

Possible Nuclear Use Cases in Northeast Asia: Implications for Reducing Nuclear Risk

Report

Tatsujiro Suzuki (Vice Director, RECNA)

Russia's invasion of Ukraine raises real concerns about the risk of the use of nuclear weapons. RECNA, in collaboration with the Nautilus Institute for Security and Sustainability of the United States and the Asia-Pacific Leadership Network for Nuclear Non-Proliferation and Disarmament (APLN) of the Republic of Korea, have launched the [Project on Reducing the Risk of Nuclear Weapons Use in Northeast Asia \(NU-NEA\)](#) this fiscal year. It was launched as a three-year plan. In its first year now, the project aims to answer the following questions. **"Under what conditions might nuclear weapons be used (with or without intention) in Northeast Asia (NEA)? How might such first use of nuclear weapons escalate to a larger scale of nuclear war?"** In response to these questions, the Project first established the following principles: (1) No consideration of probability based on the basics of crisis management of "expect the unexpected" and security measures, (2) Cases that are sufficiently likely to occur based on evidence, and (3) Prioritizing obtaining policy implications. In addition, we asked experts in security, nuclear strategy, the Korean Peninsula, and international politics to write 11 special reports. In July 2021, a workshop with over 30 experts was held, and in October, members of the Panel on Peace and Security in Northeast Asia (PSNA) reviewed the draft and provided valuable comments. Based on this information, we were able to gather cases where the use of nuclear weapons is sufficiently likely to occur.

On January 28, the *Possible Nuclear Use Cases in Northeast Asia: Implications for Reducing Nuclear Risk* Report was released (English full-text, Japanese Summary) (Fig. 1). The report envisions a variety of

"trigger events" mainly under the Korean Peninsula crisis, and covers not only cases of the first use of a nuclear weapon by DRPK or the United States, but also the use of nuclear explosions by China, Russia, and even terrorists. As a result, 25 cases are included in the report. The posited use of nuclear weapons was classified according to whether it was planned or as a result of accidental use, and whether the target was a military facility or an urban area (Fig. 2). It was also found that deployment after the first use of nuclear weapons includes a variety of cases, which are highly uncertain and could lead to a global nuclear war in the worst-case scenario.

Based on these cases, 10 proposals, albeit tentative, are made as policy implications. The main proposals include: 1. Establish continuously trusted and reliable open lines of communications between adversaries; 2. Ensure transparency in describing the extent and operation of military alliances; 3. Strengthen oversight on the use of nuclear weapons, and take measure to insulate the operations of nuclear weapons from the vagaries of national leaders; 4. Equip nuclear weapons systems with redundant command and control mechanisms; and 5. Encourage all nuclear weapon states to adopt a "No-first-Use" declaration policy. The Report and all the special reports will be published as a special issue of J-PAND.

In the second year of the project, we will attempt to quantitatively and qualitatively evaluate the impact (fatalities, physical damage to infrastructure, environmental pollution, etc.) based on these cases. In the third year, the plan is to present policy recommendations to minimize the risk of nuclear use based on those results.

