has to face another realm of questions that are far more profound and complex than the previous ones, namely, where exactly is the fine line between "peaceful technology" and "weaponizable technology"? All the current types of WMDs that exist today were invented following a major breakthrough in fundamental science that proved to be a double-edged sword to humanity, so is it actually practical to prevent the development of

³⁹ UN Geneva, "CONFERENCE ON DISARMAMENT DISCUSSES NEW TYPES OF WEAPONS OF MASS DESTRUCTION, A COMPREHENSIVE PROGRAMME OF DISARMAMENT, AND TRANSPARENCY IN ARMAMENTS," *ungeneva*, 12 June 2019, accessed 21 January 2022, <https://www.ungeneva.org/en/news-media/meeting-summary/2019/06/conference-disarmament-discusses-new-types-weapons-mass>.

new types of WMDs without slowing down the development of technology itself that could benefit the human race?

Despite all these uncertainties, it is definitely worth the time and effort to construct an outline of principles on this issue.

Decentralized Sanction Mechanism

A decentralized sanction mechanism is the institutional guarantee of the actualization of principles. It functions by authorizing or urging the member states of a treaty to impose unilateral sanctions on a state that defies the principles, thus forming a non-centrally coordinated set of sanctions and forcing the subject back to the cooperative state.

A decentralized sanction mechanism is a liberal-institutionalist solution to the shortage of enforcement power in an anarchic international community. The international community defers from a domestic society in that the latter is constructed with a hierarchy of power among different actors. By virtue of the sovereign power, the state has the binding power to directly punish the individuals within its jurisdiction as long as these individuals break the rule. The logic behind this binding power is that sovereignty is the utmost power within a domestic society, and thus the state could monopolize all violent means, granting it the capacity to enforce its laws relying on a centrally coordinated justice system. In the international community, nonetheless, such utmost power is nowhere to be found. Even the only organ of the United Nations that has binding power to all its member states, namely the Security Council, isn't remotely close to being a central government of the international community, since the binding resolutions that it adopts rely on the domestic legislation systems of its member states to be ratified and effectively executed. Therefore, it is safe to conclude that the most effective mean of enforcement under the context of international security is by using the decentralized sanction mechanism, where an international institution helps form agreements regarding which actor ought to be sanctioned whilst each member state of the institution decides how exactly to implement the sanctions required.

Currently, the most commonly employed decentralized sanction mechanism is the UNSC. Throughout the development of the North Korean nuclear crisis, the UNSC facilitated a

series of collaborative sanctions carried out by the member states of the United Nations (see Table 1). Nonetheless, the UNSC may not be the ideal platform for sanctions regarding the new types of WMDs, for it has little to no influence on the policies of the P5, which are among the few countries existing that are actually capable of developing new types of WMDs. Additionally, the UNSC sanctions that target the specific departments of a country have proved to be lacking precision. In the case of the DPRK, for instance, the UNSC led sanctions not only failed to bring the North Korean nuclear program to a moratorium but also caused a severe economic and humanitarian crisis in the country.⁴⁰

Year	Title	Principle Sanctions
2006	Resolution 1718	Prohibited the export of military supplies and luxury goods to the DPRK
2009	Resolution 1874	Banned all imports and exports of weapons with the DPRK
2013	Resolution 2087	Prohibited any further development of technology applicable to North Korea's ballistic missile programs
2013	Resolution 2094	Aimed to exclude the DPRK from the international financial system
2016	Resolution 2270	Expanded the arms embargo, imposed an asset freeze on government entities, expanded the financial sanctions, called for cargo inspections related to the DPRK
2016	Resolution 2321	Further expanded economic sanctions on the DPRK by prohibiting the country from selling minerals completely and coal that exceeded an annual cap
2017	Resolution 2371	Banned the export of coal
2017	Resolution 2375	Banned textile exports, capped refined petroleum product imports, banned natural gas and condensate imports
2017	Resolution 2379	Further capped petroleum imports, capped crude oil imports

Table 1 Major UNSC Sanctions on DPRK⁴¹

Therefore, a decentralized sanction mechanism constructed upon the experience of those already existing I help enforce the principles established for this topic.

