



# International Law and the Problem of Change: The Challenge of Nuclear Disarmament

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# Chapter 2

## International Law and the Problem of Change: The Challenge of Nuclear Disarmament

Mika Hayashi\*

### Contents

- 2.1 Introduction
- 2.2 Outlawing Biological Weapons
  - 2.2.1 Prohibition of Use
    - 2.2.1.1 Gradual Development in Treaty Rules
    - 2.2.1.2 Formation of the Customary Rule and its Scope
  - 2.2.2 Prohibition of Possession
  - 2.2.3 International Control of the Comprehensive Prohibitions
- 2.3 Outlawing Nuclear Weapons
  - 2.3.1 Limited Stigmatisation of Use
    - 2.3.1.1 Treaty Rules
    - 2.3.1.2 Absence of the Formation of a Customary Rule
  - 2.3.2 Limits in the Endeavour for Nuclear Disarmament
  - 2.3.3 The Problem of International Control
- 2.4 Conclusions

**Abstract** This chapter examines the outlawing of biological weapons and its possible impact on the discussion of a prohibition of nuclear weapons. Despite the different ways in which weapons of mass destruction are regulated, the examination of biological weapons is useful in considering a few important elements in realising a change in the international regulation of nuclear weapons: stigmatisation of the use of the weapons; the acceptance of the no-first-use as a first step for a more comprehensive regulation; disarmament that accompanies the comprehensive prohibition of the use. These milestones that appear to characterise the successful, comprehensive ban of biological weapons contrast with, and serve to highlight, the difficulties for a change in the international regulation of nuclear weapons: the limited stigmatisation; refusal of the no-first-use rule by nuclear-armed States; a divide about how disarmament should be carried forward. In addition, any impact or lesson from the outlawing of biological weapons must be assessed with due regards to the question of international security in the context of nuclear disarmament.

**Keywords** Biological (Bacteriological) Weapons · International Control · No-First-Use of Nuclear Weapons · Nuclear Deterrence · Nuclear Disarmament · Nuclear Weapons · Stigmatisation of Weapons of Mass Destruction

## 2.1 Introduction

Problems of change in this particularly difficult field of nuclear weapons have already been addressed by Professor and Judge James Crawford in his 2018 article,<sup>1</sup> in which he used the 1993 Chemical Weapons Convention (CWC)<sup>2</sup> to illustrate the problems of the 2017 Treaty

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<sup>1</sup> Crawford 2018, 447-476.

<sup>2</sup> Convention on the Prohibition of the Development, Production, and Stockpiling and Use of Chemical Weapons and on their Destruction (CWC), 1974 *UNTS* 45.

on the Prohibition of Nuclear Weapons (TPNW).<sup>3</sup> This chapter addresses the problems of nuclear disarmament by including a third type of weapons of mass destruction, biological weapons, in considering the problem of nuclear disarmament. Three types of weapons of mass destruction (WMD) are regulated very differently. Despite these different ways, the examination of biological weapons can be useful in considering a few important elements in realising a change in the international regulation of nuclear weapons.<sup>4</sup>

The first common aspect of the regulation of WMD is the stigmatisation regarding the use of such weapons. A difference, however, stems from the degree of this stigmatisation. The stigmatisation is overwhelming for biological or chemical weapons' use. It is simply a fact that 'no-one now defends their use.'<sup>5</sup> The stigmatisation of the use of nuclear weapons, in comparison, cannot be considered overwhelming in the same way, despite the conscious efforts to draw a parallel between nuclear weapons and the other two types of weapons.<sup>6</sup> What marks the nuclear weapons most distinctly from the other two types of weapons is the policy of nuclear deterrence, practiced and adhered to by a considerable number of States. Nuclear deterrence must therefore be addressed in the assessment.

The second common aspect of the regulation of WMD is the thrust for disarmament and the need for international control for such disarmament. In fact, the need for international control is undisputed for the regulation of WMD. There is even consensus, at least rhetorically in preambles of treaties, that disarmament should proceed under 'strict and effective international control.'<sup>7</sup> In this regard, however, the treaty regimes of biological weapons and nuclear weapons are confronted with various issues. The Biological Weapons Convention (BWC)<sup>8</sup> establishes a regime for disarmament, without any permanent institutional control for that disarmament. In regards to nuclear weapons, while there is no universal agreement about complete disarmament, there is wide agreement on the need for non-proliferation, and the international control is an essential component of the regulatory

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<sup>3</sup> Treaty on the Prohibition of Nuclear Weapons, UN Doc A/CONF.229/2017/8 (7 July 2017); UNGA Res. 72/31 (11 December 2017). The Treaty has entered into force on 22 January 2021, *see* [https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=XXVI-9&chapter=26](https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVI-9&chapter=26).

<sup>4</sup> A similar approach is adopted by Crawford 2018, 449, regarding the comparison between chemical weapons and nuclear weapons.

<sup>5</sup> Crawford 2018, 449, with regard to chemical weapons.

<sup>6</sup> *See* e.g. Maurer 2019, 6.

<sup>7</sup> Preamble, TPNW; preamble, CWC. *See* also preambles of the Nuclear Non-Proliferation Treaty (NPT) and the Biological Weapons Convention (BWC).

<sup>8</sup> Convention on the Prohibition of the Development, Production, and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (BWC), 1015 *UNTS* 163. In this treaty and generally in discussions pertaining to biological weapons, the two terms, 'biological' and 'bacteriological', are used interchangeably.

regime of the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT).<sup>9</sup> However, not all nuclear-armed States<sup>10</sup> joined the NPT. Moreover, none of the nuclear-armed States accepts the 2017 Treaty on the Prohibition of Nuclear Weapons Treaty.

Against this backdrop, this chapter examines the outlawing of biological weapons, because of the changes in this regulation that transpired (Section 2.2): stigmatisation of the use of the weapons; the initial acceptance of the no-first-use rule, as a first step for a more comprehensive regulation; disarmament that accompanies the comprehensive prohibition of the use; difficulty to agree on the nature and the design of verification mechanism. These aspects, save the last one, characterise the successful, comprehensive ban of biological weapons and serve to highlight the difficulties for a change in the international regulation of nuclear weapons (Section 2.3): limited stigmatisation; limited no-first-use policy or its pure refusal; a divide about how disarmament should be carried forward; international control for nuclear disarmament proposed.

## **2.2 Outlawing Biological Weapons**

Successful outlawing of biological weapons by the international community shows that there were a few steps in bringing about the change: the acceptance of the no-first-use rule as a first step, and stigmatisation of the use of the weapons (2.2.1); disarmament that accompanies the comprehensive prohibition of the use (2.2.2). One poignant issue that has not been successful in the regulation of biological weapons is to build an institutional, international control to deal with compliance and non-compliance (2.2.3).

### ***2.2.1 Prohibition of Use***

#### **2.2.1.1 Gradual Development in Treaty Rules**

The stigmatisation of biological weapons, in the form of prohibition of use, did not come into existence out of nowhere. The development in the law of armed conflict shows that it took more than a century to establish an absolute prohibition, starting from a limited and conditional restriction.

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<sup>9</sup> Treaty on the Non-Proliferation of Nuclear Weapons (NPT), 729 *UNTS* 161.

<sup>10</sup> In this article, 'nuclear weapon States' refer to the five nuclear weapon States party to the NPT. 'Nuclear-armed States' refer to all States possessing nuclear weapons, including the nuclear weapon States in the NPT: India, Pakistan, North Korea and Israel in addition to the five nuclear Weapon States in the NPT. Casey-Maslen 2019, 11.

