

# **Uncovering and Comparing Compensation Systems for Victims of the Use and Testing of Nuclear Weapons Worldwide: Taking the Treaty on the Prohibition of Nuclear Weapons into Account<sup>1</sup>**

Seiichiro TAKEMINE

Meisei University

The Center for Peace, Hiroshima University

## **1. Introduction**

“Discussions on environmental issues leave out the issue of radioactive contamination. Radioactive contamination should be the starting point for discussions on the global environment” (The Chugoku Shimbun “Hibakusha” Reporting Team 1991, 1). The Chugoku Shimbun, a newspaper company headquartered in Hiroshima City, “considered it necessary to understand an overall, global picture of radiation damages since the bombings of Hiroshima and Nagasaki and organized a special reporting team” (1). The Chugoku Shimbun sharply criticized the reality in which “endless nuclear tests, production of nuclear weapons, uranium mining, and nuclear power plant accidents have been causing more and more suffering, and the number of ‘hibakusha’ has been increasing” (1).

In Japan, in the late 1970s, nuclear victims worldwide started participating in campaigns to abolish nuclear weapons. Then, from the 1980s to the 90s, photojournalist Hiromitsu Toyosaki (1995) and the abovementioned Chugoku Shimbun newspaper pioneered investigative reporting on nuclear victims worldwide, and more and more people in Japan got to know that nuclear damages were not just limited to those of the Hiroshima and Nagasaki bombings but spread globally.

To promote research with a scope wide enough to cover not just damages caused by the Hiroshima and Nagasaki atomic bombings but other various nuclear damages around

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<sup>1</sup> This is a revised and enlarged version of the original Japanese article, Takemine 2020 (translated by Yuichi Yokoyama; proofread by Annelise Giseburt).

the globe, Hiroko Takahashi, who researched global nuclear damages by investigating U.S. archives as a historian, and I, who researched the Marshall Islands where the U.S. conducted nuclear tests, organized the Global Hibakusha<sup>2</sup> Research Group in 2004. In 2005, members of the research group established the Global Hibakusha roundtable as one of the roundtables of the Peace Studies Association of Japan.

The Global Hibakusha Research Group has been connecting specialists on different sites of nuclear damages worldwide. With the help of this network of specialists, I started leading collaborative research titled “Seeking Nuclear Justice: International Survey and Comparison of Compensation Measures/Systems for the Victims of Nuclear Tests.” Supported by a research grant from the Toyota Foundation, full scale research started in May 2018, and we have conducted many collaborative research meetings since then.

While each of the compensation measures for nuclear victims in different countries has been discussed individually, as far as I knew, no research drew an international comparison of these measures when we launched the research project<sup>3</sup>. In the process of using nuclear energy—ranging from uranium mining to disposal of radioactive waste, even when the energy is used for “peaceful” purposes—radioactive contamination occurs. Our collaborative research aims to explore global norms for compensation for people who have become nuclear victims, through comparing the Japanese support system for survivors of the Hiroshima and Nagasaki bombings stipulated by the Atomic Bomb Survivors’ Support Law (hereinafter “Survivors’ Support Law”) with compensation measures for nuclear victims in other countries. As a first step, our collaborative research has been focusing on compensation measures for victims of nuclear tests.

This collection of research articles, titled “Investigation on Compensation Measures for the Nuclear Victims/Survivors around the World: in Light of the Treaty on the Prohibition of Nuclear Weapons,” is an outcome of our collaborative research. Each of the articles examines a compensation system for nuclear testing victims in a specific country/area from a comparative perspective and identifies key characteristics of said system. Additionally, one of the articles in this collection explores a compensation system for sufferers of the atomic bombings of Hiroshima and Nagasaki, which will help us better compare and understand the compensation systems for nuclear victims in general. Furthermore, another analyzes the Treaty on the Prohibition of Nuclear Weapons (TPNW), which stipulates assistance for nuclear victims and international cooperation.

In our research, we will use the term “compensation” for nuclear testing victims to

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<sup>2</sup> For detailed discussions on the concept of “global hibakusha,” refer to Takemine 2015b and 2016a.

<sup>3</sup> After the Treaty on the Prohibition of Nuclear Weapons entered into force, members of the International Campaign to Abolish Nuclear Weapons have been investigating compensation systems for nuclear victims worldwide (Van Duzer and Sanders-Zakre 2021).

refer to acts of “making up for losses or costs” (Legal Terms Research Group 2020, 1082) caused by nuclear tests. “Compensation” in our articles thus includes, for example, victim “assistance” in the TPNW or “support” for atomic bomb survivors stipulated by the Survivors’ Support Law (discussed later in Section 3). Depending on contexts, different terms with similar meanings are used, such as “assistance,” “support,” “pension,” or “compensation.” Note, however, that we differentiate “compensation” as defined above from “reparation” which means payment for losses or costs caused by illegal acts.

