

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Space, Cyber, and Telecommunications Law  
Program Faculty Publications

Law, College of

---

2013

## Cutting the Bread

Frans G. von der Dunk

*University of Nebraska - Lincoln*, [fvonderdunk2@unl.edu](mailto:fvonderdunk2@unl.edu)

Follow this and additional works at: <http://digitalcommons.unl.edu/spacelaw>

 Part of the [Air and Space Law Commons](#), [Criminology and Criminal Justice Commons](#), and the [International Law Commons](#)

---

von der Dunk, Frans G., "Cutting the Bread" (2013). *Space, Cyber, and Telecommunications Law Program Faculty Publications*. 73.  
<http://digitalcommons.unl.edu/spacelaw/73>

This Article is brought to you for free and open access by the Law, College of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Space, Cyber, and Telecommunications Law Program Faculty Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Viewpoint

## Cutting the Bread

Frans von der Dunk

University of Nebraska, College of Law, Lincoln, Nebraska, U.S.A., [fvonderdunk2@unl.edu](mailto:fvonderdunk2@unl.edu)



Abstract

Why the draft Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Received Force against Outer Space Objects (PPWT) will not work – whereas the Code of Conduct for Outer Space Activities may.

Article history: Received October 18, 2013, accepted October 18, 2013, available online November 14, 2013

Keywords: Treaty on the prevention of the placement of weapons in outer space, The Code of Conduct for Outer Space Activities, Outer space cooperation, Outer space weaponization

On my way to boarding the plane headed for Geneva for purposes of participating in the UNIDIR Conference on Space Security, April 2-3, 2013,<sup>1</sup> I was once more reminded by several notices that I was not allowed to take, *inter alia*, any knife with me into the aircraft. Mind you: not just knives specially produced or converted to wound or kill people, but *any* knife, including knives specially produced or converted for example to cut bread – because, obviously, also those could wound or kill people on an aircraft, and there would be little upfront guarantee about absence of malicious intent on my part to use any knife for such purposes.

This is essentially also why, upon closer view, the Russo-Chinese proposal for a draft Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force against Outer Space Objects (PPWT),<sup>2</sup> which was first put on the table on 2008 in the Conference on Disarmament, will not work – whereas the EU-initiated, and by now *inter alia* US-supported, Code of Conduct for Outer Space Activities,<sup>3</sup> proposed in its first version in the same year of 2008, from that same vantage point may be successful. Both were also revisited at the aforementioned UNIDIR Conference as major elements of the long-standing, but still current

discussion on ‘deweaponization’ and/or the prevention of an arms race in outer space (and more often than not presented as mutually exclusive alternatives).

While laudable as an effort to help preserve the realm of outer space, so far not having experienced any use of armed force in the classical meaning of the word, for peaceful purposes, the draft PPWT from a legal perspective has one major flaw which will inevitably cause it to remain a dead letter. This does not refer to the (more politically-oriented) debate on whether ‘weapons in space’ are really the most threatening issue to be addressed or whether ‘space debris’ and other modes of interference with space activities are actually more important. Nor does it refer, as such, to the (essentially political) debate on whether a legally binding treaty or a ‘soft-law’ instrument, legally nonbinding but perhaps politically-binding, would be preferable.<sup>4</sup>

The *legal* flaw of the draft PPWT by contrast resides in the inability to properly define the core notion of ‘weapon,’ in particular in the context of outer space where most, if not all hardware, software and activities are of a dual-use character. ‘Dual-use’ is taken to mean here that they can be used both for military, including aggressive, and non-military, including commercial purposes, without much further conversion or redesign. If one is going to realize a ‘hard-law’ treaty obligation for most or all important space powers not to put any weapons in outer space, however, a clear-cut and indisputable definition of that concept would be indispensable.

<sup>1</sup> See <http://swfound.org/news/all-news/swf-successfully-co-organizes-the2013-unidir-space-conference/> for further details on the conference.

<sup>2</sup> Draft PPWT, or Draft Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force Against Outer Space Objects; presented February 12, 2008 to the Conference on Disarmament; e.g. <http://www.reachingcriticalwill.org/legal/paros/parosindex.html> (click on the treaty’s comprehensive name).

<sup>3</sup> See for the text revised as of 2010, Annex, Conclusions adopted by the Council on September 27, 2010; Council of the European Union, Doc. 14455/10 of October 11, 2010; <http://www.consilium.europa.eu/uedocs/cmsUpload/st14455.en10.pdf>.

<sup>4</sup> Cf. on these issues I. Marboe (editor), *Soft Law in Outer Space – The Function of Non-Binding Norms in International Space Law* (2012).