⁴⁰ Food and Agriculture Organization of the United Nations, "Democratic People's Republic of Korea (DPRK) FAO/WFP Joint Rapid Food Security Assessment," *United Nations*, May 2019, accessed Jan.25 2021, <http://www.fao.org/3/ca4447en/ca4447en.pdf>.

⁴¹ Kelsey Davenport, "UN Security Council Resolutions on North Korea," *Arms Control Association*, April 2018, accessed 18 Jan 2022, <https://www.armscontrol.org/factsheets/UN-Security-Council-Resolutions-on-North-Korea>.

Confidence Building and Transparency Enhancing

With the general principles and the sanction mechanisms settled, a transparency building effort shall be made to kick start their cooperation in disarmament, for transparency building provides symmetric information for all stakeholders concerned, denies countries' distrust among each other, and thus reinforces countries' confidence to fulfill their treaty obligations.

The asymmetry of information among countries underpins the pessimistic attitude toward international cooperation. Essentially, cooperations regarding disarmament matters require countries to either expose their confidential WMD programs to the international community or limit their own development in this field, and no country would be willing to do that unless concrete evidence is provided that all other countries are doing the same. Otherwise, distrust and suspicions will arise in the already precarious international community, discouraging self-serving countries from obeying international laws in order to guarantee their own survival and posing a negative influence on the international security regime.

Therefore, a monitoring mechanism or information service that is trusted by all stakeholders should be championed to enhance transparency in this field, provide information for the international community to support collaborative decision-making, and thereby maintain a sustainable cooperation effort. Specifically speaking, a transparency-enhancing mechanism promotes cooperation in the field of the prohibition of new types of WMDs in two ways. Firstly, from a preventive perspective, effective international monitoring allows countries to acknowledge each other's recent progress in developing WMDs, reduces cheating or deceptive behaviors among the stakeholders, and thus removes countries' source of paranoid security anxiety as well as preventing the occurrence of reckless behavior following potential misjudgment of each other's intentions. This will convince countries that developing new types of WMDs for the sake of defensive purposes wouldn't be necessary and would only be a waste of public resources. By the same token, from a responsive point of view, international monitoring or information service allows the international community to effectively identify a breach of the principles as soon as possible, providing material evi-

dence for the sanction mechanism to be deployed. This would further enhance the credibility of the international institution itself.

One possible application of this theory in the field of the prohibition of new types of WMD is the establishment of a technical subdivision under the current institutions dedicated to monitoring possible progress in this field.⁴² Such a subdivision shall comprise multinational experts that do not adhere to the orders of any government so that the credibility of its work can be affirmed. Also, this subdivision shall be providing technical facts and details only and should restrain from interfering with the political side of the matter. The IAEA may have provided an example for the establishment of such a subdivision. In addition to the field branch of such a subdivision, new surveillance technology could be implemented to promote the efficiency of international monitoring. In the Cuban missile crisis and the North Korean nuclear crisis, aerial and satellite surveillance, along with the information sharing from domestic intelligence agencies, have proved to be of remarkable help. Nonetheless, the potential overstretching of such unilateral ability to monitor remains to be taken into consideration.

Monitoring the Advancement of Science and Technology under the Context of International Security

Recalling the development of existing WMDs, it can be concluded that the advancement of fundamental science and applicational technology plays a quintessential role in the development of the more effective means to kill. Each time a breakthrough is made in the field of fundamental science, humanity celebrates the giant leap that brings people one step closer to the essence of nature and yet fears the birth of a new form of destructive power that could be used against the civilian populations.

Although it should never be deemed appropriate to prevent the occurrence of a new type of WMD at the cost of technological advancement, a monitoring mechanism could be cham-

⁴² Weapons of Mass Destruction Commission (WMDC), *Weapons of Terror: Freeing the World of Nuclear, Biological and Chemical Arms* (Beijing: World Affairs Publishing House, 2007), Chinese translation by CACDA, 157.

pioned to at least enable people to keep an eye on the potentially weaponizable dual-use items and technologies.⁴³ To begin with, technical and moral principles should be taken seriously in the scientific field. This requires raising awareness of the scientific community as well as the general public. Additionally, governmental supervision and peer review capable of sorting out the potential danger of a scientific finding should be conducted prior to the publishing of the result. Moreover, laws and regulations on all levels should be formulated to protect the whistleblowers of an incident. Lastly, international forums and conventions also play a crucial role in reaffirming the moral obligations of scientists and institutions.