An early example of the regulations of biological weapons in the law of armed conflict is the prohibition of the use of poison and poisoned weapons.<sup>11</sup> Later, the horror of the use of gas during World War I led to an adoption of the Geneva Protocol in 1925.<sup>12</sup> As its title indicates, it prohibited the use of asphyxiating, poisonous or other gases and ‘extend[ed] this prohibition to the use of bacteriological methods of warfare’ in time of war. The Geneva Protocol was considered a weak regulation from the perspective of the law of armed conflict for a number of reasons. First, the text explicitly recognised that the States Party to the Protocol were bound by its rule only between themselves; the prohibition at that time was certainly not a customary prohibition. Second, more importantly, many States effectively reserved their right to retaliate in kind in case of violations, by formulating reservations to the Protocol.<sup>13</sup> Even France, the depositary of the treaty, made a reservation in the following terms:

(1) The said Protocol is only binding on the Government of the French Republic as regards states which have signed and ratified it or which may accede to it. (2) The said Protocol shall *ipso facto* cease to be binding on the Government of the French Republic in regard to any enemy state whose armed forces or whose Allies fail to respect the prohibitions laid down in the Protocol.<sup>14</sup>

From the perspective of this chapter, it is the second reservation that requires further examination. It could be understood as reflecting a position that the prohibition in the Protocol was a prohibition of the first use only; a belligerent state had a right to retaliate in kind against its opponent that resorted to the prohibited weapon.<sup>15</sup> Thus, for those States that made reservations to this effect, the acceptance of the rule was conditional, or the scope of the rule was limited to the first use only.

Such reservations were maintained until a new approach to the international regulation after World War II took hold. The new approach was to shift the focus from a limited regulation in the law of armed conflict<sup>16</sup> to a more comprehensive regulation involving disarmament. Against this background, there were negotiations in the Eighteen-Nation Disarmament Committee, which later became the Conference of the Committee on Disarmament, to go beyond the Geneva Protocol and develop a more comprehensive

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<sup>11</sup> 1899/1907 Hague Convention Respecting the Laws and Customs of War on Land, 2 *AJIL* Supplement 90-117 (1908); Art. 23(a) of the Regulations concerning the Laws and Customs of War on Land. It did not distinguish the chemical and biological provenance of such poison and poisoned weapons.

<sup>12</sup> Like the 1907 Hague Convention, this instrument also applied to both chemical and biological weapons. Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare [Geneva Protocol], *LNTS*, vol. 94 (1929), No. 2138, p. 65.

<sup>13</sup> All reservations can be found in *LNTS*, vol. 94, p. 67 *et seq.*

<sup>14</sup> A translation reproduced in Roberts and Guelff 2000, 165.

<sup>15</sup> Roberts and Guelff 2000, 155. See also Asada 2015, 160-163.

<sup>16</sup> The prohibition in the Geneva Protocol was explicitly about ‘the use in war.’

regulation. An additional and important pressure on the negotiation was produced when the United States made an announcement in 1969 that it was unilaterally renouncing the use of lethal biological agents and weapons, and all other methods of biological warfare.<sup>17</sup> With the adoption of the BWC, States that once made reservations to the Geneva Protocol started to withdraw these reservations. Reservations were withdrawn, often at around the time the same States adhered to the BWC<sup>18</sup> or later the CWC.<sup>19</sup> The States Parties to the BWC consider that:

‘reservations [to the Geneva Protocol] concerning retaliation, through the use of any of the objects prohibited by the Convention, even conditional, are totally incompatible with the absolute and universal prohibition of the development, production, stockpiling, acquisition and retention of bacteriological (biological) and toxin weapons, with the aim to exclude completely and forever the possibility of their use.’<sup>20</sup>

Authors also stress that a logical consequence of the prohibition of the possession in the BWC is that such weapons cannot be used under the BWC: ‘what is not possessed cannot be used.’<sup>21</sup>

The BWC focuses on disarmament issues, and the list of prohibitions in Article I does not refer to the use of weapons. Nevertheless, because the possession of these weapons is prohibited by Article I of the BWC, the States Parties to the BWC consider ‘the use by the States Parties ... is *effectively* a violation of Article I,’<sup>22</sup> and they are determined ‘to condemn any use of biological agents or toxins other than for peaceful purposes, by anyone at any time.’<sup>23</sup>

The scope of the biological weapons of which use is prohibited under the BWC is comprehensive. The States Parties affirm ‘that the Convention is comprehensive in its scope and that all naturally or artificially created or altered microbial and other biological agents and toxins, as well as their components, regardless of their origin and method of production and whether they affect humans, animals or plants, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes, are unequivocally covered by Article I.’<sup>24</sup> The BWC is also understood to regulate any future weapons resulting

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<sup>17</sup> SIPRI 1971, 280-281.

<sup>18</sup> For example, Ireland withdrew its reservation to the Geneva Protocol in 1972.

<sup>19</sup> France withdrew its reservations on 12 December 1996 and the United Kingdom did so in 1991. See also Roberts and Guelff 2000, 155.

<sup>20</sup> Final Declaration of the Eighth Review Conference, BWC/CONF.VIII/4, para. 52 (2017).

<sup>21</sup> Lowe 1988, 643; Dinstein 2016, 95.

<sup>22</sup> Final Declaration of the Eighth Review Conference, BWC/CONF.VIII/4, para. 3 (2017) (italic by the present author). See sub-section 2.2.2 for the views confirming this relationship between the disarmament and the prohibition of the use.

<sup>23</sup> *Ibid.* The preamble of the BWC also ‘Reaffirms their [States Parties’] adherence to the principles and objectives of that Protocol.’

<sup>24</sup> *Ibid.*, para. 1.

from discoveries and technical developments, too, as it is repeatedly confirmed by the States Parties.<sup>25</sup>

The prohibition of the use of biological weapons today extends beyond the traditional international armed conflict in which only States are belligerents. There is wide acceptance that the prohibition of the use of biological weapons applies not only in international armed conflicts but also in non-international armed conflicts.<sup>26</sup> It is also one of the rules to be respected by the United Nations forces according to the Secretary General's Bulletin on the Observance by United Nations Forces of International Humanitarian Law of 1999.<sup>27</sup>

### **2.2.1.2 Formation of the Customary Rule and its Scope**

Along the treaty rules, there is also a customary rule prohibiting the use of biological weapons.<sup>28</sup> Moreover, today, it is not only a prohibition of the first use. As discussed previously, this was not immediately apparent from the attitudes of States towards the 1925 Geneva Protocol; nearly 40 States adhered to the Protocol with reservations to the effect that they were bound by the rule only as long as other States complied with the same rule. The question is important, because if the position indicated by these reservations also formed the contour of the customary rule, then the customary rule would also be a prohibition of the first use only, preserving a right to retaliate in kind against a belligerent that resorted to the prohibited weapon.

Nevertheless, a comprehensive ban on use of biological weapons was in sight by the time the United States unilaterally renounced the use of all biological weapons and methods of warfare in 1969.<sup>29</sup> While the same policy announcement limited the scope of the renunciation to the 'first use' for chemical weapons, such a limitation was not attached to the renunciation of biological weapons.<sup>30</sup> In 1969, the question of biological and chemical weapons was also addressed by the General Assembly, and its Resolution declared the use in international armed conflict of any biological agents of warfare, together with the use of chemical weapons, 'as contrary to the generally recognized rules of international law, as embodied in' the Geneva Protocol.<sup>31</sup> While the voting record of this Resolution does not

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<sup>25</sup> For the most recent affirmation in the Review Conference, *see* BWC/CONF.VIII/4, para. 2 (2017).

<sup>26</sup> Henckaerts and Doswald-Beck 2005, 256-258; Fleck 2021, 169; Sivakumaran 2012, 393.

<sup>27</sup> UN Secretary General Bulletin (1999), Observance by United Nations Forces of International Humanitarian Law, ST/SGB/1999/13.

