Japan's Contribution to Global Nuclear Disarmament

and Non-Proliferation

Toward a Policy for Fulfilling the Responsibilities of Japan as the Only Country to have Suffered from Atomic Bombs

April 2020

Working Group on New Initiatives for Nuclear Energy and Nuclear Non-Proliferation Sasakawa Peace Foundation

Preface

The Sasakawa Peace Foundation (SPF) established the International Peace and Security Department in order to contribute to peace and security in Japan, the Asia-Pacific region, and the rest of the world. The department conducts research and makes policy recommendations.

In September 2018, SPF established the Working Group on New Initiatives for Nuclear Energy and Nuclear Non-Proliferation. The Working Group aims to explore the ways that Japan, a leading nation in the civilian use of nuclear energy and the only country that has experienced the tragedy of nuclear bombings, can contribute to the field of global nuclear disarmament and non-proliferation. To date, the Working Group has conducted research on a wide range of topics, including international management of nuclear fuel, denuclearization of North Korea, and global nuclear disarmament, with the results compiled into a series of policy recommendations. The first set of recommendations, "Proposals to the Japanese Government Concerning International Management of Plutonium —Aiming for Reduction in Plutonium Stocks and Adoption of New International Norms," was published in May 2019, and was delivered to then Minister for Foreign Affairs Taro Kono in August 2019. In February 2020, the Working Group released a policy proposal entitled "Proposals to the Japanese Government Concerning Denuclearization of North Korea: With a View to Reduction of Nuclear Threat and Establishment of New Security Framework in Northeast Asia."

However, the conditions surrounding international discussions of nuclear disarmament and non-proliferation continue to deteriorate. The Intermediate-Range Nuclear Forces Treaty (INF) signed between the United States and Russia collapsed in August 2019 and the potential expiration of the New Strategic Arms Reduction Treaty (New START) in 2021 has become a real possibility, resulting in concerns that the international frameworks that supported nuclear disarmament between the United States and Russia may disappear altogether.

Faced with this complex situation and keeping in mind that 2020 is the 75th anniversary of the bombings on Hiroshima and Nagasaki as well as the 50th anniversary of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)'s entry into force, the Working Group has produced new policy recommendations outlining the contributions Japan can make toward global nuclear disarmament and non-proliferation in anticipation of the Review Conference of the Parties to the NPT, originally scheduled to be held from the end of April through May 2020.

In light of the global coronavirus (COVID-19) pandemic, States Parties have postponed the conference. However, the Working Group has decided to move forward with submitting these recommendations to the Japanese government in recognition of the critical nature of this discussion.

Members of the Working Group

Chair:

Tatsujiro SUZUKI, Vice Director/Professor, Research Center for Nuclear Weapons Abolition at Nagasaki University (RECNA)

Members:

- 1. Tomonori IWAMOTO, Secretary General, Institute of Nuclear Materials Management (INMM) Japan Chapter
- 2. Masakatsu OTA, Senior Feature Writer, Kyodo News
- 3. Mie OBA, Professor, Kanagawa University; Former member, Japan Atomic Energy Commission
- 4. Toichi SAKATA, President, Japan Space Forum; Former Ambassador, Japan to Ukraine and the Republic of Moldova
- 5. Yutaka SAGAYAMA, Senior Assistant to the President, Japan Atomic Energy Agency
- 6. Tsuneo NISHIDA, Honorary Director, The Center for Peace at Hiroshima University; Former U.N. ambassador
- 7. Nobuo TANAKA, Chairman, The Sasakawa Peace Foundation

Observer:

Chieko NAGAYAMA, Former high school teacher in Fukushima

Japan's Contribution to Global Nuclear Disarmament and Non-Proliferation — Toward a Policy for Fulfilling Japan's Responsibilities as the Only Country To Have Suffered from Atomic Bombs

As of March 2020, the prospect of global nuclear disarmament and non-proliferation appears extremely grim. Against the backdrop of the U.S. withdrawal from the Intermediate-range Nuclear Forces (INF) Treaty and the potential expiration of the New Strategic Arms Reduction Treaty (New START), the hands of the Doomsday Clock, published by the Bulletin of the Atomic Scientists, pointed to "100 seconds to midnight," suggesting that the world is closer than ever to Doomsday.¹ The global community is facing a crisis wherein the international frameworks that support nuclear disarmament between the United States and Russia run the risk of disappearing. Furthermore, due to the development and deployment of low-yield and easier-to-use small nuclear weapons, concerns over the risk of nuclear war are again on the rise.