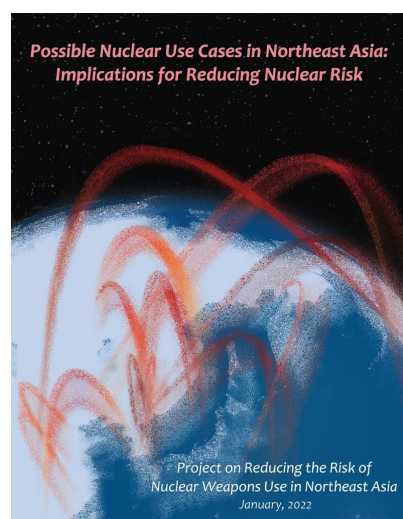


Figure 1. Report Cover

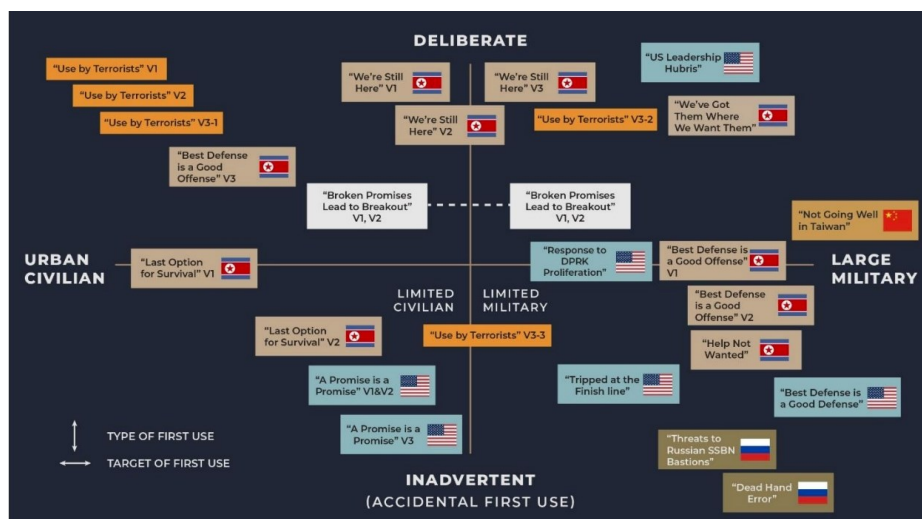


Figure 2. Plot of Use Cases versus Intent and Type of Target

Policy paper published on the topic of disarmament education

Keiko Nakamura (Associate Professor, RECNA)

On March 29, RECNA Policy Paper No. 16, *Disarmament Education in the Future: From Japanese and Korean Perspectives*, was published. The paper was co-authored by Professor Kiho Yi, Director, Center for Peace and Public Integrity, Hanshin University, who has worked with RECNA on a number of projects, and myself, Keiko Nakamura.

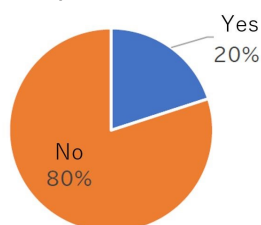
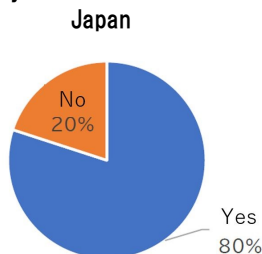
Since 2020, RECNA has been continuing a research project on disarmament education (especially nuclear disarmament and non-proliferation education) based on a comprehensive collaboration agreement with International Christian University (ICU). From FY2021, RECNA has been working on a Grant-in-Aid for Scientific Research (B) “Leveraging the Japan-Korea Collaborative for Peace and Disarmament Education: Evidence-based Education Program Development, Implementation, and Evaluation” (Principal Investigator: Professor Toshiaki Sasao, ICU). Policy Paper No. 16 is part of the

results of that effort, and is a compilation with substantial additions and revisions based on the lectures given by Professor Yi and myself at the Fourth Nagasaki Citizens’ Lecture on Nuclear Weapons Abolition (sponsored by the PCU-NC), held on December 18, 2021.

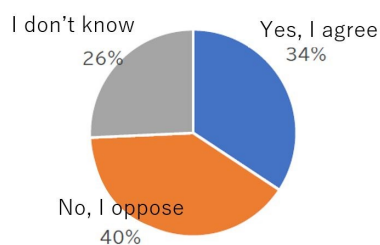
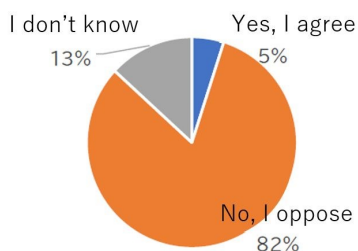
In Chapter 1, I write about the definition and positioning of disarmament education, analyze and discuss the current situation based on a syllabus survey of classroom practices at Japanese national universities, and sort through issues for further development. In Chapter 2, Professor Yi explains the current state of East Asian security in its historical context, and discusses the need for citizens and local governments to become peacemakers in this context, and the role that education can play in this effort. In Chapter 3, a transcript is presented of the exchange between Professor Yi and myself at the Citizens’ Lecture last December, on the subject of a survey of attitudes toward nuclear weapons by Japanese and Korean students.

Results of a survey of 60 Japanese students taking my class and 70 Korean students taking Prof. Yi’s class.