Comprehensive Use and Improvement of Current Mechanism

At present, the best negotiating platform for discussing any WMD-related topic is the CD because, despite the existence of a series of issues to be mentioned below, the CD remains the most credible disarmament negotiating platform in the world today. Based on the three major treaties, the delegates need to further solve the current and possible problems of WMD on the existing platform, as well as some defects of the platform itself.

In the long process of prohibiting weapons of mass destruction, three conventions of great significance have been born to constitute the basic mechanism for the international community to prohibit the proliferation of weapons of mass destruction. They are the NPT, the CWC, and the Convention on the Prohibition of the Development, Production, and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction.

The common and fundamental role of these treaties is to give reference for the best solution to the problem of new types of WMD in the world today. For instance, The Treaty on the Non-Proliferation of Nuclear weapons, also known as the Treaty on the Prevention of Nuclear Proliferation or the Nuclear Non-Proliferation Treaty, is the cornerstone of the international nuclear disarmament and non-proliferation system and an important part of the post-war international security system. In the half-century since its ratification, the treaty has achieved positive results in promoting nuclear disarmament, curbing nuclear proliferation, and promoting nuclear energy for the benefit of mankind. Another example is the

⁴³ WMDC, *Weapons of Terror*, 141.

CWC signed on January 13, 1993. It is the first international arms control treaty in human history that comprehensively prohibits and destroys a whole category of weapons of mass destruction and has a strict verification mechanism. It symbolizes that mankind has taken an important step in maintaining international peace and security by forming concrete and feasible measures using international treaties as mediums and the existing UN bodies as platforms.

It can be seen that although there has been what can be called fruitful progress in the four aspects of mass weapons in the traditional sense, countries have not achieved any results so far in preventing new types of WMD. At present, apart from radioactive weapons that have already been listed in the agenda of the United Nations, the scope of new WMDs can only generally include network weapons (the use of large-scale network viruses), space weapons (space weapons, low earth orbit weapons, etc.), autonomous weapons (such as artificial intelligence weapons), and genetic weapons.⁴⁴ When the problem is limited to the specific term "new", countries adhere to two traditional routes as the starting point of their solution ideas, namely "discuss the possible new types of weapons of mass destruction and include as many types of weapons as possible in the solution" and "this problem does not need to be discussed because it is unable to accurately define specific new types"⁴⁵ It should be pointed out that the position of a country is very the same as its situation in the development of weapons of mass destruction. Therefore, delegates need to carefully study their position to reach a solution most in line with their national positions in this committee.

Finally, delegates should not forget that the restrictions on weapons of mass destruction in the traditional sense have many deficiencies that can be repaired, a fact that provides lessons learned for the facilitation of new treaties or institutions regarding new types of WMDs. Taking nuclear weapons as an example, the NPT simply divides states into nuclear and non-nuclear states and expounds in great detail the responsibilities and obligations that non-nuclear states should bear. However, the treaty is very vague about the respon-

44 Fu Cong, "Statement by Ambassador Fu Cong at the plenary session of the conference on disarmament on new types of weapons of mass destruction," *Permanent mission of the people's Republic of China to the United Nations Office at Geneva and other international organizations in Switzerland*, published on Feb 22nd, available from https://www.fmprc.gov.cn/ce/cegv/chn/dbtyw/cjkk_1/hdft_1/t1440646.htm

45 "New Types and Systems of WMD: Consideration by the CD," *UNIDIR*, 2

sibilities of nuclear states. It should be emphasized that this treaty was written during the cold war between the United States and the Soviet Union. Nuclear states inevitably sacrifice part of the homeland security of other non-nuclear states to safeguard their interests, which has aroused potential dissatisfaction. After the five permanent members announced that they would continue to perform their treaty obligations in early 2022, whether other countries decided to continue to abide by the treaty needs to be carefully examined (for example, Iran has announced its withdrawal from the treaty).