This article introduces this special collection of articles on compensation measures for nuclear testing victims. Taking the TPNW into account, it outlines the Survivors’ Support Law for Hiroshima and Nagasaki atomic bomb survivors and a compensation system for victims of U.S. nuclear tests in the Marshall Islands. To lay the foundation for international comparative research of nuclear victim compensation systems, the article focuses on the questions of how “losses or costs” to be made up for are defined out of all kinds of nuclear damages (or, how damages are conceptualized) and who are beneficiaries of the compensation mechanisms. Furthermore, the article also pays attention to who are to compensate for damages (subjects responsible for compensating for damages) and how compensations are made (details of compensation). Comparing the two systems in Japan and the Marshall Islands will show us why it is necessary to “uncover and compare compensation systems for victims of the use and testing of nuclear weapons worldwide” now.

## **2. “Victim Assistance” in the Treaty on Prohibition of Nuclear Weapons**

In the TPNW, which was adopted at the United Nations in 2017, Article 1, “Prohibitions,” has attracted the most attention. This article comprehensively bans states parties to the treaty not just from using nuclear weapons but from testing, producing, possessing, or threatening to use them. In addition, the treaty also stipulates procedures for eliminating nuclear weapons to some extent. As a matter of course, in these regards, the TPNW is unprecedented as a step toward banning—and furthermore, eliminating—nuclear weapons.

Focusing only on the prohibition of nuclear weapons can make us overlook another significant potential of the TPNW. Following the Anti-Personnel Mine Ban Convention (APM) and the Convention on Cluster Munitions (CCM), the TPNW addresses not only the weapons themselves but also the people who have suffered from damages caused by the weapons.

The treaty clearly mentions “hibakusha” in its preamble in recognition of the damages that sufferers of the atomic bombings of Hiroshima and Nagasaki have endured and the roles they have played in calling for the total elimination of nuclear weapons. The preamble, furthermore, declares that the states parties to the treaty are “[m]indful of the unacceptable suffering of and harm caused to [...] those affected by the testing of nuclear weapons” (Paragraph 6), “[r]ecogniz[e] the disproportionate impact of nuclear-weapon activities on indigenous peoples” (Paragraph 7), and are “[c]ognizant that the catastrophic consequences of nuclear weapons [...] pose grave implications for [...] the health of current and future generations, and have a disproportionate impact on women and girls” (Paragraph 4). Based on these provisions, Article 6 stipulates “[v]ictim assistance and environmental remediation” and Article 7 “[i]nternational cooperation and assistance” required for implementing them. These provisions show that the TPNW is a treaty related not just to disarmament but to human rights, environmental problems, and the issues of indigenous communities and gender.

More than 50 countries ratified the treaty, and, as a result, the TPNW entered into force on January 22, 2021. Article 8 provides that meetings of the states parties be convened on a biennial basis (Paragraph 2). Agenda topics in future meetings will include ways of “[v]ictim assistance and environmental remediation” and “[i]nternational cooperation and assistance,” as well as steps toward banning and eliminating nuclear weapons.

There is, however, no global, comprehensive compensation system for nuclear victims. Furthermore, as Yamada (2019) points out from an international law perspective, there is insufficient information necessary for considering steps toward victim assistance, such as who are the “victims” to be assisted, what qualifies people to be “victims,” how to prove the causal relationship between their suffering and nuclear weapons, and what kind of measures are necessary for “victim assistance.”

In this context, from an international humanitarian law perspective, Docherty argues for the need to learn from the preceding humanitarian disarmament treaties, namely, the APM and CCM, in consideration of the implementation of Articles 6 and 7 (IHRC 2019; Docherty 2020)<sup>4</sup>. It is noteworthy that Docherty (2020) highlights the necessity of paying attention to victim assistance, environmental remediation, and international cooperation and assistance stipulated by the TPNW in order to address sufferings caused by the use

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<sup>4</sup> When Docherty visited Japan, on July 28, 2019, she gave our research group a presentation titled “Victim Assistance and Environmental Remediation in the Treaty on the Prohibition of Nuclear Weapons.” In the discussions that followed her presentation, based on IHRC 2019—the article that the organization at which she works published and which she wrote as the main author—Docherty talked about the significance of Articles 6 and 7 of the TPNW in reference to the APM and CCM.

and testing of nuclear weapons thus far—while there are a variety of issues to be discussed in the first meeting of states parties to the TPNW.

Certainly, learning from how the APM and CCM have developed mechanisms for victim assistance and international cooperation would be beneficial to making progress in assistance of nuclear victims and promotion of international cooperation. Nevertheless, as Docherty (2000, 263) mentions, “states parties should recognize and respond to the distinctive and often daunting challenges of victim assistance and environmental remediation in the nuclear weapons context.” It is unclear whether dealing with damages caused by mines and cluster munitions and those by nuclear weapons in a similar fashion is feasible. If we would like to accumulate knowledge on existing frameworks, we first have to pay attention to systems of compensation for nuclear victims worldwide, each of which has been established individually.