Meanwhile, the Treaty on the Prohibition of Nuclear Weapons (TPNW) adopted by the United Nations in 2017 has been signed by 81 countries and ratified by 36 countries,² steadily approaching the 50-country threshold required for the treaty to come into force.³ However, the gaps between the Nuclear Weapon States (NWS), the states benefitting from extended nuclear deterrence, and Non-Nuclear Weapon States (NNWS), are unlikely to be bridged, with disagreements over the importance of nuclear deterrence. Furthermore, after the U.S. withdrew from the Joint Comprehensive Plan of Action (JCPOA)⁴, tensions have risen not only between the U.S. and Iran, but also in the Middle East as a whole.

While the Review Conference of the NPT has been rescheduled due to the ongoing COVID-19 pandemic, the ultimate success of this conference is vital to maintain and further strengthen nuclear disarmament and non-proliferation frameworks. Therefore, the Working Group has decided to move forward with submitting these new policy recommendations on nuclear disarmament and non-proliferation to the Japanese government. As 2020 marks the 75th anniversary of the atomic bombings in Hiroshima and Nagasaki as well as the 50th anniversary of the NPT coming into force, the Working Group would like to strongly urge the Japanese government to pursue initiatives in support of non-proliferation as the only country to have ever

¹ Reference Material 1.

 $^{^2}$ As of the end of March 2020.

Reference Material 2.

⁴ Glossary (1).

experienced the tragedy of wartime nuclear attacks.

Proposals

- 1. The Japanese government should urge the NWS, especially the U.S., China, and Russia, to carry out nuclear disarmament negotiations in order to fulfill the disarmament obligations under Article 6 of the NPT and to comply with the agreements reached at past NPT conferences. Furthermore, as the only country to suffer wartime nuclear attacks, Japan should pursue nuclear disarmament diplomacy, which could include hosting a "Nuclear Disarmament Summit Meeting" in Hiroshima and Nagasaki to act as a bridge between the NWS and the NNWS. In the domain of nuclear non-proliferation, the Japanese government should proactively pursue the following policies: denuclearizing the Korean Peninsula and reducing nuclear threats in Northeast Asia in order to build a new security framework in the region, and reviving the JCPOA to ease tensions in the Middle East.
- 2. While aiming to implement concrete policies to reduce the role of nuclear weapons and alleviate nuclear risks as noted above, the Japanese government should revise its negative stance toward the TPNW and strive to sign and ratify the treaty. To examine possible measures to support the treaty, Japan should participate in the Conference of Contracting Parties as an observer until the conditions for signing the treaty are met.

Proposal 1:

The Japanese government should urge the NWS, especially the U.S., China, and Russia, to carry out nuclear disarmament negotiations in order to fulfill the disarmament obligations under Article 6 of the NPT and to comply with the agreements reached at past NPT conferences. Furthermore, as the only country to suffer wartime nuclear attacks, Japan should pursue nuclear disarmament diplomacy, which could include hosting a "Nuclear Disarmament Summit Meeting" in Hiroshima and Nagasaki to act as a bridge between the NWS and the NNWS. In the domain of nuclear non-proliferation, the Japanese government should proactively pursue the following policies: denuclearizing the Korean Peninsula and reducing nuclear threats in Northeast Asia in order to build a new security framework in the region, and reviving the JCPOA to ease tensions in the Middle East.

The global COVID-19 pandemic has resulted in the postponement of the 10th Review Conference of the NPT. However, the importance of the conference remains unchanged. As the only country to experience wartime nuclear attacks, Japan should mobilize its full diplomatic power and political resources to support a successful review conference. These efforts should be based on the agreements reached in past review conferences, especially "the unequivocal undertaking by NWS to accomplish the total elimination of their nuclear arsenals" in 2000⁵ and the "Action Plan" in 2010.⁶ Furthermore, based on the existing disarmament-related treaties and multilateral agreements, a strong appeal should be made to NWS, including the U.S., and NNWS urging their firm commitment to and compliance with these international commitments. More specifically, we would like to propose the following policies:

<u>U.S.-Russia relations are said to be at the lowest point since the end of the Cold War.</u>⁷ The countries have been unable to make any progress in the negotiations on the extension of New START. If these trends continue, there will be an increasing danger that more of the frameworks for nuclear disarmament between the U.S. and Russia may fall apart following the expiration of the INF Treaty. Japan should strongly urge both the U.S. and Russia to resume dialogue to prevent

⁵ In the final document of the 2000 Review Conference, one of the thirteen practical measures for nuclear disarmament states "An unequivocal undertaking by the NWS to accomplish the total elimination of their nuclear arsenals." Reference Material 3.