The main existing disarmament negotiation platforms are the CD in Geneva and treaties. Treaty restrictions are still the most effective way to restrict countries in today's international community. However, this mechanism has a simple and fatal problem: it cannot restrict non-treaty states. This means that some countries (and very dangerous, it has become a trend) will be more inclined to leave the treaty rather than join it to seek their national security interests. This is also a manifestation of the prevalence of unilateralism and neoconservatism in international issues. Of course, the countries pursuing multilateralism led by China still call on all countries to join the treaty platform on a global scale to respond to the call of the United Nations to prevent the proliferation of mass weapons.

As the only multilateral disarmament negotiating body in the international community, CD plays a decisive and important role in disarmament within the United Nations system. Its significance is that countries can rely on this platform to reach a consensus on disarmament issues and conclusions. Although the threat of unilateralism still exists, all countries hope to maintain the balance of the global security system led by nuclear security, so there is still a willingness to negotiate in good faith.

The biggest problem with CD is that it is a consensus-binding body. Therefore, to reflect its "consensus", each conclusion must be passed by a unanimous vote. This greatly reduces the efficiency of the conference because some countries will recklessly hinder the process of a topic for their interests. Therefore, since the 1990s, the CD has never made breakthrough progress, and treaties related to radioactive weapons have never been reached. We hope that delegates in this committee can make full use of the original platform and mechanism (such as the landmark reporting mechanism) to try to make some improvements and

breakthroughs. In particular, we are very pleased to see delegates explore the possibility of banning the prohibition of new types of weapons of mass destruction based on making full use of existing platforms.

Beyond WMD

The notion of “beyond WMD” refers to the study of how humanity can eventually escape from the dependence on the deterrence power of WMDs. It encourages the international community to look beyond the quarrel over specific weaponry items and to consider the matter of disarmament integrally by taking into consideration the interplay of different kinds of weapons and forces on each other.

A basic conclusion derived from the beyond WMD theory is that it would be impossible to fully realize the complete disarmament goal in a world stockpiled with excessive conventional forces.⁴⁶ As modern nuclear deterrence is established to prevent major armed conflicts between countries in the first place, the absence of strategic deterrence weaponry would potentially result in more arbitrary use of conventional forces. Meanwhile, the incentive of developing new types of WMD and their systems derives from the hope to challenge the status quo of the 21st century where the P5 are granted an unparalleled power in the practice of international relations by their legal state to own nuclear weapons. Moreover, whenever one of the P5 countries hopes to revise the current balance of power, it would also attempt to do so by developing more powerful weapons that override the nuclear deterrence system.

The projected goal of the beyond WMD theory is to completely centralize the use of international forces and prohibit any unilateral use of armed power unless it is used for sole defensive purposes. Although this goal is far from practical under the current international system, the claims of the theory do inspire the international community to consider the prohibition of new types of WMDs with the other forms of arms in mind.

⁴⁶ WMDC, *Weapons of Terror*, 167.

Country Positions

Global Influential Powers

1. United States

The United States is the country with the strongest comprehensive military strength in the world. Therefore, for the United States, the weapons of mass destruction represented by nuclear weapons are not entirely power but shackles. However, the United States will never allow other countries, especially the current non-nuclear countries, to develop nuclear weapons technology, because it is considered to be a destruction of today's nuclear balance. Therefore, the United States has been very active in curbing nuclear proliferation. However, when discussing new types of weapons of mass destruction, the United States holds a position of "non-cooperation". The specific reason is that the United States does not want to hinder its military development process by discussing the so-called "new types of weapons of mass destruction" that are not yet clear. It can be seen that some weapons under development by the United States and the development trend of its army are more or less in line with the characteristics of new weapons of mass destruction. Take its space force as an example. The United States established the national space command in 1985, marking the birth of the American space force. The space war research center was established in 1993, including the space war research laboratory, the space war academy, and the 527th Space Attack Squadron. For another example, the "RODS OF GOD" that the United States has been studying for some time is a space-based kinetic energy weapon, which belongs to the category of new weapons of mass destruction "outer space weapons". Therefore, the United States is more willing to discuss traditional weapons of mass destruction, especially nuclear security, than new weapons that currently exist or have not been developed, because it is related to whether the world strategic balance with the United States as the single-pole will be broken.