### **3. Compensation Measures for Sufferers of the Hiroshima and Nagasaki Atomic Bombings<sup>5</sup>**

For sufferers of the atomic bombings of Hiroshima and Nagasaki, the abovementioned “Survivors’ Support Law” has been in effect since 1995. It was formulated in 1994 as a law that integrates two preceding laws: the Medical Care Law and the “Law on Special Measures for the Atomic Bomb Survivors” (hereinafter “Special Measures Law”). Based on this “Survivors’ Support Law,” the Japanese government has been administering the responsibility for taking compensation measures for those suffering from damages caused by the Hiroshima and Nagasaki bombings, while these measures diverge from “state

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<sup>5</sup> Sufferers of the Hiroshima and Nagasaki atomic bombings are widely called “hibakusha” not just in Japanese but also sometimes in English as in the preamble of the TPNW. Derived from this, the word “hibakusha” is also sometimes used as a word referring to nuclear victims in general. However, defined currently in the Survivors’ Support Law and previously in the Law on Medical Care of the Atomic Bomb Survivors (hereinafter “Medical Care Law”), in the Japanese legal system, “hibakusha” is a general term referring to those whom the Japanese government defines as beneficiaries of its support policies among the sufferers of the atomic bombings. Therefore, the “hibakusha” defined by the law does not necessarily include all the sufferers of the atomic bombings. As this article presents, among those whom the laws have not entitled to benefits, there are people who have been demanding to be certified as “hibakusha,” raising their voice—“I, too, am hibakusha.” The term “hibakusha” has sometimes been used as a collective term referring to all sufferers of the atomic bombings since the formulation of the Medical Care Law. Nevertheless, this article, which analyzes support policies or lack thereof for sufferers of the atomic bombings, uses the term “hibakusha” (and “atomic bomb survivor(s),” the term used as the English equivalent in this article) to refer only to those who are defined by the laws as such and certified as beneficiaries of the benefits stipulated by the laws. On the other hand, this article uses the term “sufferers” to refer to all kinds of people who suffer from damages caused by the atomic bombings, whom this article differentiates from the legally defined terms of “hibakusha” and “(atomic bomb) survivors.” Differentiating “hibakusha” (“survivors”) and “sufferers” in this way brings our attention to demarcations between who are defined as the beneficiaries and who are not.

compensation,”<sup>6</sup> which sufferers’ organizations have been demanding (Association of Counselors for Atomic Bomb Sufferers 2019).

The compensation system for sufferers of the atomic bombings of Hiroshima and Nagasaki is not just for former military personnel and civilian military employees but civilians. The Japanese government denied compensation for war damages that civilians suffered, because “[i]n general, under war, that is, the state of emergency which threatens the survival of the country, even when the war makes it unavoidable for the nationals to incur certain sacrifices regarding their lives, bodies, or properties, all the nationals have to equally endure the sacrifices as ‘general sacrifices’ due to the nation’s total war” (Fundamental Problems Conference 1980, 2). Nevertheless, atomic bomb sufferers’ persistent campaigns, supported by public opinion, led to the formulation of the Survivors’ Support Law, which allowed an exception to this logic “in light of the fact that the health damage caused by radiation resulting from the atomic bombings is a unique kind of damage different from any other war damage” (Preamble, Paragraph 3 of the Survivors’ Support Law) (Global Hibakusha Research Group 2006).

The preamble of the Survivors’ Support Law takes “comprehensive measures for health, medical care and welfare of the aging atomic bomb survivors” (Paragraph 3). If any of the following four categories applies to a person, they are certified as “hibakusha” (atomic bomb survivor): (1) A person who was in the area of Hiroshima or Nagasaki City at the time of the atomic bombing, or in an area adjacent to the areas of these cities; (2) A person who was in an area within two kilometers from the hypocenter within two weeks from the time of the atomic bombing; (3) “[A] person who was under circumstances, at the time of or after the atomic bombing, which affected the person physically due to atomic-bomb radioactivity”

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<sup>6</sup> An organization of sufferers of the Hiroshima and Nagasaki bombings, “Japan Confederation of A- and H-Bomb Sufferers Organizations” (hereinafter “Hidankyo”) published “Atomic Bomb Sufferers’ Basic Demands” in 1984. They demanded the government formulate a sufferer support law based on the principle of state compensation, which includes the following four measures as its central pillars (Hidankyo 1984): (1) Based on the determination to never let anyone become hibakusha again, compensate for damages caused by the atomic bombings; (2) Provide bereaved family members of atomic bomb victims with a solatium and a pension; (3) Take on the full responsibility for maintaining survivors’ health and providing them with medical treatment; and (4) Provide every survivor with a survivor pension and increase the amount of the pension for a survivor with disabilities.

While it is the U.S. that dropped the atomic bombs, Hidankyo has been demanding the state compensation from the Japanese government (Global Hibakusha Research Group 2006)—for the following three reasons. (1) The atomic bombings resulted from the Asia Pacific War, which the Japanese government began and continued after the bombings. (2) The Japanese government waived claims against the U.S. in the Treaty of Peace with Japan. (3) Until formulation of the Medical Care Law, the government left atomic bomb sufferers and the damages they suffered without doing anything.