Have you ever learned about nuclear weapons issues in elementary, middle, or high school?



What do you think about your country’s choice to go nuclear?



The recent heightened sense of crisis surrounding nuclear weapons, such as the receding momentum for nuclear disarmament and the increasing risk of nuclear use, combined with the awareness that the time is approaching when the hibakusha (atomic bombing survivors), who have been continuously appealing about the inhumanity of nuclear weapons, will be gone, has further spurred an increased emphasis on disarmament education. A manifestation of this is inclusion of the importance of disarmament and nonproliferation education in the preamble of the Treaty on the Prohibition of Nuclear Weapons, which entered into force in January 2021. However, even from a global perspective, systematic research and practice on disarmament education is not sufficiently advanced. In particular, in Japan and South Korea, disarmament education that is grounded in

the inhumanity of nuclear weapons has not progressed due to complex factors such as differences in historical perceptions regarding the atomic bombings and security policies that are dependent on nuclear deterrence. However, especially in the wake of Russia’s invasion of Ukraine, as arguments in favor of military buildup, including further reliance on nuclear deterrence, are gaining strength, the spread and strengthening of disarmament education in both Japan and South Korea is undoubtedly an urgent issue. It is our sincere hope that the considerations appearing in this policy paper will serve as material for such discussions.

Full text [here](#) (In Japanese only)

Policy Paper: Joint statement of the leaders of the five nuclear-weapon states

Michiru Nishida (Professor, RECNA)

On January 3, 2022, the leaders of the five nuclear-weapon states (N5) issued a joint statement in which they affirmed that “a nuclear war cannot be won and must never be fought.” This statement has its origins in a 1985 statement issued by then United States President Ronald Reagan and Mikhail Gorbachev, then General Secretary of the Communist Party of the Soviet Union. That statement, issued in the midst of the tense Cold War, subsequently led to various nuclear disarmament measures. In light of the importance of this statement and whether this could be another such opportunity, we have prepared a policy paper by experts inside and outside RECNA that considers the implications for future nuclear disarmament and the nuclear strategies of each nuclear weapon state, as well as the perspectives of China and Russia, from a variety of angles.

Many authors have argued that even with this statement, the analysis does not allow for optimism about future nuclear disarmament due to strained relations between the major powers and complex factors affecting strategic stability. Unfortunately, after the statement was issued,

Russia not only launched an outrageous invasion of Ukraine, which fundamentally shook world order, but also acted in direct contradiction to the intent of the joint statement by using nuclear intimidation in the event of the invasion. Thus, the latest statement has further slowed down the momentum for nuclear disarmament, which was originally weaker than that of the Reagan-Gorbachev statement at the time of the Cold War. So, while it is easy to dismiss this statement as meaningless, it would be more constructive for the international community, including civil society, to make use of this statement by continuing to question the N5, and especially Russia with regard to its words and actions this time, about the consistency of each country's nuclear strategy and specific words and actions with this statement and specific follow-up measures thereafter. From this perspective, it is our hope that this policy paper will be helpful to many people.

Full text [here](#) (In Japanese only)

The initiative to put online and digitize the reality of atomic bombing

Mitsuhiro Hayashida (Project Researcher)

This initiative was commissioned by the Nagasaki National Peace Memorial Hall for the Atomic Bomb Victims (Nagasaki Peace Memorial Hall). The purpose of this initiative is to complement the academic activities of the Nagasaki Memorial Hall by effectively collecting, preserving, and organizing materials, etc., and utilizing them with digital and information technology, with the aim of passing on the reality of the atomic bombing on a global scale in a new manner during the ongoing COVID-19 pandemic. Below, I would like to introduce this year's efforts and next year's plans for each of the three pillars of the initiative.

(1) Additional research on the reality of atomic bombing

We focused on photographs of Nagasaki before the atomic bombing as materials that are currently lacking, and began collecting them at the end of July 2021. By the end of February 2022, 19 people had provided several thousand photos (currently being counted). When the photo data was used in a class at Nagasaki University, the students showed a growing sympathy for the reality of the atomic bombing by learning about daily life before the bombing. Next year, we plan to compile the photo data with captions and create teaching materials that can be used in the classroom.