Influenced by the Cold War mentality, when stopping other countries from threatening the national security and interests of the United States through weapons of mass destruction, the United States has always emphasized taking the initiative. Therefore, in the situation

report issued by the U.S. Army in 1996, it was written that “special operations forces can effectively monitor, prevent or delay the development, production, and trafficking of weapons of mass destruction in the early stage, and can curb, prevent or deal with the use of weapons of mass destruction in the later stage.” The national strategy against weapons of mass destruction, published on December 11, 2002, describes in detail the strategy of the United States to curb weapons of mass destruction in the 21st century.⁴⁷

Regrettably, the US government has rarely mentioned the so-called “new” weapons of mass destruction in the documents currently published. In the US defense strategy, it is obvious that the existing weapons of mass destruction are more important. It is worth mentioning that under the deadlock in the discussion of “new types of weapons of mass destruction” in CD in recent 20 years, the uncooperative attitude of the United States is one of the important factors causing the deadlock.

The attitude of the United States towards the radioactive weapons that have not been regulated by a convention is that there is no need for states to establish an independent Convention on radioactive weapons. The United States and some other countries, especially the close military allies of the US, believe that radioactive weapons are not necessary to establish a convention because of their limited role in the battlefield and low-cost performance.⁴⁸

2. China

China has always opposed the proliferation of weapons of mass destruction, both the traditional ones and the possible new ones. Concerning new types of weapons of mass destruction, China believes that the following points should be taken to solve the challenges caused by scientific and technological progress:

First, carry out preventive arms control diplomacy. The international community should establish an authoritative scientific development review mechanism as soon as possible to assess the prospects and risks of military applications of new technologies. On this basis,

⁴⁷ “The national strategy against weapons of mass destruction,” *International Information Bureau of the State Department*, available from <http://news.sohu.com/01/76/news205257601.shtml>

⁴⁸ “New Types and Systems of WMD: Consideration by the CD,” *UNIDIR*, 9

international norms are formulated through negotiation to impose necessary preventive restrictions or prohibitions on the military application of new technologies.

Second, strengthen the standardization of scientific research activities. A code of conduct for scientists should be formulated promptly, taking into account various factors such as scientific and technological development, human safety and ethics, and reasonably regulating high-risk scientific research activities and scientists' behavior.

Third, establish an effective non-proliferation mechanism. Countries should constantly improve legislation and mechanism construction, and strengthen the control of sensitive technologies and items. The international community should strengthen cooperation and establish a universal and non-discriminatory export control mechanism to effectively prevent extremist terrorist forces from acquiring and using high-risk dual-use technologies and goods.⁴⁹

About unresolved radioactive weapons, China has promulgated and implemented regulations such as the regulations of the people's Republic of China on the control of nuclear export and the regulations of the people's Republic of China on the control of the export of dual-purpose nuclear goods and related technologies, as well as corresponding control lists, implemented a strict examination and approval system for the export of related items and technologies, and adopted severe punitive measures for violations. All these show that the Chinese government adheres to the norms of the trend of world denuclearization concerning traditional weapons of mass destruction (especially nuclear weapons). However, it should be noted that although the UNGA has adopted the TPNW, China and other permanent members of the Security Council and some other countries have not participated in the negotiations and have euphemistically expressed their willingness not to participate in the treaty. Therefore, as a nuclear state, China still believes that nuclear weapons are an indispensable part of the mechanism to protect its homeland security and maintain the world balance under nuclear deterrence.

⁴⁹ Fu Cong, "Statement by Ambassador Fu Cong at the plenary session of the conference on disarmament on new types of weapons of mass destruction," *Permanent mission of the people's Republic of China to the United Nations Office at Geneva and other international organizations in Switzerland*, published on Feb 22nd, available from https://www.fmprc.gov.cn/ce/cegv/chn/dbtyw/cjjk_1/hdft_1/t1440646.htm

3. Russian Federation

Russia's position is more or less similar to that of the Soviet Union. Therefore, Russia adheres to the "prevention policy" on the issue of weapons of mass destruction, that is, it should be solved through negotiation before new weapons of mass destruction appear. The biggest difference between this and the United States and most of its allies is that the United States and other countries believe that it is meaningless to discuss new types of weapons of mass destruction that have not yet emerged.