Note that Hidankyo’s demand for state compensation dates back to when the organization was founded in 1956—after the 1952 “Law on Special Aid to the Wounded and Sick Retired Soldiers” defined the former military personnel and civilian military employees who were wounded or sick and bereaved family members as victims of the war under the “spirit of state compensation” (Article 1).

(e.g., those engaged in post-bomb relief activities or exposed to radioactive “black rain”); or (4) A person who was an unborn baby of a survivor at that time.

A certified atomic bomb survivor is issued a document called “Health Handbook for Atomic Bomb Survivors,” and the government provides the Handbook holder with medical examinations, as well as the copayments the holder would normally pay for healthcare services covered by public health insurance. Social welfare services—including consultation services for survivors on their health, daily lives, and support (Article 37) and in-home support services to support survivors’ daily life in their homes (Article 38)—are also established by Section V of the Survivors’ Support Law. On top of this, various kinds of additional allowances are available—such as “health management allowances” for survivors with specific diseases, or “special allowances” for those with diseases that are certified to be caused by the atomic bombs.

In summary, the compensation system stipulated by the Survivors’ Support Law has the following structure: (1) The government provides medical care to an applicant who is certified as an “atomic bomb survivor” and issued a Handbook; and (2) supplementary allowances are available in designated cases. In this structure, an applicant is certified as an atomic bomb survivor by corroborating their residence within designated areas and time periods and their movement history, based on Article 1 of the law. In addition, a certified atomic bomb survivor with designated diseases can apply for health management allowances. Furthermore, if the Minister of Health, Labour and Welfare certifies certified survivors’ corroboration of causation between their injuries or illnesses and their radiation exposure, the survivor is entitled to special allowances. However, this certification, which is stipulated in Article 11 of the Survivors’ Support Law, has been rarely granted.

In July 2021, however, the Hiroshima High Court delivered a judgement which put pressure on the government to reconsider the compensation measures for atomic bomb sufferers as outlined above. There were sufferers who were not certified as “atomic bomb survivors” defined in the Survivors’ Support Law despite their exposure to the “black rain” because they were outside of the designated areas, and they filed a lawsuit in demand of support. The plaintiffs won both the first trial at the Hiroshima District Court and the second trial at the Hiroshima High Court, and as a result, the high court gave the abovementioned judgement which denied the government’s certification criterion and certified all of the 84 plaintiffs who were outside of the designated areas as atomic bomb survivors<sup>7</sup>.

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<sup>7</sup> Teru Matsumoro 松本輝, “Kuroiame Nishin mo Genkoku Shōso” 黒い雨 二審も原告勝訴 [Plaintiffs Victorious in Second Trial Regarding “Black Rain” Lawsuit], *Chugoku Shimbun*, July 15, 2021.

The major point at issue in the trial was whether the plaintiffs could be certified as atomic bomb survivors, that is, “person[s] who w[ere] under circumstances, at the time of or after the atomic bombing, which affected the person[s] physically due to atomic bomb radioactivity” (Article 1, Paragraph 3 of the Survivors’ Support Law). The high court<sup>8</sup> pointed out that the plaintiffs were exposed to the black rain after the Hiroshima atomic bombing, that it was possible that the black rain contained radioactive fallout, and that even if not exposed to the black rain, it was possible that residents were internally exposed to radiation. Based on this understanding, the court judged that the government should certify them as atomic bomb survivors—since, the court pointed out, it was impossible to deny that the plaintiffs, who were out of the designated areas of support, were under circumstances which could affect their health.

This is not only an epoch-making judgement which requires reconsideration of the compensation system based on the Survivors’ Support Law, but also a thought-provoking one which suggests we reconsider how to certify victims in support systems for nuclear victims. It is noteworthy that the judgement did not require the plaintiffs to prove a causal relationship between their radiation exposure and their diseases, adopted the plaintiffs’ testimonies and latest scientific information, and concluded that the areas subject to support measures should be expanded for the reason that there was no basis to deny that the health effects were caused by the atomic bombing. It is also remarkable that the judgement referred to the possibility of health effects from internal exposure.

Many other people have been denied the legal status of “atomic bomb survivor” and left out of the compensation system. For example, there are people demanding the expansion of designated atomic bombed areas in Nagasaki. Furthermore, bereaved family members of atomic bomb victims—such as Heiichi Fujii, the first secretary general of Hidankyo—, children and grandchildren of survivors, or those whose property such as houses or lands were damaged are not defined as beneficiaries of the compensation measures stipulated by the Survivors’ Support Law. In addition, beneficiaries of the Survivors’ Support Law are limited only to the living. Hidankyo (2009) points out this problem inherent in the Survivors’ Support Law: “The spirit of the Survivors’ Support Law should lie in ‘state compensation,’ but that was not included in the law. The formulated law is silent on the issues of the state’s war responsibility and the U.S. government’s responsibility of the atomic bombings. Therefore, there is no compensation for the deceased, who are the chief victims of the bombings.” Hidankyo’s demand, however, made the government incorporate in the Survivors’ Support Law an article providing that the