(2) Education through digitization and online publication of the reality of atomic bombing

As a resource for learning about how the atomic bomb destroyed the city of Nagasaki, we are preparing a website where aerial photographs taken by the U.S. military before and after the bombing are linked together and can be viewed as a map. This year, the team worked on the

Nagasaki portion of the initiative, creating three buildings, the Nagasaki Medical College Building, Shiroyama Elementary School, and Urakami Cathedral, in 3D on a map in addition to piecing together aerial photographs. In the next fiscal year, we will begin work on a Hiroshima version of the map. In addition, we plan to expand the functionality of the Nagasaki map to include photos of before and after the bombing and information on damage in each area, and to create an atomic bombing testimony archive that reconstructs the footsteps of hibakusha (atomic bombing survivors) on a 3D map of the area after the bombing.

(3) Educational Practice in the Hiroshima-Nagasaki Peace Study Course

As teaching materials to convey the daily lives of families that were destroyed by the atomic bombing, a short documentary video focusing on one family was created in two versions, a long version (about 8 minutes) and a short version (about 2 minutes), utilizing the photos obtained through the efforts in (1) above. The long version is intended to be used as an introduction to the Hiroshima-Nagasaki Peace Study Course and a manual has been prepared for its use. The short version is planned to be used on social media and to be shown in the basement lounge of the Nagasaki Peace Memorial Hall.

In addition, a website is currently being created to publish each of the contents introduced in (1) through (3), and work is underway with the goal of opening the website to the public this summer.

The Tenth Nagasaki Youth Delegation begin their activities

Taeko Kiriya (Visiting Researcher, RECNA)

On Wednesday, November 24, 2021, the appointment ceremony was held for the Tenth Nagasaki Youth Delegation. Seven students from Nagasaki University and its graduate school began their activities as the Nagasaki Youth Delegation. Because of the global COVID-19 pandemic still continuing on from last year, the NPT Review Conference that was scheduled to have been held in 2020 has been repeatedly postponed, and although it is planned to be convened this August, the format under which it will be held and whether the participation of civic society will be possible are uncertain. Though it has not yet been decided whether the Nagasaki Youth Delegation will be able to attend it or not at this point in time, their participation is still on the agenda for now, and in the meantime, the delegation will continue their studies about the international situation regarding nuclear weapons and nuclear disarmament, while participating in various events online.

The members of the Tenth Nagasaki Youth Delegation are as follows. (As of March 1, 2022, in Japanese alphabetical order.)

Ami Inohara

1st year, School of Global Humanities and Social Sciences, Nagasaki University

Hello, everyone! My name is Ami Inohara and I am a first-year student at Nagasaki University's School of Global Humanities and Social Sciences. With the aging of the hibakusha, the number of witnesses who experi-

enced the horror of the atomic bombing is decreasing, but I hope that many people will see the nuclear issue as a problem that concerns them as well. As a student in Nagasaki, a city that suffered an atomic bombing, I will do my best to contribute to the abolition of nuclear weapons, even if only in a small way.

Myogyon Kan

1st year, School of Global Humanities and Social Sciences, Nagasaki University

My name is Myogyon Kan and I am a member of the Tenth Nagasaki Youth Delegation. I was born and raised in Osaka and when I moved to Nagasaki prefecture, I learned how important the idea of the abolition of nuclear weapons and peace is in Nagasaki. I will try my best to share the learning I have gained through the Youth Delegation's activities with as many people as possible.

Ayuka Goto

1st year, School of Global Humanities and Social Sciences, Nagasaki University

My name is Ayuka Goto and I am a student at Nagasaki University's School of Global Humanities and Social Sciences. I realized that Nagasaki is widely recognized around the world as a symbolic city of peace when I saw representatives from countries all over the world offering prayers for peace at the Nagasaki Peace Memorial Ceremony. I would like to fulfill my mission as a member of the Nagasaki Youth Delegation active in Nagasaki, a city of peace that is attracting worldwide attention.