What needs more consideration is that although the prevention idea of "prevention before it happens" put forward by Russia is very constructive, what needs to be paid attention to is its efficiency. The 1972 Seabed Arms Control Treaty and the 1978 Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (Environmental Modification Convention, or ENMOD) have not been effectively implemented, because there is no possibility of the prevention of the norms in the treaty. This was also used by the United States and its allies in subsequent negotiations to refute the Russian position and attempt to increase allies for the United States position.

4. France

France has always supported the proposal of the CD on the prohibition of weapons of mass destruction, and on this basis, it has taken practical measures such as disarmament and the dismantling of nuclear weapons facilities on its territory. However, like other countries, France has not signed the TPNW. As a country with the second-largest number of overseas military bases in the world except for the United States, France believes that its homeland security still needs nuclear weapons as the most effective deterrent. France opposes the possession of nuclear weapons by non-nuclear countries. At the same time, influenced by the Cold War mentality of the United States, the Soviet Union, and the modern United States and Russia, France has also given up its commitment not to be the first to use nuclear weapons. However, on the issue of new types of WMDs, France holds a position similar to that of China and Russia, that is, it is necessary to classify and discuss new types of WMDs that haven't emerged yet. France denies possession of chemical weapons and acceded to the CWC in 1995 and the BWC in 1984.

5. UK

Britain possesses or once possessed all kinds of weapons of mass destruction, including nuclear, biological, and chemical weapons.⁵⁰ Britain is one of the five nuclear-weapon states permitted by the NPT and has an independent nuclear deterrent. Britain renounced the use of biological and chemical weapons in 1956 and subsequently destroyed its stockpiles.

Concerning new types of WMDs, Britain's basic attitude is the same as that of the United States, that is, if no exact types of WMDs and signs that they are already being used can be identified, there is no need to discuss this issue. As one of the most loyal allies of the United States in the western world, it is not surprising that Britain holds such a position. Ironically, Britain is a firm nuclear non-proliferation advocate in the international community, especially on the North Korean nuclear issue. However, it has transferred cutting-edge nuclear technology to Australia together with the United States, which has been unanimously condemned by international public opinion.

Special Stakeholders

1. Iran

Iran does not currently possess weapons of mass destruction and has signed treaties rejecting weapons of mass destruction, including the BWC, the CWC, and the NPT. Iran has a first-hand understanding of the impact of weapons of mass destruction - during the Iran Iraq war in the 1980s, more than 100000 Iranian troops and civilians were victims of chemical weapons.⁵¹

On the nuclear issue, Iran believes that it has the legitimate right to enrich uranium for peaceful purposes under the NPT, and further expresses that it "has always complied with its obligations under the NPT and the statute of the IAEA"⁵². Twelve countries are known to

⁵⁰ "Status of World Nuclear Forces," *Federation of American Scientists*, available from <https://programs.fas.org/ssp/nukes/nuclearweapons/nukestatus.html>

⁵¹ Gawdat Bahgat, "Nuclear proliferation: The Islamic Republic of Iran," *Iranian Studies Journal*, vol. 39(3), September 2006

⁵² "Final document of the 12th summit of the Non-Aligned Movement Summit in Durban, South Africa, 2-3

operate uranium enrichment facilities. Iran notes that “the failure of some nuclear-weapon states to fulfill their international obligations continues to be a source of threat to the international community”⁵³. Iran also said that “the only country that has ever used nuclear weapons still has a huge arsenal of thousands of nuclear warheads”⁵⁴ and called for an end to the transfer of technology to non-NPT countries. Iran called for the establishment of a follow-up committee to ensure compliance with the global nuclear-nonarmed agreement. Iran and many other countries without nuclear weapons said that the current situation in which nuclear-weapon states monopolize the right to possess nuclear weapons is “highly discriminatory”⁵⁵, and they promoted measures to accelerate the process of nuclear disarmament.

Although there is no further information about Iran's new types of WMDs, their position on this issue can be speculated. If Iran has plans to develop new weapons of mass destruction, it should speculate about dealing with the checks and balances of the United States; If it does not have this plan, it will predictably not agree with the plan of the P5, especially the United States, to develop new types of weapons of mass destruction, and try to stop it as much as possible. Because so far, the first element of Iran's national defense and security is to break away from the military deterrence of the United States against Iran.