Here, experience has shown that it is very hard already in terrestrial realms to define such a broad concept as ‘weapon’ with any acceptable level of precision, thus essentially precluding any global agreement on prohibiting them. Only where focused on special types of weapons have international treaties on banning them, including their testing and stockpiling, achieved a measure of success. This applies to such narrowly defined and easily-delineated categories as nuclear weapons, biological weapons, chemical weapons, cluster munitions and landmines.<sup>5</sup>

However, as soon as slightly broader categories came to be used in such a context, relevant efforts were doomed to run into trouble. The most prominent example in the context of outer space concerns the reference to ‘weapons of mass destruction’ as it is amongst others found in Article IV of the 1967 Outer Space Treaty.<sup>6</sup> While presumably clear in combining nuclear, biological and chemical weapons, as soon as in the 1980s US plans were developed to build a space defense infrastructure (the Strategic Defense Initiative, SDI) based on the use of laser weapons, the dispute on whether such weapons were also included in the concept of ‘weapons of mass destruction’ reared its head and was never satisfactorily solved. (It was the simple unilateral cancellation of the

program before becoming a physical reality, which turned the debate into a moot one.) And with the 9/11 attacks, a similar question arose in adjacent legal realms as to whether aircraft could not also, under circumstances, constitute ‘weapons of mass destruction.’<sup>7</sup>

Following a first wave of criticism on the handling of this definitional problem, the draft PPWT undertook an effort to refine the concept of ‘weapon’ by referring to ‘special production or conversion’ to serve as a weapon, as the crucial distinguishing line between hardware to be prohibited and hardware not to be prohibited in outer space.<sup>8</sup> However, if already in the case of a simple knife it is not considered feasible to distinguish, from a security perspective, between knives specially produced or converted for wounding and killing respectively for cutting bread, how could one make that distinction work in the context of outer space and hardware launched into it, being so far away from inspection and monitoring opportunities as well as being of such a complicated high-technology nature?

Not accidentally therefore also in terrestrial realms, apart from the limited set of treaties referred to above prohibiting narrowly defined and relatively easily-distinguishable types of weapons, efforts to establish, maintain and/or enhance international and national security by legal means have been largely channeled *not through prohibiting the hardware involved, but through prohibiting their use other than in a set of narrowly defined circumstances.*

Thus, in terms of threat or use of force against the integrity of another state—always at the heart of the international and national security debates—only two main exceptions have been recognized to the baseline prohibition thereof by Article 2(4) of the UN Charter.<sup>9</sup> One concerns the notion of self-defense, individually or collectively, provided by Article 51 of the UN Charter.<sup>10</sup> The other concerns the customary practice

<sup>5</sup> Cf., e.g., Comprehensive Test Ban Treaty, New York, done September 24, 1996, not yet entered into force; Cm. 3665; 35 ILM 1439 (1996); Treaty for the Prohibition of Nuclear Weapons in Latin America, Mexico City, done February 14, 1967, entered into force September 20, 1967; 634 UNTS 281; 6 ILM 521 (1967); South Pacific Nuclear Free Zone Treaty, Rarotonga, done August 6, 1985, entered into force December 11, 1986; 1445 UNTS 177; ATS 1986 No. 32; 24 ILM 1440 (1985); Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil thereof, London/Moscow/Washington, done February 11, 1971, entered into force May 18, 1972; 955 UNTS 115; TIAS No. 7337; 23 UST 701; UKTS 1973 No. 13; Cmnd. 4678; ATS 1973 No. 4; 10 ILM 145 (1971); S. Treaty Doc. No. 105-28 (1997); Convention on the Prohibition of the Development, Production, Stockpiling, and Use of Chemical Weapons and on Their Destruction (hereafter Chemical Weapons Convention), New York, done September 3, 1992, entered into force April 29, 1997; 1974 UNTS 45; S. Treaty Doc. No. 103-21 Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, London/Moscow/Washington, done April 10, 1972, entered into force March 26, 1975; 26 UST 583; 11 UKTS, Cmd. 6397; Convention on the Prohibition of the Development, Production, Stockpiling, and Use of Chemical Weapons and on Their Destruction (hereafter Chemical Weapons Convention), New York, done September 3, 1992, entered into force April 29, 1997; 1974 UNTS 45; S. Treaty Doc. No. 103-21; and Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, Geneva, done October 10, 1980, entered into force 2 December 1983; 1342 UNTS 7.

<sup>6</sup> Art. IV, Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty), London/Moscow/Washington, done January 27, 1967, entered into force October 10, 1967; 610 UNTS 205; TIAS 6347; 18 UST 2410; UKTS 1968 No. 10; Cmnd. 3198; ATS 1967 No. 24; 6 ILM 386 (1967); provides in relevant part: “States Parties to the Treaty undertake not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner.”