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<sup>8</sup> Hiroshima Kōtō Saibansho [Hiroshima High Ct.] July 14, 2021, Rei2 (gyō ko 行 ㇿ) no. 10, Saibansho saibanrei jōhō [Saibanshoweb], [https://www.courts.go.jp/app/hanrei\\_jp/detail4?id=90607](https://www.courts.go.jp/app/hanrei_jp/detail4?id=90607).



government shall undertake “peace memorial projects” to “remember the sacrifice of precious human lives by the victims of the atomic bombing of Hiroshima and Nagasaki and to pray for a lasting peace” (Article 41, Chapter V), while this is distant from the “compensation for the deceased” which Hidankyo demanded. Based on this article, National Peace Memorial Halls for the Atomic Bomb Victims were founded in Hiroshima in 2002 and in Nagasaki in 2003, which are different from the Hiroshima Peace Memorial Museum and the Nagasaki Atomic Bomb Museum.

The Japanese government did not launch support policies for atomic bomb sufferers right after the bombings. About eight and a half years after the bombings, in March 1954, Japanese crew members of tuna fishing boats such as Daigo Fukuryu Maru (also known as Lucky Dragon No. 5) were exposed to radioactive fallout from a U.S. hydrogen bomb test in the Marshall Islands. This aroused public opinion in favor of the prohibition of atomic and hydrogen bombs, and in 1955, the first World Conference against Atomic and Hydrogen Bombs was held in Hiroshima. Sufferers of the Hiroshima and Nagasaki bombings took the platform and gave conference participants a profound shock. The conference made a declaration that relief for sufferers of damage from atomic and hydrogen bombs was the cornerstone of their campaign for the prohibition of atomic and hydrogen bombs (Gensuikyo 1969).

Atomic bomb sufferers themselves rose up to found Hidankyo in 1956. Right after its founding, Hidankyo started demanding the government, which left atomic bomb sufferers without any support, take support measures for them. This led to formulation of the Medical Care Law in 1957. Thus, radiation exposure of the Daigo Fukuryu Maru drew public attention to the existence of the neglected sufferers of the atomic bombings of Hiroshima and Nagasaki, and 12 years after the atomic bombings, the government started providing atomic bomb survivors with medical services, though not sufficiently.

Hidankyo’s official Japanese name, “Nihon Gensuibaku Higaisha Dantai Kyōgikai,” is literally translated as “Japan Confederation of A- and H-Bomb Sufferers Organizations.” The name thus refers not only to atomic bomb sufferers but hydrogen bomb sufferers. When the Medical Care Law, a law preceding the current Survivor’s Support Law, was formulated, “the beneficiaries of a new support law were supposed to include not only survivors of the Hiroshima and Nagasaki atomic bombings but also the sufferers of the hydrogen bomb test and future sufferers of incidents in the nuclear power industry”<sup>9</sup>. If the beneficiaries of the law had included “future sufferers of incidents in the nuclear power industry” as well as

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<sup>9</sup> Matashichi Oishi, memorandum, “‘Genbaku Shōgaisha Engohōan’ (Shōwa 31-nen) no Keika tō” 『原爆障害者援護法案』(昭和31年)の経過等 [Records on the Bill on Support for Those Affected by the Atomic Bombings (1956)], unpublished data.

atomic bomb survivors, the government's response to the 2011 Fukushima Daiichi Nuclear Power Plant Accident would have been significantly different.

“Future sufferers of incidents in the nuclear power industry” and sufferers of nuclear testing including crewmembers of the Daigo Fukuryu Maru were separated from the Hiroshima and Nagasaki survivors. The government stated that the issue of support for the Daigo Fukuryu Maru fishermen reached a final conclusion given the ex gratia payments by the U.S. government that were made on no legal basis, and excluded them from the support law. “We hibakusha ceased to be hibakusha. We have been left in limbo since,” said Matashichi Oishi (2007, 111), one of the former crewmembers of the Daigo Fukuryu Maru. Other former fishermen in Kochi Prefecture who were exposed to the nuclear fallout from the U.S. hydrogen bomb test filed a lawsuit against the Japanese government in 2016 to demand state redress. Although they lost the case, the judgement referred to the necessity of a new relief law for them<sup>10</sup>. In March 2020, they filed another lawsuit against the Japanese government.

#### **4. Compensation System for Victims of U.S. Nuclear Testing in the Marshall Islands**

From 1946—only a year after the atomic bombings of Hiroshima and Nagasaki—to 1958, the U.S. conducted a total of 67 atmospheric nuclear tests at Bikini Atoll and Enewetak Atoll in the Marshall Islands. In 1986, the Marshall Islands became independent after the Compact of Free Association (hereinafter “Compact”) with the U.S. entered into force in 1986. In Section 177 of the Compact, the U.S. government admitted damage to persons and property resulting from its nuclear tests and accepted the responsibility for compensation. The Marshall Islands and the U.S. concluded an agreement for implementation of Section 177 of the Compact<sup>11</sup> at the same time, and set a framework for compensating for nuclear test damage. Based on this agreement, “[i]n recognition of contributions and sacrifices made by the people of the Marshall Islands in regard to the Nuclear Testing Program” (Preamble, Paragraph 6), the U.S. government provided the Marshall Islands with 150 million dollars to create “the Republic of the Marshall Islands Nuclear Claims Fund.”