2. DPRK

North Korea withdrew from the NPT in 2003, thus it has no direct obligation in the sense of international laws not to develop WMD. The DPRK believes that the development of weapons of mass destruction is a strong guarantee for its national defense and security. As Jong Hyon Chol, researcher of the Society for International Political Study of DPRK said to claim DPRK's position, “The root cause of the current deterioration of the situation on the Korean peninsula lies in the hostile policy and double standards of the United States towards the DPRK. Therefore, it is natural for us to strengthen our self-defense and national defense forces to defend the autonomy, survival and development rights of the country and

September 1998,” FAS, available from <https://nuke.fas.org/control/nwc/news/980905-nam.htm>

53 Ibid.

54 Ibid.

55 Ibid.

the people”⁵⁶, “May I ask, when the sovereignty and survival rights of ASEM member states are challenged, which one will remain indifferent, coexist peacefully and bring the fate of the country and nation to a close Entrusted to other countries.”⁵⁷ This passage, taken from the official website of the DPRK government, forcefully discusses the DPRK’s attitude towards strengthening the deployment of weapons of mass destruction.

Therefore, the biggest difference between the position of the DPRK and that of most countries participating in the discussion on this topic is that it never believes that banning the development of weapons of mass destruction is a due trend, and therefore refuses to disarm itself according to the will of other countries. “No wonder, not long ago, China’s Global Times commented that the United States’ invitation to the Taiwan authorities to participate in the ‘democracy summit’ was a provocation against China. All actions such as Beijing’s sending warplanes and ships over Taiwan or hitting US ships will win the absolute support of the people, to reaffirm its will to rely on strong force to defend national sovereignty and territorial integrity. The progressive people of the world should correctly understand the cold reality that their strength is weak and can only fall victim to the strong. They should give priority to strengthening national strength to defend international justice.”⁵⁸ The Directors believes that such words should enable delegates to have a clearer understanding of the DPRK’s attitude.

Regional Influential Powers

1. India

India is a member of three multilateral export control regimes - the missile technology control regime, the Wassenaar Arrangement, and the Australia Group. It has signed and ratified the BWC and the CWC. India is also a signatory to the Hague Code of conduct. India has neither signed the CTBT nor the NPT, believing that both are flawed and discriminatory. India previously possessed chemical weapons but voluntarily destroyed all its stockpiles in

56 Jong Hyon Chol, “ASEM Should Behave Itself,” *Society for International Political Study, Democratic People’s Republic of Korea*, published on Decth, 2021, available from <http://www.mfa.gov.kp/view/article/13763>

57 Ibid.

58 Kim Il Chol, “What Safeguards Genuine Democracy,” *Society for International Political Study, Democratic People’s Republic of Korea*, published on 7th, 2021, available from <http://www.mfa.gov.kp/view/article/13768>

2009 - one of the seven countries extended by the OPCW. India adheres to the “no first use” nuclear policy and has developed the nuclear Trinity capability as part of its doctrine of “minimum credible deterrence”.

As early as June 26, 1946, Jawaharlal Nehru, who was about to become the first Prime Minister of India, announced:

“As long as the world is formed as it is, every country must design and use the latest equipment to protect it. I do not doubt that India will develop its scientific research. I hope Indian scientists will use atomic energy for constructive purposes. However, if India is threatened, she will inevitably try to protect herself with all the means at her disposal.” This sentence later became the basis of India’s nuclear theory of “credible minimum deterrence”.⁵⁹

About new types of weapons of mass destruction, India has not yet been involved in this field but has expressed its desire to discuss this topic. Considering that it is also an important ally of the United States and Russia, India should carefully choose to stand in line on this slightly politicized issue.

2. Pakistan

Pakistan is one of the nine countries that possess nuclear weapons. As a response to the losses of Pakistan in the Middle East in the Bangladesh liberation war in 1971, Pakistan attaches great importance to its nuclear construction.

Pakistan has blocked the negotiation of a Fissile Material Cutoff Treaty as it continues to produce fissile material for weapons.