⁶ In addition to the reconfirmation of the 2000 agreement, in the Final Document (Action Plan) of the 2010 Review Conference are clearly mentioned the important action programs for nuclear disarmament including the reduction of the number and role of nuclear weapons and Negative Security Assurance. Reference Material 4.

⁷ Mitsuru Kurosawa (Professor of the Graduate School, Osaka Women's University), "My 50 years' research on nuclear disarmament tells me that we face the worst situation now where the US, China and Russia are in mutual confrontation," *Mainichi Shinbun*, November 25, 2019, https://mainichi.jp/articles/20191125/ddm/003/030/060000 (retrieved on February 21, 2020).

<u>further expansion of nuclear weapons</u>. In particular, Japan should encourage the two countries to <u>start negotiations for the extension of New START</u>, which is scheduled to expire in February 2021. At the same time, as China is increasing its production of nuclear arms, Japan should push for China's nuclear disarmament. Furthermore, Japan should encourage India and Pakistan to sign and ratify the Comprehensive Nuclear Test Ban Treaty (CTBT) and to participate in the negotiations to conclude the Fissile Material Cut-off Treaty (FMCT).

As the U.S. and Russia continue to develop advanced, low yield nuclear weapons while maintaining a "use-it-if-necessary" attitude, one could argue that <u>the risk created by nuclear</u> development is at the highest level since the end of the Cold War. Japan must articulate its support for concrete measures designed to reduce nuclear risks such as the "no-first-use (NFU)" policy⁸ and the "sole purpose" strategy, which limits the role of nuclear weapons as deterrence.⁹ Additionally, Japan should promote the implementation of "de-alerting" to prevent instantaneous launches of nuclear missiles¹⁰ and encourage the realization of "Negative Security Assurance (NSA)" to prohibit nuclear attacks and threats by the NWS against the NNWS.¹¹ The U.S. and Russia should also hold dialogues on the military use of emerging technologies and domains such as cyberspace, artificial intelligence, and outer space, with the objective of reducing risk. Japan should pursue diplomatic avenues to push China, India, and Pakistan ---- all countries that are expanding their nuclear capabilities ---- to take measures to reduce nuclear risks. These actions could include improving transparency on nuclear strategies and capabilities, as well as establishing risk-management measures.

"The Meeting of the Group of Eminent Persons for Substantive Advancement of Nuclear Disarmament (SAG),"¹² established by the Ministry of Foreign Affairs to serve as a bridge between the NWS and the NNWS, concluded with the release of the Chairman's Summary in October 2019. Moving forward, <u>the Japanese government should translate the results of this meeting into diplomatic actions to support its efforts as a mediator between the NWS and the NNWS.</u> Namely, the Japanese government should promote diplomacy to encourage further dialogues on nuclear disarmament between countries, such as holding a "Nuclear Disarmament Summit Meeting" in Hiroshima and/or Nagasaki. In doing so, the

⁸ Generally called no-first-use. Glossary (2).

⁹ Glossary (3).

¹⁰ Glossary (4).

¹¹ Glossary (5).

¹² Collected Abbreviations & Glossary (6).

Japanese government could provide a platform for dialogues between experts, civil society, and government in support of Track 1.5 Diplomacy efforts.

At present, <u>the two most pressing issues in the field of nuclear non-proliferation are how</u> to reduce nuclear risks in Northeast Asia and the Middle East, as well as how to alleviate tensions <u>through the process of confidence building</u>. The denuclearization of North Korea is an urgent issue for Japan. As mentioned in the previous policy recommendations released in February 2020,¹³ Japan should pursue a proactive diplomacy toward <u>denuclearizing the Korean Peninsula</u>, reducing nuclear threats in Northeast Asia, and building a new security framework in the region.