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<sup>10</sup> Yuka Matsubara 松原由佳, “Kisha no me: Kōchi Bikini Hibaku Kokubaisoshō Hōchi no mama Yurusarenu 記者の目：高知ビキニ被ばく国賠訴訟 「放置のまま」許されぬ [Through a Reporter's Eyes: Bikini Test Radiation Exposure Trial for State Redress in Kochi—Never Leave Victims Alone],” *Mainichi Shimbun*, May 28, 2020.

<sup>11</sup> The official name of the agreement is “Agreement Between the Government of the United States and the Government of the Marshall Islands for the Implementation of Section 177 of the Compact of Free Association.” It is often called “Section 177 Agreement” or “177 Agreement” for short.

Based on this fund, the following three primary programs have been implemented. (1) Distributions have been made to the local governments of four atolls—Bikini, Enewetak, Rongelap, and Utrik—in which the U.S. government admitted nuclear test damage in the Marshall Islands (Article II, Sections 2, 3, 4, 5 of the Section 177 Agreement). (2) 177 Health Care Program<sup>12</sup> has been implemented, which has made it possible for designated beneficiaries to be examined by a doctor. The beneficiaries are limited to the people of the four atolls mentioned above, but even those born after the nuclear tests are defined as beneficiaries of the health-care programs (177 Health Care Program 2017). (3) The “Marshall Islands Nuclear Claim Tribunal” (NCT)<sup>13</sup> was established as an organization which receives and reviews compensation claims. While the NCT was set up under the Marshall Islands government, it exercises its jurisdiction to render final determination upon compensation claims independently of the legislative and executive powers of the Marshall Islands government as well as the U.S. government (Marshall Islands Nuclear Claims Tribunal Act 1987).

The NCT has acknowledged that all persons who resided in the Marshall Islands from the period of the U.S. nuclear testing (1946–1958) have a right to claim compensation for personal injuries resulting from the nuclear testing. Note, however, that local workers engaged in post-testing decontamination work are out of the scope of the compensation system.

A claimant needs to prove that they resided in the Marshall Islands during the period of the nuclear tests and have contracted one or more of the specified diseases; the NCT has not put on the claimants the burden of proof of causation between their illnesses and radiation exposure. In other words, the NCT adopted a presumptive approach by specifying diseases that were presumed to have a causal relationship with radiation exposure. This approach has also been adopted by the Radiation-Exposed Veterans’ Compensation Act (REVCA) and the Radiation Exposure Compensation Act (RECA) in the U.S.<sup>14</sup> The NCT has specified 36 diseases since 2003. The amount of a personal injury award is set in accordance with each of the diseases, and the award is granted as a lump sum so that a recipient is able to use it to cover expenses for treatment and assistance services. Since

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<sup>12</sup> This article’s description of the 177 Health Care Program is based on my interviews with the management staff of the program in Majuro, capital of the Marshall Islands, such as Erma Wase-Myazoe, Program Administrator at Majuro Office, on the document, “177 Health Care Program Primary Care Initiative, Annual Report 2017” (177 Health Care Program 2017), and on relevant legal provisions.

<sup>13</sup> This article’s description of the NCT is based on my interviews with Bill Graham, who served as public advocate in Majuro, his written testimony submitted to the U.S. House of Representatives Foreign Affairs Committee (Graham 2010), and relevant legal provisions.

<sup>14</sup> For detailed discussions on the RECA, see Szymendera (2021) and Tamayama’s article in this collection of articles (Tamayama 2022).

cancer surgeries are unavailable at any of the hospitals in the Marshall Islands, patients who need one have to travel overseas to Hawaii or the Philippines.

In addition to claims for personal injury compensation, the NCT also receives property damage claims. The NCT has covered various nuclear damages arising from contamination of land, such as radiological cleanup and restoration, past and future loss of use of the land, and a variety of consequential damages including hardship and suffering in life after relocation from the contaminated land. Following the criterion used by the U.S. Environmental Protection Agency (EPA), the NCT set the criterion for certifying radioactive contamination of land on 0.15 mSv (15 millirem) per year maximum effective dose equivalent for humans (Graham 2010). In this way, the NCT's scheme for compensating for property damage has taken into account damage or loss of land, which is the basis of the Marshallese' lifestyles. Unlike Western Europe, land in the Marshall Islands is not exchangeable real estate but the foundation of life and identity, and Marshallese all have some land rights. The land tenure is collective and operates on a customary basis, and thus it is not individuals but local governments that put in claims for property damage compensation to the NCT.