<sup>7</sup> See for example the indictments against Zacarias Moussaoui as a co-conspirator in the 9/11 attacks by a federal grand jury in United States District Court for the Eastern District of Virginia inter alia on a federal charge of “conspiracy to use weapons of mass destruction” with reference to “weapons of mass destruction, namely, airplanes intended for use as missiles;” UNITED STATES OF AMERICA -v- ZACARIAS MOUSSAOUI, a/k/a “Shaquil,” a/k/a “Abu Khalid al Sahrawi,” Defendant; Count Four, at 2; <http://www.justice.gov/ag/moussaouindictment.htm>.

<sup>8</sup> Art. I(c), PPWT, defines ‘weapons in outer space’ as “any device placed in outer space, based on any physical principle, specially produced or converted to eliminate, damage or disrupt normal function of objects in outer space, on the Earth or in its air, as well as to eliminate population, components of biosphere critical to human existence or inflict damage to them;” emphasis added.

<sup>9</sup> Art. 2(4), Charter of the United Nations (hereafter UN Charter), San Francisco, done 26 June 1945, entered into force October 24, 1945; USTS 993; 24 UST 2225; 59 Stat. 1031; 145 UKTS 805; UKTS 1946 No. 67; Cmd. 6666 & 6711; CIS 1945 No. 7; ATS 1945 No. 1; provides: “All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations.”

<sup>10</sup> Art. 51, UN Charter, states: “Nothing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defense shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security.”

which has grown out of the UN Charter context, notably Article 42, to mandate – within specific limits asserted by UN Resolutions – the use of force against states officially determined to present major threats to international peace and security by the UN Security Council.<sup>11</sup>

Without going into a detailed discussion of the proper legal parameters, perhaps even validity, thereof, it may be further posited that there are – at best – two further areas where the threat or use of force may be legally acceptable. One concerns a right of self-defense *beyond* the somewhat limited version thereof contained in the UN Charter, as a right under customary international law.<sup>12</sup> Here, however, immediately further limitations as to proportionality and necessity should serve to minimize the possible abuse of such a justification for undue purposes. Those same parameters should also be deemed to apply to other presumably allowable measures of force, as ‘reprisals’ where not the integrity of a state could be argued to be at stake but ‘merely’ important security and other national interests, such as in the case of destruction of a satellite providing important services.

Again without going into a discussion into the specific parameters (Is preventive self-defense allowable? The use of force for humanitarian purposes even if not mandated by the United Nations? To what extent does economic and political pressure amount to a ‘threat or use of force’?) it should be pointed out here that general public international law and more specifically the UN Charter are also considered applicable to outer space and space activities by virtue of Article III of the Outer Space Treaty.<sup>13</sup>

As Article IV of the Outer Space Treaty, the only article in the classic UN space treaties directly dealing with the military use of outer space, provides for a few rather general parameters only, there is no reason to consider the above-

mentioned generic prohibition on the threat or use of force and the four possible exceptions thereto to not apply in outer space as well.

It is for this reason finally that the Code of Conduct – by contrast to the draft PPWT – has a fair chance of success as it essentially builds upon the successes of, and experience with general international law in the realm of international and national security. Satellites, from the above perspective, are mankind’s knives in outer space: capable of both causing horrible death and destruction and providing essential services for humanity.

Prohibiting all weapons – as is the case on aircraft – in outer space would essentially cause space activities to come to a screeching halt, and for that reason alone would be politically utopian. But distinguishing between hardware specially produced or converted for causing damage and hardware not so produced or converted, as the draft PPWT now does, is an artificial distinction which not only is extremely difficult to monitor in practice, but already in theory makes little sense: a knife ‘produced’ for cutting bread does not even need to be ‘converted’ to be instantly used for the purpose of wounding or killing someone.

In building upon the approach to address behavior rather than hardware in outer space, the Code of Conduct by contrast provides more specific limitations and more precise parameters to any allowable threats to space activities in themselves as well as threats to earth from outer space, which includes the threats or use of force in outer space. Whilst its (at least initial) non-binding nature may be deplored by many as contrasted with the benefit of having a treaty of binding nature such as aimed for by the draft PPWT, the lack of likelihood of that draft being successful should not allow the best to become the enemy of the good.

---

<sup>11</sup> Art. 42, UN Charter, provides that “the Security Council (...) may take such action by air, sea, or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea, or land forces of Members of the United Nations.” On the basis of this clause, in particular the international, US-led military operations against Saddam Hussein’s Iraq (first for invading Kuwait, much later on the unjustified claims Iraq’s development of weapons of mass destruction had reached a critical phase) and Afghanistan (following 9/11) were initiated.

<sup>12</sup> Note already that the aforementioned Art. 51, UN Charter, refers to ‘not impairing’ ‘the inherent right’ of self-defense.

<sup>13</sup> Art. III, Outer Space Treaty, provides that “States Parties to the Treaty shall carry on activities in the exploration and use of outer space, including the Moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international cooperation and understanding.”