<sup>28</sup> Dinstein 2016, 94; Boothby 2016, 115; Henckaerts and Doswald-Beck 2005, 256-258.

<sup>29</sup> SIPRI 1971, 280-281.

<sup>30</sup> SIPRI 1971, 280-281.

<sup>31</sup> A/RES/2603A (XXIV).

show unanimous support for this interpretation, main areas of disagreements about the Resolution were unrelated to the prohibition of biological weapons.<sup>32</sup> Against this background, ‘the weight of opinion appears to regard it [the Geneva Protocol] as having established a comprehensive prohibition on the use of “bacteriological” weapons.’<sup>33</sup>

As described above, it was with the arrivals of the BWC, and later the CWC, that many of the reservations to the Geneva Protocol were withdrawn. Among the reservations still maintained as of October 2020, only one belongs to a State that has not acceded to the BWC: Israel. All other remaining reservations are maintained by the States that have become Parties to the BWC: India, Pakistan, North Korea, the United States, to mention only a few.<sup>34</sup> Though these States maintain their reservations to the Geneva Protocol, they never oppose the adoption of final declarations in the BWC Review Conferences that stress the importance of, and recommending, the withdrawal of these reservations.<sup>35</sup> Moreover, as it was pointed out already, these reservations to the Geneva Protocol do not affect the comprehensive prohibition by the BWC, and are without any practical significance as long as these States remain within the BWC. In light of this, the remaining reservations to the Geneva Protocol no longer seem to be strong evidence to refute the existence of a comprehensive, customary prohibition of the use of biological weapons.

The instances where a retaliation in kind was in theory on the table also indicate that such a reaction was not contemplated or practiced. At the time of the 1991 Gulf War, there was a strong suspicion that Iraq might use its biological weapons (and chemical weapons) against the multinational forces. However, States such as France and the United States did not pursue the idea of countering biological weapons by biological weapons.<sup>36</sup> France stated that even in an event of biological attack, it would not respond in kind.<sup>37</sup> It is true that the United States’ warning against Iraq was less straightforward. It did not explicitly exclude a retaliation in kind, and the letter by the then US President to Saddam Hussein only stated: ‘You and your country will pay a terrible price if you order unconscionable acts of this

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<sup>32</sup> The Resolution was adopted by 80 votes to 3, with 36 abstentions. The controversial issues, as well as reasons for abstentions, were not about biological weapons. *See* Asada 2015, 160; Fischer 1969, 132.

<sup>33</sup> Lowe 1988, 642.

<sup>34</sup> Henckaerts and Doswald-Beck 2005, Vol. I, 256-258.

<sup>35</sup> E.g., Final Declaration of the Eighth Review Conference, BWC/CONF.VIII/4, paras. 50-51 (2017). Final declarations in the BWC Review Conferences are adopted by consensus.

<sup>36</sup> The attitude of the United States in the Gulf War was also mentioned by Crawford 2018, 463, in the context of the prohibition of chemical weapons: ‘the United States was able to demonstrate a commitment to the non-use of chemical weapons in armed conflict by avoiding their use during the Gulf War.’ Crawford 2018, 463, supports the view that ‘the United States appeared to be acting pursuant to a perceived political and moral imperative against the use of chemical weapons.’

<sup>37</sup> Goldblat 2002, 136.



sort’:<sup>38</sup> in the same letter, one of the three examples of such ‘unconscionable acts of this sort’ was the resort to biological weapons. However, the response contemplated by the United States is said to be a massive retaliation of a different kind,<sup>39</sup> and not a retaliation in kind by biological weapons.

A brief summary regarding the prohibition of the use of biological weapons is that the rule, incorporated into treaties but also established as custom, is a comprehensive ban of the use. This summary prompts one last question, about security and deterrence. How did these States, convinced that the use of biological weapons should be comprehensively banned, propose to ensure their security, and deter any biological warfare against them? Comprehensive as it is, a prohibition on the use can be violated. Because of that possibility, in 1968, major powers were still ‘engaged in expensive research programmes to produce counter-measures against attack by microbiological agents.’<sup>40</sup> A U.K. working paper in 1968 in the Eighteen-Nation Committee on Disarmament, which later became the Conference of the Committee on Disarmament, stated clearly: ‘Even if all states were to accede to the [Geneva] Protocol there would still be a risk of large-scale use of the proscribed weapons as long as states have the right to manufacture such weapons and to use them against violators and their allies.’<sup>41</sup> Against this backdrop, an answer to the question of security above was to reinforce this prohibition of the use with the prohibition of the possession of the biological weapons, biological disarmament.<sup>42</sup>

### ***2.2.2 Prohibition of Possession: Biological Disarmament***

To recapitulate: the prohibition of the use of biological weapons in the Geneva Protocol in 1925 was not accompanied by any restriction on the possession or development of these weapons. This was not optimal for an effective prohibition of the use of weapons, for a belligerent State could decide to violate the ban on the use and resort to the prohibited

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<sup>38</sup> President Bush’s Letter to President Saddam Hussein of Iraq (5 January 1991), reproduced in Gordon 1995, 493-494.

<sup>39</sup> The strong response contemplated was ‘the destruction of much of the Iraqi economy and civilian infrastructure’, Gordon 1995, 197.

<sup>40</sup> SIPRI 1971, 257.

<sup>41</sup> U.K. Working Paper on Microbiological Warfare, ENDC/231 (6 August 1968).

<sup>42</sup> This answer, pursued under the BWC, will be examined in the following sub-section (2.2.2.). Another answer to the question, by a few States, was a retaliation, not by biological weapons but by nuclear weapons. For example, India’s no-first-use policy regarding nuclear weapons is accompanied by the exception in case of being a victim of biological or chemical warfare (India, Country-by-Country Summary, in Hiroshima Report 2020, <https://hiroshimaforpeace.com/en/hiroshimareport/report-2020/>; Jain and Seth 2019, 117-118). The United Kingdom is said to have hinted at a similar possibility in the past (Jain and Seth 2019, 114). This will be discussed as a part of the examination of the no-first-use rule of nuclear weapons (2.3.1.).

weapons that it has kept or developed. Therefore, to try to complement the Geneva Protocol by an agreement on the prohibition of possession was one of logical next steps for the regulation of biological weapons. At first, the negotiation in the Eighteen-Nation Disarmament Committee tried to treat chemical and biological weapons together in a single text. However, agreeing on a disarmament scheme of biological weapons appeared easier than agreeing on a similar scheme on chemical weapons,<sup>43</sup> and by 1969, many States in this negotiation came to believe it sensible to separate these two categories of weapons. When the Soviet Union accepted this idea in 1971,<sup>44</sup> the negotiation produced a treaty text that consisted of a preamble and fifteen articles: the BWC.

The disarmament endeavour at that particular point of time was undoubtedly facilitated by a unilateral decision by the United States in 1969 to renounce biological warfare.<sup>45</sup> In reaching this decision, the United States was said to have recognised that ‘biological weapons had limited tactical utility on the battlefield and did not constitute a reliable or effective strategic deterrent.’<sup>46</sup> Later in the same year, 1969, the United Kingdom confirmed that ‘we have never had any biological weapons, we do not have any now and we have no intention of acquiring any.’<sup>47</sup> Soon, States such as Canada, Sweden and Yugoslavia also made statements to the effect that they neither possessed nor intended to manufacture biological weapons in the meetings of the Conference of the Committee on Disarmament,<sup>48</sup> and these States of course supported the draft of the BWC containing these prohibitions.<sup>49</sup> Even France, which was critical of a number of aspects of the draft, took unilateral steps to prohibit the manufacturing, stockpiling and acquisition of biological weapons.<sup>50</sup> In fact, at that time, ‘No government is known to be relying on them [biological weapons] for their security.’<sup>51</sup> Unlike ‘Hiroshima’ for nuclear weapons or ‘Ypres’ for chemical weapons, there had been no official record of a large-scale use of biological weapons in the battlefield, to prove or indicate their military utility, either. It was against this particular background that an agreement on biological disarmament, the BWC, emerged.