The JCPOA issue is also a matter of great concern to Japan. Since the Trump administration unilaterally withdrew from the agreement in 2018, U.S.-Iran relations have continued to worsen. Iran's expansion of nuclear activities, though relatively modest, are in violation of the JCPOA, causing concern in neighboring countries. If Iran's activities continue, the JCPOA will essentially collapse, possibly triggering Iran's withdrawal from the NPT. Under such a scenario, a "nuclear domino" in the Middle East involving Saudi Arabia, following Israel, may become a reality.¹⁴

By availing itself of warm relations with both the U.S. and Iran, Japan should seek to improve the relationship between the two countries through dialogues by urging the U.S. to return to the JCPOA and demanding Iran restrain its nuclear activities. Prime Minister Shinzo Abe, who was able to visit Tehran in June 2019 while maintaining strong ties with President Donald Trump, will be able to play a special role in this respect. In addition, as a leading country in the field of civilian use of nuclear power, Japan should leverage its diplomatic activities to alleviate tensions in the Middle East through bilateral cooperation in the field of civilian nuclear technology, including the development of further proliferation resistance capabilities and the Bilateral Agreement for Peaceful Nuclear Cooperation.

¹³ The Role of the Japanese Government in the Denuclearization of North Korea-From Perspectives of Reducing Nuclear Threats in North East Asia and of Building a new Security System (February 2020) (Reference Material 5).

¹⁴ Reference Material 6.

Proposal 2:

While aiming to implement concrete policies to reduce the role of nuclear weapons and alleviate nuclear risks as noted above, the Japanese government should revise its negative stance toward the TPNW and strive to sign and ratify the treaty. To examine possible measures to support the treaty, Japan should participate in the Conference of Contracting Parties as an observer until the conditions for signing the treaty are met.

The TPNW prohibits the "threat to use nuclear weapons," which in turn limits the use of nuclear deterrence. Therefore, NWS as well as the countries relying on extended nuclear deterrence, are reluctant to sign the treaty. Japan, a country committed to the abolition of nuclear weapons, cannot continue to avoid the TPNW. This stance will not be supported by the majority of the Japanese people, let alone the victims of the atomic bombings in Hiroshima and Nagasaki.¹⁵ Japanese atomic bomb victims played a crucial role in the formation of TPNW, and the "*Hibakusha*," the Japanese word that refers to nuclear victims, are included in the preamble to the treaty. The TPNW is founded on the moral and ethical values that demonstrate "the inhuman nature of nuclear weapons," a position that the Japanese government itself has emphasized. Therefore, by continuing to diminish the role of the treaty, the Japanese government will greatly harm the country's moral authority, resulting in a loss of trust from its people and international society.

Viewed in this light, it follows that the Japanese government should make a fundamental shift in its negative stance regarding the TPNW and announce a new policy indicating an intention to sign and ultimately ratify the treaty. To this end, <u>a new independent advisory council should be established</u> to examine the following three points: the obstacles Japan may face as it signs the treaty, the possible consequences of the signature and ratification, and the treaty's compatibility with the Japan-U.S. Security Treaty.¹⁶ As a long-term goal, Japan should aim to create a security environment that does not rely on nuclear deterrence (see the previously released document entitled "Policy Recommendations toward the Denuclearization of North Korea).¹⁷

¹⁵ In the NHK Election WEB Public Opinion Polls, to the question on "whether or not Japan should accede to the TPNW", 66% answered "it should accede to the Treaty" and 7% answered it should not accede to the Treaty (December 9, 2019) (Reference Material 7).

¹⁶ As past examples of such advisory councils we could mention the Committee on Investigation and Verification of the Accident in TEPCO Fukushima Nuclear Power Station(Alias Government Accident Investigation Committee), Committee on Investigation of TEPCO Fukushima Nuclear Power Station Accident (Alias National Diet Accident Investigation Committee), Advisory Group on Economic Restructuring for International Cooperation(Private advisory organ for Prime Minister Nakasone), and Economic Advisory Conference (Advisory organ directly responsible to the Prime Minister established when the Obuchi Cabinet started).

¹⁷ Reference Material 5.

This goal should be pursued along with the actions proposed in the above-mentioned proposal, namely by carrying out concrete measures to reduce nuclear risks while diminishing the role of nuclear weapons.