In a recent statement at the CD, Pakistan laid out its nuclear disarmament policy and what it sees as the proper goals and requirements for meaningful negotiations:

⁵⁹ “Official Spokesperson’s response to a media query regarding the Joint Statement on Preventing Nuclear War and Avoiding Arms Races,” *Ministry of External Affairs of the Republic of India*, available from https://www.mea.gov.in/response-to-queries.htm?dtl/34743/Official_Spokespersons_response_to_a_media_query_regarding_the_Joint_Statement_on_Preventing_Nuclear_War_and_Avoiding_Arms_Races

- (1) A commitment by all states to complete verifiable nuclear disarmament;
- (2) Eliminate the discrimination in the current non-proliferation regime;
- (3) Normalize the relationship of the three ex-NPT nuclear-weapon states with those who are NPT signatories;
- (4) Address new issues like access to weapons of mass destruction by non-state actors;
- (5) Non-discriminatory rules ensuring every state's right to peaceful uses of nuclear energy;
- (6) Universal, non-discriminatory, and legally binding negative security assurances to non-nuclear-weapon states;
- (7) A need to address the issue of missiles, including the development and deployment of Anti-ballistic missile systems;
- (8) Strengthen existing international instruments to prevent the militarization of outer space, including the development of ASATs;
- (9) Tackle the growth in armed forces and the accumulation and sophistication of conventional tactical weapons.
- (10) Revitalize the UN disarmament machinery to address international security, disarmament, and proliferation challenges.

Pakistan has repeatedly stressed at international fora like the CD that it will give up its nuclear weapons only when other nuclear-armed states do so, and when disarmament is universal and verifiable. It rejects any unilateral disarmament on its part.⁶⁰

3. Israel

Israel is widely believed to possess weapons of mass destruction and is one of the four nuclear-weapon states that are not recognized as nuclear-weapon states by the NPT. The Congressional Office of technology assessment records that Israel is a country commonly reported to have undeclared chemical warfare capabilities and offensive biological warfare plans. Israel has officially stated that it neither confirms nor denies the possession of nuclear weapons.⁶¹

⁶⁰ A. H. Nayyar, "A Pakistani Perspective on Nuclear Disarmament and Non-proliferation," *FES Briefing Paper*, no.9 (August 2008): 7

⁶¹ "Arms Control and Proliferation Profile: Israel," *Arms Control Association*, available from <https://www.arm-scontrol.org/factsheets/israelprofile>

Concerning other traditional weapons of mass destruction, Israel has signed but not ratified the chemical weapons convention. Israel is not a signatory to the BWC. It is widely believed that Israel has no stockpiles of chemical weapons. It is speculated that Israel has retained its active ability to produce and disseminate biological weapons, which may be the result of its extremely complex biological defense plan.⁶²

It should be pointed out and valued that whether Israel has researched new weapons of mass destruction or not, its motivation is still "self-defense" against the surrounding Arab countries. Considering Israel's overwhelming military superiority in the Arab region, how to maintain the balance of the local security situation and consider Israel's national defense interests is a topic worthy of deep discussion.

62 Ibid.

Questions to Consider

1. Considering the current consensus and divergence in signing up agreements on new types of WMDs, which general route do you think is more effective in the current stage?
2. The failure of the Treaty between the U.S.S.R. and the U.S.A. on the Elimination of their Intermediaterange and Shorter-range Missiles and the Treaty on Open Skies proves that factors like security anxiety make treaties and agreements on disarmament difficult to function in the long term. How can countries ensure that the efforts achieved today can have long-lasting effects?
3. The possibility of implementing emerging or disruptive technologies into the development of WMDs continuously threatens the very nature of WMD. Try to consider why it is of significance to emphasize the necessity of reassessing WMDs' basic definition.
4. How to discuss new types of weapons of mass destruction with reference to the Convention on traditional weapons of mass destruction on the basis of the existing CD platform?
5. How to improve the mechanism of the conference on Disarmament in order to improve its efficiency?
6. If emerging WMDs could empower countries, what would be their incentive to negotiate a treaty to prohibit new types of WMDs?
7. How could international institutions help facilitate cooperation in this field?

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