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<sup>43</sup> SIPRI 1971, 254.

<sup>44</sup> SIPRI 1971, 312.

<sup>45</sup> SIPRI 1971, 280-281.

<sup>46</sup> Tucker and Mahan 2009, 9. *See also* Fischer 1971, 88; Lowe 1988, 641.

<sup>47</sup> A/C.1/PV.1716 (9 December 1969), para. 209. The information was delivered as a part of an explanation why the United Kingdom was not announcing a unilateral renunciation of biological warfare similar to the United States’ announcement.

<sup>48</sup> SIPRI 1971, 281-282.

<sup>49</sup> Fischer 1971, 90.

<sup>50</sup> Fischer 1971, 96. One of the criticism by France was the lack of any elaborate international control in the draft treaty, an issue discussed further in sub-section 2.2.3.

<sup>51</sup> Editorial ‘Realism Replaces Propaganda’ *Times* (31 March 1971), cited in Balmer 2016, 87.

The disarmament obligation of biological weapons is a treaty obligation under the BWC.<sup>52</sup> The BWC is not universally supported but does enjoy a wide participation: 183 States Parties, as of 2020.<sup>53</sup> It prohibits the development, production, stockpiling and acquisition of biological weapons understood in the above-mentioned way (Art. 1(1)). The same prohibition applies to weapons, equipment or means of delivery designed to use these biological agents or toxins (Art. 1(2)). Those States that possess biological weapons must either divert them to peaceful purposes or destroy them (Art. 2). The States Parties are also under an obligation not to transfer, or in any way assist, encourage or induce anyone else to manufacture or acquire biological weapons (Art. 3). To implement the provisions of the BWC, the States Parties must take necessary national measures (Art. 4).

### ***2.2.3 International Control of the Comprehensive Prohibitions***

Despite the stigmatisation of use and the wide consensus that supports biological disarmament of the BWC, there is a pronounced area of disagreement among States. It is mandatory verification by an impartial body. Without international verification, when there are allegations of the use of biological weapons, they are likely to be denied. When there are allegations of secret biological weapons programmes and development, they are likely to be denied.<sup>54</sup> Neither the Geneva Protocol nor the BWC is equipped with any permanent institution of verification to meet these needs and challenges.

Against the backdrop of the Iran-Iraq war, the United Nations General Assembly adopted a Resolution that tried to address this issue.<sup>55</sup> The main purpose was to enable the Secretary-General to organize fact-finding investigations through the use of qualified experts when there were allegations of violations of the 1925 Geneva Protocol, or the relevant rules of customary international law.<sup>56</sup> When the political climate changed, another resolution with a very similar content was adopted by consensus.<sup>57</sup> However, it is clearly not a mandatory

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<sup>52</sup> Henckaerts and Doswald-Beck 2005 (rule 73), Boothby 2016, 115, and many authors take the position that it is also a customary obligation.

<sup>53</sup> Other than these 183 States, there are 4 signatories that have not ratified: Egypt; Haiti; Somalia; Syria. There are 10 States that remain outside the BWC: Chad; Comoros; Djibouti; Eritrea; Israel; Kiribati; Micronesia; Namibia; South Sudan; Tuvalu, BWC/MSP/2019/3 (8 October 2019).

<sup>54</sup> Well-known instances of suspected violations of the BWC include signs of a biological weapons plant in the Soviet Union in 1979 (the so-called Sverdlovsk incident) and the suspected production of mycotoxins as biological weapons by the Soviet Union and their transfer to its allies in South East Asia in the late 1970s and the early 1980s (the so-called Yellow Rain affair). These allegations were denied by the USSR at that time.

<sup>55</sup> UNGA Res. 37/98D (1982).

<sup>56</sup> Though the Resolution was adopted, 19 States voted against it and a considerable number abstained. Sur 1984.

<sup>57</sup> UNGA Res. 42/37C (1987).

process in case of allegations. Moreover, the implementation of the procedure envisaged met considerable difficulties, when the procedure was put to use in the context of the use of chemical weapons in Syria.<sup>58</sup>

The disarmament regime of the BWC is also marked by the absence of standing and compulsory verification mechanism. From the beginning, the absence of verification mechanism was perceived to be a priority issue by the States Parties. Thus, they agreed on a number of voluntary confidence-building measures as early as in the Second Review Conference in 1986 and continued to develop them. Then a group of governmental experts called VEREX was established at the Third Review Conference in 1991 to identify and examine potential verification measures. At a Special Conference in 1994, the States Parties agreed to establish an *Ad Hoc* Group in order to negotiate and develop a verification mechanism for the BWC. The negotiations concerning an additional protocol on a verification mechanism subsequently took place from 1995 to 2001. The US rejection of the draft protocol in July 2001, however, effectively terminated the negotiation. According to the United States, the negotiated draft protocol did not strengthen compliance with the Convention, and could hurt US national security as well as commercial interests.<sup>59</sup> The stalemate regarding the lack of verification mechanism is unchanged at the time of the Meeting of State Parties in 2019.<sup>60</sup> Within the BWC, between the view that favours ‘a return to the failed negotiations of 2001 for a legally-binding agreement’ and the view that maintains ‘verification in the BWC context is impossible,’<sup>61</sup> the search for a middle path has so far been fruitless.

In place of verification, the BWC does provide for consultation and cooperation in case of ‘any problems which may arise in relation to the objective of, or in the application of the provisions of, the Convention (Art. 5),’ which could be allegations of violations. A reaction to a violation may also be a complaint to the United Nations Security Council (Art. 6). However, these formal procedures to solve the problems of violations have rarely been used in the BWC. Nominally, the Review Conferences of the States Parties to the BWC also provide opportunities where problems of violations can be examined. However, without an impartial and independent body to verify the allegations, it is difficult to make any findings.

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<sup>58</sup> Hayashi 2014.

<sup>59</sup> Kervers 2002, 289.

<sup>60</sup> Lentzos 2020, 478.

<sup>61</sup> Description of the two opposing views is taken from Lentzos 2020, 474.

Not surprisingly, the Review Conferences themselves have never established violations of the BWC.

## 2.3 Outlawing Nuclear Weapons

A few aspects that characterised the successful, comprehensive ban of biological weapons contrast with, and highlight, the difficulties for a change in the international regulation of nuclear weapons: stigmatisation hampered by the very limited acceptance of no-first-use policy and the continued adherence to nuclear deterrence (2.3.1.); a divide about how disarmament should be carried forward (2.2.2.); international control for nuclear disarmament proposed without the involvement of stake-holders (2.3.3.).

### 2.3.1 *Limited Stigmatisation of Use*

Stigmatisation of the use of nuclear weapons is only partial. Although such use is generally considered abhorrent in a similar way the use of biological weapons is,<sup>62</sup> the acceptance of the no-first-use rule as a first step towards the development of the comprehensive prohibition of the use is absent. Of equal importance is the policy of nuclear deterrence that stands in the way of any serious degree of stigmatisation. These limits are visible in debates surrounding both treaty rules and customary law.

#### 2.3.1.1 Treaty Rules

Regarding the prohibition of the use of biological weapons, two treaties, the Geneva Protocol and the BWC, were examined. For the prohibition of nuclear weapons, two further treaties will be examined. The resemblance in the examination, however, stops there. In case of the two treaties for biological weapons, as it was previously shown, there was complementarity, both in form and in substance. This is not the case for the two treaties for nuclear weapons, namely, the NPT and the TPNW.