On that basis, the Japanese government should participate as an observer in the Conference of the Contracting Parties to propose supporting measures conducive to the goals of the treaty to clarify Japan's position in agreement with the aims and ideal of the TPNW.¹⁸ Policy examples include:

- (1) Supporting a proposal to bring the First Conference of Contracting Parties to Hiroshima and Nagasaki (TPNW could be named the "Hiroshima-Nagasaki Treaty")
- (2) Providing financial and technical assistance for the medical examination and treatment of *Hibakusha*, including the victims of nuclear tests, and environmental improvement of areas contaminated by nuclear tests or nuclear weapon factories.
- (3) Cooperating with the UN and leading countries in formulating and promoting educational programs focused on nuclear disarmament and non-proliferation.

¹⁸ Swissinfo.ch. "The Swiss Federal Cabinet opposes to sign TPNW," August 16, 2018. In this article it was reported that "Switzerland is to participate as observer in the first Conference of the Contracting Parties. The Federal Cabinet has instructed the Ministry of Foreign Affairs to send to the Federal Cabinet progress reports on the Treaty (Reference Material 8).

When Pope Francis visited Hiroshima and Nagasaki in November 2019, he called on the government of Japan and all nations, in addition to the citizens of the two cities, to remember the threat and inhuman nature of nuclear weapons.¹⁹ In response, Prime Minister Abe stated, "As the only country that has experienced wartime nuclear attacks, Japan has the mission to lead international society toward a world without nuclear weapons," pledging Japan's commitment to global nuclear disarmament.20

Now is the time for the Japanese government to push toward the goal of a denuclearized world by promoting its "nonnuclear disarmament diplomacy" to fulfill its duty as the only country that has experienced the tragedy of wartime nuclear attacks.

¹⁹ Reference Material 9.
²⁰ Reference Material 10.

References

- Bulletin of the Atomic Scientists, "Closer than ever: It is 100 seconds to midnight", January 23, 2020. (https://thebulletin.org/doomsday-clock/#, retrieved on January 21, 2020)
- International Campaign for Abolition of Nuclear Weapons (ICAN), "Signature and ratification status". (https://www.icanw.org/signature_and_ratification_status, retrieved on February 21, 2020)
- "Summary of the Final Document of the 2000 NPT Review Conference" (May 19, 2000, Ministry of Foreign Affairs, https://www.mofa.go.jp/mofaj/gaiko/kaku/npt/saisyu. html, retrieved on February 21, 2020)
- The 2010 NPT Review Conference: Summary of the Final Document (Action Program)" (May 29, 2010, Ministry of Foreign Affairs, https://www.mofa.go.jp/mofaj/gaiko/kaku/npt /kaigi10_keikaku.html, retrieved on February 21, 2020)
- "The Role of the Japanese Government concerning the Denuclearization of North Korea-From a Perspective of Reduction of Nuclear Threat and Building of a New Security System in North East Asia" (Released on February 21, 2020)
- Jonathan Marcus, "Five Reasons Why the US-Iran Crisis is not Over", BBC News Japan on January 15, 2020 (https://www.bbc.com/japanese/features-and-analysis-51102318, retrieved on February 21, 2020)
- Public Opinion Polls "Whether or not Japan should accede to TPNW" (Renewed on December 9, 2019, NHK, http://www.nhk.or.jp/senkyo/shijiritsu/archive/2019_12.html, retrieved on February 21, 2020)
- Swissinfo.ch "The Swiss Federal Cabinet is Opposed to the Signing of TPNW" (August 16,2018 (https://www.swissinfo.ch/jpn/politics/Security Issue_Swiss Federal Cabinet-Opposed to the Signing of TPNW/44329390, retrieved on February 21, 2020)
- 9. Pope Francisco, "Message on Nuclear Weapons" delivered at Nagasaki Nuclear Blast Hypocenter Park on November 24, 2019 (https://www.cbcj.catholic.jp/2019/11/24/19818/, retrieved on February 21, 2020)
- Talks with His Holiness Pope Francisco held on November 25, 2020 and etc." Website of Prime Minister Official Residence, https://www.kantei.go.jp/jp/98_abe/actions/201911/ 25vatican.html, retrieved on February 21, 2020)
- 11. "Disarmament Dictionary" (Published by Shinzan Co. on October 3, 2015)
- 12. "Chiezo"(Asahi Shinbun Publishinng Co. https://database.asahi.com/help/jpn/chiezo_sousa01.html, retrieved on February 21, 2020)