The NCT has constantly reviewed and reconstructed the compensation system for nuclear test victims while carrying out independent fieldwork and taking into account the conditions in the designated areas as well as changes in the compensation system in the U.S. However, the Nuclear Claims Fund has run out of money and NCT is unable to pay the awarded compensation<sup>15</sup>, and furthermore, the operation of NCT itself has come to a standstill (Takemine 2016b). No applications for or payments of compensation have been processed, and all the staff members who were involved in reviewing applications, such as judges and public advocates, retired and most NCT offices have been closed.

Despite the exhaustion of the fund, the 177 Health Care Program has been continued by securing one-year budgets from the U.S. Department of the Interior. While 2 million dollars a year was promised as the program budget at first, the budget is now determined on a yearly basis, and budget negotiations are necessary every year<sup>16</sup>. This inevitably

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<sup>15</sup> The NCT certified more than 2287 million dollars of property damage compensations—many of which were to make up for loss of lands caused by the nuclear testing. The shortage of the Nuclear Claims Fund, however, allowed no more than 4 million dollars to be actually paid, and thus more than 2.2 billion dollars remains unpaid. Property damage compensations were claimed even by local governments in the areas where the U.S. has not admitted nuclear damage, but the NCT stopped reviewing property damage compensation claims after making determination upon claims by the four local governments in the areas where the U.S. has admitted nuclear test damage. On the other hand, the NCT certified 96,658,250 dollars of personal injury compensations in total, but 23,131,552 dollars remains unpaid, and no new claims can be received. The root cause of the shortage of the fund lies in a difference in perception of nuclear testing damage between the tribunal in the Marshall Islands and the U.S. government.

<sup>16</sup> In the FY2021, the Department of the Interior allocates 1,737,051 dollars as the budget for the 177 Health Care Program (DOI 2021).

scaled down the program. Secondary and tertiary medical care have ceased to be available through the program, and only primary health care is available. It is still noteworthy that the program provides victims with preventive measures before onset of severe diseases to some extent, even if they live in remote atolls and islands.

The Marshallese government petitioned for additional compensation from the U.S. government in 2000 (RMI 2000), and has been demanding since. Based on the Section 177 Agreement, however, the U.S. government has claimed that the 150-million-dollar compensation provided to the Marshallese government is to make up for the past, present, and future nuclear testing damage, and that the compensation for the U.S. nuclear testing program has already reached the “full settlement” (DOS 2004).

This context—in which the U.S. does not provide any additional compensation even in the areas where it admits nuclear testing damage—further invisibilizes the neglected nuclear testing damages in the areas where the U.S. has not acknowledged any damage, such as Ailuk and Likiep Atolls (Takemine 2015a). U.S. government documents which were declassified after the signing of the Compact agreement that the U.S. government recognized radioactive contamination in these areas, but, nevertheless, the U.S. government has regarded the issue of compensation for nuclear testing victims as having reached the “full settlement” and has disregarded the issue.

In 2017, the Marshall Islands government established the Marshall Islands National Nuclear Commission (NNC) so that the government can negotiate with the U.S. government over the issue of compensation for the nuclear tests. People in the Marshall Islands have advocated for “nuclear justice” (NNC 2019), aiming to stop the injustices that have been repeated in the Marshall Islands, seek a reasonable resolution of the nuclear issue, and obtain compensation.

## **5. Conclusion**

This article examined the compensation systems for sufferers of the atomic bombings of Hiroshima and Nagasaki in Japan and for nuclear testing victims in the Marshall Islands. This section concludes the examination by illustrating characteristics and key points of the both systems, while taking into consideration the TPNW, which stipulates “[v]ictim assistance” and “[i]nternational cooperation.” This section also explains why it is now indispensable to “uncover and compare compensation systems for victims of the use and testing of nuclear weapons worldwide.”

The compensation system for Hiroshima and Nagasaki atomic bomb sufferers has been concerned primarily with addressing health effects of the atomic bombings. Thus, the central pillars of the system lie in providing beneficiaries with medical services regardless of whether they are sick or not and providing allowances in accordance with the diseases they contract. The social welfare services, such as consultation services and in-home support services, are also implemented. In summary, the compensation system for atomic bomb sufferers in Japan is characterized by the comprehensiveness of measures aimed to address health effects of the atomic bombings suffered by those who have survived the nuclear damages. It is also notable that the Survivors' Support Law has established peace memorial projects to pray for a lasting peace.

In Japan, in the process of formulation of the laws aimed to support atomic bomb survivors, the issue of compensation for atomic bomb sufferers has been discussed in the larger context of how war damages in general should be compensated. The current law for supporting survivors, Survivors' Support Law, was established as an exception of the government's compensation policies, which have denied compensation for civilians' war damages. The formulation of this law was boosted by organizations formed by sufferers of the atomic bombings.

Topics of initial discussions on the formulation of a survivor support system included establishing not a compensation system for war damages but a comprehensive support system for all kinds of victims of Japan-related radiation, which would also take care of atomic bomb sufferers. As Tamayama and Yokoyama's article in this collection discusses (Tamayama and Yokoyama 2022), compensations for nuclear testing victims in the U.S., such as those based on the RECA and the Energy Employees Occupational Illness Compensation Program Act (EEOICPA), are implemented as parts of compensation measures for victims of radiation exposure, while the beneficiaries are limited. In contrast, the established compensation system based on the 1957 Medical Care Law and the 1994 Survivors' Support Law regarded only certain groups of sufferers of the Hiroshima and Nagasaki bombings as its beneficiaries and neglected other nuclear victims, such as victims of nuclear testing or nuclear power plant accidents.