As its name suggests, the NPT is a treaty that prohibits the proliferation of nuclear weapons.<sup>63</sup> Thus, the NPT prohibits the transfer of nuclear weapons to any recipient. The five nuclear-weapon States Parties to the NPT are under the obligation not to transfer such

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<sup>62</sup> Maurer 2019, 6.

<sup>63</sup> Nuclear weapons regulated by the NPT are described as ‘nuclear weapons or other nuclear explosive devices (Art. 1).’

weapons to any recipient (Art. I), and non-nuclear-weapon States are under an obligation not to receive them (Art. II). Most importantly, the NPT does not have any provision restricting or prohibiting the use of nuclear weapons. It is a treaty negotiated during the Cold War, and the policy of nuclear deterrence was unquestioned. Even NATO's nuclear sharing arrangements, which enabled the US nuclear weapons to be placed in the territories of some NATO Allies in Western Europe and Turkey, were deemed acceptable under the NPT.<sup>64</sup>

The TPNW, by way of contrast, is a comprehensive ban treaty: it prohibits the use and the threat of use of nuclear weapons, as well as their development, testing, production, stockpiling, transfer and receiving transfer (Art. 1 (1) (a)-(d)). The TPNW also specifically prohibits assisting anyone to engage in the prohibited activities, and seeking assistance from anyone to engage in the prohibited activities (Art. 1 (1) (e)-(f)). These comprehensive treaty rules leave no room for the policy of nuclear deterrence if a State decides to join the TPNW. Thus, the United States, France and the United Kingdom made it clear that 'We do not intend to sign, ratify or ever become party to it. Therefore, there will be no change in the legal obligations on our countries with respect to nuclear weapons.'<sup>65</sup> These three nuclear weapon States are joined by Russia and China on other occasions, and together, they declare: 'We will not support, sign or ratify this Treaty. The TPNW will not be binding on our countries.'<sup>66</sup>

Given this background, despite their complementarity in theory, the NPT and the TPNW under the current conditions cannot function as complementary instruments. In the eyes of the nuclear-weapon States of the NPT, they are not complementary: 'Those who have joined [the TPNW] must explain how to preserve security and stability, particularly in Europe and Asia, in the absence of nuclear deterrence, in the face of rearmament and the resurgence of threats, without risking high-scale conventional warfare.'<sup>67</sup> In the eyes of the non-nuclear weapon States that nevertheless rely on the nuclear deterrence for their security, the two treaties are not complementary, either. For NATO Allies, the predominant view is that the

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<sup>64</sup> Shaker 1980, 129 *et seq.*, and 191 *et seq.*, most particularly 223-249.

<sup>65</sup> 'Joint Press Statement from the Permanent Representatives to the United Nations of the United States, United Kingdom, and France Following the Adoption' (7 July 2017), <https://usun.usmission.gov/joint-press-statement-from-the-permanent-representatives-to-the-united-nations-of-the-united-states-united-kingdom-and-france-following-the-adoption/>

<sup>66</sup> Joint Statement by China, France, Russian Federation, United Kingdom and United States (29 October 2018), First Committee, 73<sup>rd</sup> session of the UNGA. Reproduced on the website of the Russian Ministry of Foreign Affairs, [https://www.mid.ru/en/foreign\\_policy/news/-/asset\\_publisher/cKNonkJE02Bw/content/id/3384609](https://www.mid.ru/en/foreign_policy/news/-/asset_publisher/cKNonkJE02Bw/content/id/3384609) and on the website of the French Permanent Representation to the Conference on Disarmament (22 October 2018), <https://cd-geneve.delegfrance.org/Statement-P5-on-the-TPNW-10-22-2018>. Also reproduced by the United Kingdom as P5 Joint Statement on the Treaty on the Non-Proliferation of Nuclear Weapons (28 October 2018), <https://www.gov.uk/government/news/p5-joint-statement-on-the-treaty-on-the-non-proliferation-of-nuclear-weapons>.

<sup>67</sup> Statement by France, Cluster 1, 2019 NPT PrepCom (2 May 2019).

TPNW is incompatible with nuclear deterrence and the related undertakings within NATO.<sup>68</sup> Nuclear-sharing agreements are certainly incompatible with Article 1 (1) (g), that prohibits allowing the stationing of nuclear weapons. The two treaties, the NPT and the TPNW, are not complementary, and the wide participation to the TPNW is not in sight.

Apart from the TPNW, a commitment not to use nuclear weapons against non-nuclear-weapon States, the so-called negative security assurance, is sometimes made by nuclear-weapon States in the context of treaties establishing nuclear-weapon-free zones.<sup>69</sup> Accordingly, one could try to argue that such a commitment by nuclear-weapon States is a product of treaties. However, because of the very purpose of the treaties establishing nuclear-weapon-free zones, these treaties are regional, and not universal, in their nature and in their scope. Moreover, the only treaty among them which received the negative assurance of all five NPT nuclear-weapon States is the Treaty of Tlatelolco for Latin America.<sup>70</sup> The impact that it can produce, from a universal stigmatisation's perspective, is inevitably limited.<sup>71</sup>

### 2.3.1.2 Absence of the Formation of a Customary Rule

Two aspects regarding nuclear weapons stand out in comparison to the stigmatisation of the use of biological weapons. The first aspect is the position held by nuclear-armed States regarding the no-first-use rule of nuclear weapons. The second aspect is the role of deterrence assigned to nuclear weapons.

It is recalled that the first step towards the stigmatisation, and eventually the comprehensive customary prohibition, of the use of biological weapons was the acceptance of the no-first-use rule. In comparison, such clear acceptance of no-first-use rule for nuclear weapons cannot be found. When the International Court of Justice (ICJ) referred to 'an extreme circumstance of self-defence, in which its very survival would be at stake' in its

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<sup>68</sup> *Bericht der Bundesregierung zum Stand der Bemühungen um Rüstungskontrolle, Abrüstung und Nichtverbreitung sowie über die Entwicklung der Streitkräftepotenziale (Jahresabrüstungsbericht 2019)*, <https://www.bundesregierung.de/breg-de/suche/jahresabruestungsbericht-2019-1769174>, 27-28; 'Explanation of Vote of the Netherlands on Text of Nuclear Ban Treaty' (7 July 2017), [www.permanentrepresentations.nl/latest/news/2017/07/07/explanation-of-vote-of-ambassador-lise-gregoire-on-the-draft-text-of-the-nuclear-ban-treaty](http://www.permanentrepresentations.nl/latest/news/2017/07/07/explanation-of-vote-of-ambassador-lise-gregoire-on-the-draft-text-of-the-nuclear-ban-treaty); Ronzitti 2017, 3.

<sup>69</sup> For a complete list of such treaties and their current state, see Fleck 2020, 378-384; Stephan Kadelbach 'Nuclear Weapons and Warfare' (May 2019), *Max Planck Encyclopedias of International Law*, para. 17. <https://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e355>.

<sup>70</sup> Treaty for the Prohibition of Nuclear Weapons in Latin America (Treaty of Tlatelolco), 634 *UNTS* 326. Protocol II regarding the negative assurance has been signed and ratified by all five nuclear-weapon States of the NPT. Fleck 2020, 381.

<sup>71</sup> Kadelbach 2019, para. 30.