Glossary²¹

(1) Joint Comprehensive Plan of Action (JCPOA)

An agreement between Iran, a country suspected of nuclear weapon development, and the U.S., UK, France, Germany, China and Russia concluded in July 2015. In return for a substantial reduction of nuclear development on the part of Iran, the U.S. and Europe relaxed sanctions such as financial sanctions and limitation of oil trade in January 2016. The Agreement stipulated, among other things, that Iran shall not produce weapon-capable highly enriched uranium (HEU) and weapon-usable plutonium for a duration of 15 years and shall substantially reduce units of centrifugal separators in order to prevent Iran from possessing nuclear weapons. However, President Trump criticized the agreement, alleging that it has critical defects in allowing Iran to continue its nuclear development in spite of these limitations and not including a stipulation on the limitation of ballistic missile development. In May 2018, the U.S. withdrew from the agreement and resumed sanctions against Iran. In protest against the U.S. move, Iran declared a partial non-implementation of the Nuclear Agreement in May 2019.

(2) No First Use (NFU) of Nuclear Weapons

The policy not to use nuclear weapons earlier than the opponent in an armed conflict. However, the option for nuclear counterattack is kept in case of the opponent's first use of nuclear weapons. This policy is also referred to as No-Preemptive-Use-of-Nuclear-Weaponry. The concept of NFU has the effect of promoting nuclear disarmament. If all the countries possessing nuclear weapons including the Nuclear Weapon States (NWS) defined in the NPT agreed to the concept and if thereby a global system of NFU was built, the role of nuclear weapons would be limited to deterring the use of nuclear weapons by other NWS. Ever since its successful nuclear weapon test in October 1964, China has been consistently declaring unconditional NFU, stating that China will not be the first to use nuclear weapons under any circumstance.

(3) The Only Purpose

Limiting the purpose of nuclear weapons to deterring nuclear attacks. While having no precise definition, the word attracted attention when the Obama administration used it for the purpose of reducing the roles of nuclear weapons. Some think its meaning is substantially the

²¹ Reference Materials 11 and 12

same as NFU (see above), but some distinguish the concept as a distinct nuclear strategy.

(4) De-alerting

During the Cold War era, U.S. and Russian nuclear weapons were targeted at each other's cities and military bases always in an alert state ready to be launched. Ever since the end of the Cold War, the de-alerting of such nuclear weapons has been proposed. For example, in 1994, both the U.S. and Russia agreed to the mutual de-targeting of nuclear weapons. While the agreement held some political significance, technically speaking, retargeting would be an easy task. Hence, high-ranking ex-military officials in the U.S. proposed de-alerting at the level of equipment such as 'de-activation' of missile guiding systems and 'de-mating' of warheads and missiles.

(5) Negative Security Assurance (NSA)

A declaration made by the NWS to not use nuclear weapons against the NNWS. Since the negotiation process for the NPT signed in 1968, the NNWS have been continuously demanding the NWS to stipulate this principle in the Treaty. The Protocol II of the Treaty of Tlatelalco (Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean) which came into force in 1968, gave legal assurance to NSA, with all of the five NWS as defined in the NPT (U.S., Soviet Union, China, UK and France) ratifying it. However, NWS often lag behind in responding to protocols on NSA. With respect to other nuclear-free-zone treaties, it is only the Central Asia Nuclear-Weapon-Free Zone Treaty that the above-mentioned five NWS ratified.

(6) Group of Eminent Persons for Substantive Advancement of Nuclear Disarmament (SAG)

The group was established in 2017 by the advocacy of Mr. Fumio Kishida, the then Minister for Foreign Affairs. Given the fact that there are growing conflicts between the Nuclear Weapon States and the Non-Nuclear Weapon States over nuclear disarmament, the Ministry of Foreign Affairs of Japan sponsored the group in an effort to serve as a bridge between the two sides to facilitate nuclear disarmament. The group is composed of a total of 17 people including scholars and diplomats from both NWS and NNWS, with Mr. Takashi Shiraishi, President of the Prefectural University of Kumamoto, serving as the Chairperson of the Group. Having met for five sessions, the group chairperson published the "chair person's summary" as the final output in October 2019.