Nagasaki Youth Delegation members at Appointment Ceremony
from the left for front row; Ms. Inohara, Ms. Kan, Ms. Goto, Ms. Komatsubara,
from the left for rear row; Ms. Nojiri, Ms. Fukunaga, Ms. Miyazaki

Yumi Komatsubara

1st year, School of Global Humanities and Social Sciences, Nagasaki University

The reason I wanted to be a member of the Nagasaki Youth Delegation was because during my high school study abroad program, I learned that people overseas know very little about the atomic bombings of Nagasaki and Hiroshima. Through the activities of the Youth Delegation, I want to think further about peace education that will help many people deepen their understanding of the atomic bombings, and I would like to actually conduct peace education myself.

Nozomi Nojiri

1st year, School of Global Humanities and Social Sciences, Nagasaki University

Hello! My name is Nozomi Nojiri and I am a first-year student at Nagasaki University's School of Global Humanities and Social Sciences. I am from Miyazaki Prefecture, but I visited Hiroshima and Nagasaki as a child and have always been interested in the history of the atomic bombing and the war. As I listened to the experiences of the hibakusha, I wondered if there was anything I could do to help. I will do my best as a member of the Tenth Nagasaki Youth Delegation.

Kaede Fukunaga

1st year, Graduate School of Global Humanities and Social Sciences, Nagasaki University

My name is Kaede Fukunaga and I am a member of the Tenth Nagasaki Youth Delegation. As a student in Nagasaki, I was wondering if I could use peace as a starting point and make a contribution to community. So, I applied to be a member of the Youth Delegation. I would like to learn about the atomic bombings and the recent situation in regard to nuclear weapons in depth and from multiple perspectives, so that the voices of hibakusha can be heard around the world.

Yui Miyazaki

1st year, Faculty of Economics, Nagasaki University

My name is Yui Miyazaki and I am a first-year student at Nagasaki University's Faculty of Economics. I believe that by including nuclear issues as part of peace education, students will acquire correct knowledge about nuclear weapons, and come up with solutions to achieve a nuclear-free world. Through the Delegation's activities, I will do my best to encourage as many people as possible to think about peace.

RECNA's Eye

Yoshida Fumihiko (Director, RECNA)

RECNA publishes the statements under the name of RECNA's EYE when it is deemed appropriate to express RECNA's views on current issues. So far in 2022, we have published two online statements. The first one in January was about the Kishida administration's foreign policy with the United States, and the second one in February was about the crisis in Ukraine.

The title of January's RECNA's EYE is Kishida-Biden Diplomacy Toward a Nuclear-Free World. On August 6 of 2020, when he was still a presidential candidate, U.S. President Joseph Biden issued a statement saying, "I will work to bring us closer to a world without nuclear weapons so that the horrors of Hiroshima and Nagasaki will never be repeated." Prime Minister Fumio Kishida, who comes from Hiroshima, has focused on the abolition of nuclear weapons as his lifework. The combination of these two people with a strong interest in nuclear disarmament is a favorable opportunity to bring about change in the stalled progress toward the abolition of nuclear weapons. The two leaders held a summit meeting (online) on January 21. While expressing our expectations for the outcome of the meeting, we pointed out that Prime Minister Kishida has a responsibility to fully explain to the public, in the Diet and at press conferences, his own thinking and the progress made in building a relationship of trust with President Biden.

Full text [here](#) (In Japanese only)

The February's RECNA's EYE was titled Statement on the Russian Invasion of Ukraine and Nuclear Risk. In a flagrant military invasion, Russia occupied nuclear power plants in Ukraine and has been repeatedly attacking military facilities and major cities. Russian President

Vladimir Putin made remarks that appeared to threaten the North Atlantic Treaty Organization (NATO), the U.S.-European military alliance, and others, with nuclear strikes. RECNA strongly criticized this military invasion and expressed strong concern about the serious damage to the nuclear disarmament and nonproliferation regime and the growing nuclear risk. RECNA harshly criticized Russia saying that the Russian military invasion of Ukraine has deepened the gulf between the United States and Russia, and the future of disarmament among the nuclear superpowers has become even more uncertain. Military actions that do not even hesitate to threaten the use of nuclear weapons and shun opportunities for disarmament are acts in violation of the obligation to pursue negotiations in good faith for nuclear disarmament, as set forth in Article VI of the Nuclear Non-proliferation Treaty (NPT).

Full text [here](#)



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