1996 Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons,<sup>72</sup> it did not discuss further conditions in any way. The formulation does not exclude the first use against a non-nuclear attack explicitly, and nothing can be inferred from this formulation about the no-first-use rule. However, historically, the no-first-use rule for nuclear weapons was an impossible proposition for the NATO Allies, because of the sheer superiority in the conventional forces of the Soviet Union.<sup>73</sup> The no-first-use rule, in the sense that the use of nuclear weapons will be considered only when there is a nuclear attack, has never been clearly endorsed by individual States, either,<sup>74</sup> with an exception of China.<sup>75</sup>

For example, according to the UK Manual of the Law of Armed Conflict, ‘The United Kingdom would only consider using nuclear weapons in self-defence, including the defence of its NATO allies, and even then only in extreme circumstances.’<sup>76</sup> However, there is no general assurance in this manual that this use would only be directed against nuclear attacks. On the contrary, the British Secretary of Defence confirms that ‘In the most extreme circumstances, we have made it very clear that you can’t rule out the use of nuclear weapons *as a first strike*.’<sup>77</sup>

The US Nuclear Posture Review is even more articulate in refuting the no-first-use rule: ‘the United States has never adopted a “no first use” policy and, given the contemporary threat environment, such a policy is not justified today.’<sup>78</sup> It clarifies that ‘The United States would only consider the employment of nuclear weapons in extreme circumstances to defend the vital interests of the United States, its allies, and partners,’<sup>79</sup> but that ‘Extreme circumstances could include significant non-nuclear strategic attacks.’<sup>80</sup>

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<sup>72</sup> When the formulation was used, the court was not confirming such a right to self-defence with nuclear weapons. It concluded that ‘it cannot reach a definitive conclusion as to the legality or illegality of the use of nuclear weapons by a State in an extreme circumstance of self-defence, in which its very survival would be at stake.’ Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons [1996] ICJ Report 226, para. 105(2), *dispositif* E.

<sup>73</sup> Kadelbach 2019, para. 9.

<sup>74</sup> See Fleck 2020, 356-366; Crawford 2018, 459-460.

<sup>75</sup> China has consistently, at least rhetorically, upheld the no-first-use policy. Fleck 2020, 363; Crawford 2018, 459; Casey-Maslen 2019, 30.

<sup>76</sup> UK Ministry of Defence 2004, 117.

<sup>77</sup> Rob Merrick, ‘Theresa May would fire UK’s nuclear weapons as a “first strike”, says Defence Secretary Michael Fallon’ (24 April 2017), *The Independent*, <https://www.independent.co.uk/news/uk/politics/theresa-may-nuclear-weapons-first-strike-michael-fallon-general-election-jeremy-corbyn-trident-labour-cnd-a7698621.html> (emphasis added by the present author). On the UK position regarding the no-first-use rule, see also Jain and Seth 2019, 114.

<sup>78</sup> US Department of Defense, Nuclear Posture Review Report, February 2018, 22, <https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF>. See also Roberts 2019.

<sup>79</sup> US Department of Defense, Nuclear Posture Review Report, February 2018, 21.

<sup>80</sup> *Ibid.*



The position of France is also similar to these nuclear-weapon States examined above, in that the use of nuclear weapons is not restricted to a reaction to a nuclear attack. The use will be considered only in extreme circumstance of self-defence when vital interests of States are involved, but it should be noted, against the aggressions of ‘whatever form.’<sup>81</sup>

Beyond the NPT member States, as previously mentioned, one of India’s express exceptions to its no-first-use policy of nuclear weapons is the case of biological attack.<sup>82</sup>

To summarise, the attitude of nuclear-armed States<sup>83</sup> does not provide any evidence to argue that the no-first-use rule is a customary rule regarding the use of nuclear weapons.

The second aspect that marks the difference, between the stigmatisation of biological weapons, and the lack of the same degree of stigmatisation of nuclear weapons, is the practice of nuclear deterrence. The practice of nuclear deterrence diminishes the realistic possibility to set a course similar to that of the stigmatisation of the use of biological weapons.

In the 1996 Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons, the ICJ observed that there was ‘still strong adherence to the practice of deterrence.’<sup>84</sup> The Court concluded in the same paragraph that there was no customary rule prohibiting the use of nuclear weapons specifically.<sup>85</sup> The factual observation made by the ICJ about the practice of deterrence<sup>86</sup> is still valid today. Against this background, the nuclear weapon States vocally reject any possibility that a customary rule could stem from the TPNW

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<sup>81</sup> Discours du Président Emmanuel Macron sur la stratégie de défense et de dissuasion devant les stagiaires de la 27ème promotion de l’école de guerre (7 February 2020), <https://www.elysee.fr/emmanuel-macron/2020/02/07/discours-du-president-emmanuel-macron-sur-la-strategie-de-defense-et-de-dissuasion-devant-les-stagiaires-de-la-27eme-promotion-de-lecole-de-guerre>. The identical expression was also used in previous statements. Déclaration de M. François Hollande, Président de la République, sur la dissuasion nucléaire (19 February 2015), <https://www.elysee.fr/francois-hollande/2015/02/19/declaration-de-m-francois-hollande-president-de-la-republique-sur-la-dissuasion-nucleaire-a-istres-le-19-fevrier-2015>; Déclaration de M. Nicolas Sarkozy, Président de la République, sur le Livre blanc sur la défense et la sécurité nationale, la dissuasion nucléaire et sur la non prolifération des armes nucléaires (21 March 2008), <https://www.elysee.fr/nicolas-sarkozy/2008/03/21/declaration-de-m-nicolas-sarkozy-president-de-la-republique-sur-le-livre-blanc-sur-la-defense-et-la-securite-nationale-la-dissuasion-nucleaire-et-sur-la-non-proliferation-des-armes-nucleaires-a-cherbourg-le-21-mars-2008>.

<sup>82</sup> Jain and Seth 2019, 117-118; Fleck 2020, 363.

<sup>83</sup> Regarding the nuclear-armed States not specifically mentioned as examples in the preceding paragraphs, i.e., Pakistan, Israel, North Korea and Russia, see Country-by-Country Summary, in Hiroshima Report 2020, <https://hiroshimaforpeace.com/en/hiroshimareport/report-2020/>; Fleck 2020, 360-361, 364-366;

<sup>84</sup> Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons [1996] *ICJ Reports* 226, para. 73.

<sup>85</sup> *Ibid.* In the same advisory opinion, while the ICJ did not find a specific customary rule prohibiting the use of nuclear weapons, it did find that ‘the threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law.’ *Ibid.*, para. 105(2), *dispositif* E.

<sup>86</sup> See also Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons [1996] *ICJ Reports* 226, para. 67.

that places a comprehensive ban on the use: ‘we would not accept any claim that this treaty reflects or in any way contributes to the development of customary international law.’<sup>87</sup> A joint statement of the five nuclear weapon States to the First Committee of the General Assembly equally confirms: ‘... we do not accept any claim that it contributes to the development of customary international law; nor does it set any new standards or norms.’<sup>88</sup>

Confronted with this refusal of nuclear weapon States to see the TPNW as a vehicle to generate customary law, those who support the prohibition, and the transformation of the treaty rule into a customary rule, turn to the theory of ‘persistent objector.’<sup>89</sup> This theory can make an allowance for a State that does not agree with the new rule identified as custom, and therefore can be attractive to a State that opposes a new rule. The alleged new rule is not binding on the persistent objector.<sup>90</sup> The theory can also be attractive in the eyes of the supporters of the developing rule. It enables a formation of customary rule, even when there is an objecting State. It is supposed that there is a tipping point of some kind in the formation of custom. If the theory of persistent objector is accepted, when that tipping point is reached, the presence of an objector, or multiple objectors, no longer prevents the formation of custom in question. In the present context, it opens up a possibility to argue that the prohibition of the use of nuclear weapons presented in the TPNW can become a customary rule, even in the presence of the objecting States.