In contrast to the Japanese compensation system for atomic bomb sufferers, in which the country that caused the damage by the atomic bombings, the U.S., does not assume responsibility for compensation, the compensation system for nuclear testing victims in the Marshall Islands is based on the U.S. government's recognition of its responsibility for compensation—the U.S. government has funded compensation for nuclear testing victims. What should be noted here is that the U.S. government maintains that it made the

compensation to the Marshall Islands government not because its nuclear testing program was wrong, but because the Marshallese people contributed to the U.S. national defense.

While the Marshall Islands established a compensation system for nuclear testing victims, the fund for compensations ran short, and thus the system is in abeyance, while only a downsized health care program has been implemented. Despite this situation, the compensation system for nuclear victims established in the Marshall Islands is instructive to the world in advancing “victim assistance.”

Information on the nature of nuclear damages has been constantly updated, which makes it clear that nuclear damages are never ending. It is impossible to cover the everlasting nuclear damages by establishing a fund using a one-time compensation from a country which conducted nuclear tests and providing victims with a one-time compensation award—as in the Marshall Islands. Such a compensation system thus needs constant budgetary measures and continuous payments of compensation to victims as in the Japanese compensation system.

While the Japanese compensation system focuses on the “special health conditions” of the survivors, the Marshall Islands has established a framework of property damage compensation by addressing various nuclear damages arising from contamination of land. And the Marshall Islands has set the criterion for certifying radioactive contamination of land on 0.15 mSv per year maximum effective dose equivalent for humans—which is stricter than the criterion adopted by the International Commission on Radiological Protection (ICRP). In order to make progress in victim assistance based on the recognition of “the disproportionate impact of nuclear-weapon activities on indigenous peoples” (TPNW, Preamble, Paragraph 7), it would be indispensable to pay attention to damages to land as one of nuclear damages as in the Marshall Islands, for land is the basis of people’s lives.

The health-care programs in the Marshall Islands provide services to those who were born after the nuclear tests if they are constituents of the areas where the U.S. admitted nuclear test damages. The payment of personal injury award to rightful claimants does not require them to prove causation between their diseases and radiation exposure if they can prove their residence in the Marshall Islands during the nuclear testing period and their contraction of one or more of the specified diseases.

The beneficiaries of the compensation, however, are limited to the people in the four areas where the U.S. government admitted damages resulting from its nuclear tests, and people in other areas or local workers who were engaged in decontamination work after the tests were out of the scope of the system.

More than 2,000 nuclear tests have been conducted worldwide<sup>17</sup>. The following articles in this volume will explore compensation systems for victims of nuclear tests conducted by the U.S., the former Soviet Union, Britain, France, and China.

Our collaborative research has not aimed to discuss whether a compensation system in a specific country or area is a true compensation for victims or not or to completely deny the sufficiency of a compensation system. We have committed ourselves to uncovering various systems and measures of “compensation,” which we have broadly defined as acts of “making up for losses or costs” incurred by nuclear victims. This collection of articles is an outcome of our joint scholarly endeavor.

Learning from Hironao Ozaki, an expert who has compared compensation systems for pollution victims, about accumulation of comparative research on the systems (Ozaki 2018 and Pollutions, Drug-induced Sufferings, Occupational Diseases Compensation Research Group 2012), our collaborative research, “Seeking Nuclear Justice: International Survey and Comparison of Compensation Measures/Systems for the Victims of Nuclear Tests,” has so far uncovered different compensation measures for nuclear testing victims worldwide and referred to insights yielded by investigating each of them from a comparative perspective. The aim of our research is to contribute to the improvement of each of the compensation measures for nuclear victims, as well as to offer a foundation for discussions on victim assistance stipulated in the TPNW and explore global norms for nuclear victim compensation. While our primary focus has been on compensation for nuclear damages caused by the use or testing of nuclear weapons, the scope of our research covers other types of nuclear victims—such as people who have fallen victim to radiation exposure at nuclear-related facilities, uranium mines, or nuclear power plants—and the issue of compensation for these victims. We firmly believe that our research will have important implications for considering and constructing compensation systems for nuclear victims in general, as it mainly explores compensation systems for nuclear testing victims while taking into account “[v]ictim assistance” and “[i]nternational cooperation” stipulated by the TPNW. Furthermore, we also believe that this research will contribute to consideration and construction of compensation measures for victims of other types of pollution and environmental disruption.

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<sup>17</sup> For details of nuclear tests in the world, see the “Nuclear Testing” page in the website of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO Preparatory Commission n.d.). Available on this website is the information on the history of nuclear testing, sites of nuclear tests, types of nuclear tests, and country-to-country information on nuclear tests.



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