However, the tipping point or threshold conventionally accepted for custom to be formed must include practice of ‘States whose interests were specially affected’ by the new rule.<sup>91</sup> In light of this tipping point, if the objecting States are those whose interests were specially affected by the matter in question, ‘then the rule will not come into existence at all.’<sup>92</sup> According to this understanding, the opposition to the formation of custom by all five nuclear weapon States in the NPT and the Allies of some of these States, as well as by the

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<sup>87</sup> ‘Joint Press Statement from the Permanent Representatives to the United Nations of the United States, United Kingdom, and France Following the Adoption’ (7 July 2017), available at <https://usun.usmission.gov/joint-press-statement-from-the-permanent-representatives-to-the-united-nations-of-the-united-states-united-kingdom-and-france-following-the-adoption/>, also available at <https://onu.delegfrance.org/Adoption-of-a-treaty-banning-nuclear-weapons>.

<sup>88</sup> ‘Joint Statement by China, France, Russian Federation, United Kingdom and United States’ (29 October 2018), First Committee, 73<sup>rd</sup> session of the UN General Assembly, reproduced on the website of the Russian Ministry of Foreign Affairs, [https://www.mid.ru/en/foreign\\_policy/news/-/asset\\_publisher/cKNonkJE02Bw/content/id/3384609](https://www.mid.ru/en/foreign_policy/news/-/asset_publisher/cKNonkJE02Bw/content/id/3384609).

<sup>89</sup> Casey-Maslen 2019, 56.

<sup>90</sup> See the UK position on the customary rule regarding self-determination in the context of the Chagos Archipelago. Written Statement of the UK (15 February 2018), paras. 8.59-8.61, during the proceedings of the Advisory Opinion on the Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965 [2019] ICJ Report 95.

<sup>91</sup> North Sea Continental Shelf Cases, Judgement [1969] ICJ Report 3, para. 73.

<sup>92</sup> Thirlway 2019, 101.

nuclear-armed States remaining outside the NPT, prevents the formation of a customary rule prohibiting the use of nuclear weapons. To consider that the formation of custom must reflect the attitudes or positions of the specially affected States is a sound one, for such a condition can avoid a formation of new rules which have no power to influence the behaviours of the States concerned.<sup>93</sup> In the context of nuclear weapons, accepting the idea that customary rule prohibiting their use can arise without the participation of nuclear-weapon States and their Allies is equivalent to limiting the purported customary rule ‘to States other than nuclear-weapon States and their Allies, thus diminishing its legal relevance for State practice.’<sup>94</sup>

### ***2.3.2 Limits in the Endeavour for Nuclear Disarmament***

Until the adoption of the TPNW, the only universal instrument that dealt with nuclear disarmament was the NPT. While an instrument initially crafted by the United States, the USSR and the United Kingdom – the States that became depositories of the NPT - to prevent proliferation, the treaty did include, from the beginning, nuclear disarmament as its component (Art. VI). Both nuclear-weapon States and non-nuclear-weapon States of the NPT confirm that disarmament is one of the main pillars of this regulatory regime.<sup>95</sup> However, in contrast to the disarmament of biological weapons under the BWC, the nuclear disarmament within the NPT has not received the undivided support of all its States Parties, much needed for such an endeavour.

The division regarding the nuclear disarmament endeavour within the NPT are well-known.<sup>96</sup> On one hand, the nuclear weapon States in the NPT do recognise disarmament obligations under Article VI. The United Kingdom ‘remains firmly committed to step-by-step disarmament and to its obligations under article VI of the Treaty’;<sup>97</sup> the Russian Federation ‘consistently implements all the provisions of the NPT, including Article VI’;<sup>98</sup> the United

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<sup>93</sup> For a radically different view on the specially affected States for the formation of custom, see Heller 2018, <sup>94</sup> Fleck 2020, 404.

<sup>95</sup> The ‘three pillars’ of the NPT, referring to the non-proliferation, peaceful use of nuclear energy and nuclear disarmament, is an expression used by both non-nuclear-weapon States and nuclear-weapon States. *See, e.g.*, NPT/CONF.2020/PC.I/SR.1 (2017); NPT/CONF.2020/PC.I/SR.2 (2017); NPT/CONF.2020/PC.I/SR.3 (2017). *See also* ILA, ‘Second Report on Nuclear Weapons, Non-Proliferation and Contemporary International Law’ 14-16 Washington Conference (2014).

<sup>96</sup> This paragraph and the next two paragraphs summarise a part of a previous work by the present author, Hayashi 2020, 99-100. Crawford 2018, 470, presents the problem of nuclear disarmament under the NPT as a problem of international control.

<sup>97</sup> NPT/CONF.2020/PC.I/SR.3 (2017), para. 94.

<sup>98</sup> Statement by Russia, NPT Review Conference 2015 (Geneva, 27 April - 22 May 2015), [http://www.un.org/en/conf/npt/2015/statements/pdf/RU\\_en.pdf](http://www.un.org/en/conf/npt/2015/statements/pdf/RU_en.pdf).

States ‘is fully meeting its obligations under Article VI’;<sup>99</sup> France ‘reaffirms its support for a gradual and pragmatic approach to nuclear disarmament pursuant to article VI of the Treaty.’<sup>100</sup> In stressing the disarmament under Article VI, these nuclear weapon States often indicate their concrete achievement of the reduction in their national possession. For example, the above statement regarding obligations under Article VI by the United Kingdom was complemented by the information that ‘in January 2015, [the] Government had announced that submarines on patrol would carry only 40 nuclear warheads and no more than eight operational missiles. That took the total number of operationally available warheads to no more than 120. The current Government remained committed to reducing the overall stockpile of nuclear weapons to no more than 180 warheads by the mid-2020s [...]’<sup>101</sup>

On the other hand, the speed and content of such disarmament endeavour are unilaterally decided by nuclear weapon States. There is no objective criteria or tool to argue that it is too slow or insufficient. The nuclear weapon States clearly view that ‘any action taken to reduce a State’s nuclear arsenal, however small, fulfils the requirements of Article VI.’<sup>102</sup> Moreover, emphasising that a reduction is a sign of compliance with Article VI, the nuclear weapon States have at the same time carried out modernisation and replacement of their old weapons and related devices.<sup>103</sup> From the perspective of the non-nuclear weapon States, the situation is deeply unsatisfactory.<sup>104</sup>

It was in this frustrating context that the TPNW had been negotiated. Thus, instead of accepting the step-by-step or gradual disarmament, the TPNW requires any nuclear-armed State joining this treaty to ‘immediately remove them [the nuclear weapons] from operational status (Art. 4(2)).’ Instead of accepting the discretion of the nuclear-armed States regarding the speed of disarmament, the deadline for the destruction is to be decided in the first Meeting of States Parties (Art. 4(2)). Instead of leaving the concrete disarmament steps in the hands of the nuclear-armed States, the plan of elimination of any of these States joining the TPNW shall be ‘negotiated with the international authority’ soon to be designated by the

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<sup>99</sup> Statement by J. Sherwood McGinnis, Deputy US Representative to the Conference on Disarmament, to the Second Session of the Preparatory Committee for the 2005 NPT Review Conference (1 May 2003), <https://2001-2009.state.gov/t/isn/rls/rm/24919.htm>.

<sup>100</sup> NPT/CONF.2020/PC.I/SR.3 (2017), para. 11.

<sup>101</sup> NPT/CONF.2020/PC.I/SR.3 (2017), para. 94. The way these statements are constructed is so typical that an author has dubbed it the ‘NWS rhetorical template.’ Joyner 2014, 401. It is mentioned that China does not follow this template.

<sup>102</sup> Joyner 2014, 400.

<sup>103</sup> Casey-Maslen 2018, 28-31; Andrew Grotto, ‘Non-Proliferation Treaty (1968)’ (February 2009), *Max Planck Encyclopedias of International Law*, para. 60.

<https://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e969>.

<sup>104</sup> Joyner 2014, 402-404.

Meeting of States Parties (Art. 4(6)). Instead of leaving the plan of elimination without a review, it will then be submitted to the Meeting of States Parties or the review conference of the TPNW for approval (Art. 4(2)). In sum, the TPNW aims to build an objective regulatory regime that does not leave nuclear disarmament to the discretion of nuclear-armed States.

However, an immediate and the most obvious issue for the international control of disarmament thus proposed in the TPNW is that the stake-holders of nuclear disarmament are not involved in conceiving this regulatory regime: all fifty States party to the TPNW when it has entered into force in January 2021 were non-nuclear weapon States. In this, the challenge in the BWC for biological disarmament and the challenge for nuclear disarmament differs. The challenge for nuclear disarmament also pertains to the next issue that must be examined in detail, namely, the problem of international control.

### ***2.3.3 The Problem of International Control***

The international control adopted by the NPT consists of bilateral safeguards agreements of States Parties with an external international organisation, the International Atomic Energy Agency (IAEA). As of 2019, its Additional Protocol,<sup>105</sup> a model agreement that contains more intrusive safeguard measures than the older agreements called comprehensive safeguard agreements,<sup>106</sup> is concluded between the IAEA and 136 States.

By way of contrast, the TPNW ‘provides for a verification regime but only in broad terms.’<sup>107</sup> The IAEA is given a role to play throughout Articles 3-4 of the TPNW, without, however, a consultation with the IAEA so far.<sup>108</sup> In relation to any State that possessed nuclear weapons after the adoption of the TPNW in 2017 (Art. 4(1)), or a State that possesses nuclear weapons when it joins the TPNW (Art. 4(2)), the TPNW envisages that a ‘competent international authority or authorities,’ in addition to the IAEA, will also have a role to play.

In this verification regime set up only in broad terms, there will be two salient issues. The first issue is the absence of stake holders in the process to develop this verification regime. By way of contrast, in the BWC, all stake-holder States are present in the Meeting of States Parties and the Review Conferences, where the nature and the design of the international control are negotiated, and eventually decided. In the TPNW where all the

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<sup>105</sup> IAEA, Model Protocol Additional to the Agreement(s) between State(s) and the International Atomic Energy Agency for the Application of Safeguards, INFCIRC/540 (Corrected), September 1997.

<sup>106</sup> IAEA, ‘The Structure and Content of Agreements between the Agency and States Required in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons’, INFCIRC/153 (Corrected), June 1972.

<sup>107</sup> Crawford 2018, 455.

<sup>108</sup> Fleck 2019, 405.

nuclear-weapon States and nuclear-armed States are absent, decisions regarding the ‘competent international authority or authorities’ for the TPNW as well as other decisions regarding the verification mechanism may be made but they will be made without those nuclear-weapon States and nuclear-armed States that afterwards must comply with the verification mechanism (if they join the TPNW).

The IAEA could be described as another potential stake holder. For example, the IAEA is seen as ‘[a]n obvious candidate to serve as the competent international authority’.<sup>109</sup> Even without that possibility, Articles 3 and 4 of the TPNW with explicit mention of the IAEA may indicate a certain expectation that the IAEA would take part in the verification in the nuclear disarmament envisaged. However, the IAEA did not participate in the negotiation of the TPNW.<sup>110</sup> The IAEA being an international organisation, any request from an external body such as the Meeting of States Parties of the TPNW can be implemented only when the IAEA itself, or its Board of Governors, decides to do so. While the provisions of the IAEA Statute appear sufficiently flexible,<sup>111</sup> the question whether and to what extent the IAEA could be involved in verification with this treaty is still unclear.

The second issue regarding the verification mechanism under the TPNW, set up only in broad terms, is that it cannot generate the degree of confidence needed in engaging the States to disarmament. If nuclear disarmament is to take place, there is an obvious need for confidence, among nuclear-armed States as well as non-nuclear-weapon States alike, that all States are dismantling their nuclear warheads and destroying all of them. Such confidence is hard to build, when it is not possible to learn what kind of elimination plan each State Party possessing nuclear weapons, upon joining the TPNW, will negotiate with the international authority or authorities. There is also need for confidence that any disarmament is carried out without increasing the risk of nuclear proliferation. Given these concerns, the concrete procedures of verification to be agreed upon, to verify the elimination of nuclear weapons, have to be intrusive and extensive,<sup>112</sup> and meaningful discussions on such procedures can only begin when the stake holders agree to discuss them.

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<sup>109</sup> Casey-Maslen 2019, 194.

<sup>110</sup> Fleck 2019, 405.

<sup>111</sup> Crawford 2018, 470.

<sup>112</sup> Fleck 2019, 406. How intrusive the verification measures can be was in fact a point of contention in the negotiation for a verification protocol to the BWC prior to 2001, Kervers 2002, 287.

## 2.4 Conclusions

A conclusion drawn by Judge James Crawford in his comparison of chemical weapons and nuclear weapons, that ‘there are striking differences between the regulatory history of the two kinds of weapon in our time,’<sup>113</sup> also applies to biological weapons and nuclear weapons. These striking differences also indicate lessons for realising a change in the international regulation of nuclear weapons. First, the change in the international regulation of biological weapons was gradual. At first, many States only accepted the no-first-use rule of biological weapons at the time of the 1925 Geneva Protocol. It was a limited acceptance, but in retrospect, it was a first step needed for the development of the comprehensive prohibition of these weapons. By the late 1960’s and 1970’s, States came around to renounce the use of biological weapons unconditionally. A desire for this change, from a limited prohibition of the first use to a comprehensive prohibition of the use of biological weapons, also produced a chance to agree on the prohibition of possession and biological disarmament. It was the best guarantee for the comprehensive prohibition of the use of these weapons. These developments, that look very much like milestones in the change of the international regulation of biological weapons, have not taken place for nuclear weapons. By contrast, nuclear-weapon States in the NPT, with the exception of China as explained previously, refrain from affirming the no-first-use rule, individually or collectively. While positions of some other nuclear-armed States regarding the no-first-use rule are not straightforward, there appears to be no clear signal of acceptance of the no-first-use rule, either. Serious concerns in civil societies notwithstanding, the practice of nuclear deterrence defies any serious degree of stigmatisation of nuclear weapons.

As it was apparent in biological disarmament, it is of course crucial to have the United States and Russia engaged in any process of nuclear disarmament. Willingness, of those States whose attitude matters, is needed in bringing a change. That much is clear as a lesson from the regulation of biological weapons, and also from the regulation of chemical weapons.<sup>114</sup>

If we are to map this lesson to the field of nuclear disarmament, a further lesson is that the question of international security determines the attitudes of States regarding the regulation of weapons. A comprehensive prohibition of the use of weapons is hard to accept if the weapons in question are perceived as the key to national security or international

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<sup>113</sup> Crawford 2018, 467.

<sup>114</sup> Crawford 2018, 463, 476.

security. In case of biological weapons, the comprehensive prohibition of the use and the disarmament were achieved in the environment where the possession of these weapons was not perceived as useful in enhancing the national security or international security. From this perspective, the opposite is true for nuclear weapons: possessing nuclear weapons, or being an ally to a nuclear-armed State, is perceived by many States as a question of security. This perception hinders any change in the regulation of nuclear weapons in the direction of comprehensive prohibition or complete disarmament. Precisely because of this perception, the question of international security and nuclear deterrence is deliberately sidestepped in the TPNW, where the comprehensive nuclear disarmament is proposed. Clearly, the example of the change in the regulation of biological weapons does not actively confirm that such sidestepping or downplaying of security challenges would bring about a change in the regulation. It simply showed an example of a change where security challenges were not linked to the regulation of the weapons.

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