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International law, nuclear weapon-free zones and the proposed zone free of weapons of mass destruction in the Middle East

Marco Roscini¹

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1. Introduction

Article VII of the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) supports the establishment of nuclear weapon-free zones (NWFZs) as a regional component of the non-proliferation regime.² In 1975, the UN General Assembly defined a NWFZ as ‘any zone, recognized as such by the General Assembly of the United Nations, which any group of States in the free exercise of their sovereignty, has established by virtue of a treaty or convention whereby: (a) the statute of total absence of nuclear weapons to which the zone shall be subject, including the procedure for the delimitation of the zone, is defined; (b) an international system of verification and control is established to guarantee compliance with the obligations deriving from that statute’.³ According to the General Assembly, then, a NWFZ has two essential components: the total absence of nuclear weapons within the zone and the presence of an international verification and control machinery.⁴

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² Art. VII reads as follows: ‘Nothing in this Treaty affects the right of any group of States to conclude regional treaties in order to assure the total absence of nuclear weapons in their respective territories’.

³ General Assembly Resolution 3472 (XXX) B of 11 December 1975.

⁴ In 1976, a group of experts appointed by the Conference of the Committee on Disarmament presented a comprehensive study setting out the principles that should be taken into account in order to establish a NWFZ. According to the study, 1) disarmament obligations may be assumed not only by large groups of states, but also by smaller groups and even by individual countries; 2) the agreement must ensure the absence of nuclear weapons in the region; 3) the initiative for the creation of the NWFZ should come from the regional states and participation must be voluntary; 4) all regional states (and in particular those militarily significant) should ideally participate in the initiative; 5) an effective system of verification of compliance must be set up in the agreement; 6) cooperation on all peaceful uses of nuclear energy should be promoted; 7) and the treaty should be of unlimited duration (Comprehensive Study of the Question of Nuclear-Weapon-Free Zones in All Its Aspects (Special Report of the Conference of the Committee on Disarmament), UN Doc. A/10027/Add. 1, New York, 1976 [hereinafter ‘1976

Five treaties establishing NWFZs have been concluded so far: the 1967 Treaty of Tlatelolco for the Prohibition of Nuclear Weapons in Latin America and the Caribbean, the 1985 Treaty of Rarotonga on the South Pacific NWFZ, the 1995 Bangkok Treaty on the South-East Asia NWFZ, the 1996 Pelindaba Treaty on the African NWFZ and the 2006 Semipalatinsk Treaty on a NWFZ in Central Asia.⁵ All five treaties have now entered into force. Mongolia has also unilaterally declared itself a nuclear weapon-free state⁶ and Antarctica is free of weapons of mass destruction (WMDs) as a consequence of the 1959 Washington Treaty, that demilitarized the continent and devoted it to exclusively peaceful purposes.⁷ Altogether, these zones cover the whole Southern hemisphere and an unstable region in the Northern hemisphere.

While proposals for a NWFZ in the Middle East were put forward as early as 1962, in 1974 Iran and Egypt formally submitted a draft resolution to the UN General Assembly calling for the establishment of such zone.⁸ In 1990, Egypt proposed to broaden the scope of the zone and turn it into a WMD-free zone so to target not only Israel's nuclear programme, but also the chemical and bacteriological weapons possessed by other Middle Eastern states. Since the 1980s, the UN General Assembly has annually adopted a resolution by consensus supporting the initiative.⁹ The WMD-free zone was also mentioned, among others, in Security Council Resolution 687 (1991) on Iraq. Negotiations have however stalled for a long time but gained momentum when, at the 1995 Review and Extension Conference of the NPT, the so-called Middle East Resolution was adopted as part of the package deal for the Arab States to support the indefinite extension of the NPT.¹⁰ The resolution, which was reaffirmed at the 2000 NPT Review Conference,¹¹ endorsed the peace process in the Middle East, called the remaining

Comprehensive Study'], Annex 1, para. 90). These guidelines were updated (but not substantially modified) by the UN Disarmament Commission in April 1999 (Establishment of nuclear-weapon-free zones on the basis of arrangements freely arrived at among the States of the region concerned, A/54/42, Annex I [hereinafter 'Report of the Disarmament Commission'], text in 24 United Nations Disarmament Yearbook (1999), 248 et seq.). It is to be noted that the 1999 guidelines, like those of 1976, are meant to guide states in establishing NWFZs but cannot be regarded as binding or exhaustive, or be interpreted in a way as to prejudice the establishment of a NWFZ.

⁵ The text of the treaties can be read on the website of the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (OPANAL): <www.opanal.org/NWFZ/nwfz.htm>.

⁶ Law of Mongolia on its nuclear-weapon-free status, adopted on 3 February 2000 (text at <www.opanal.org/NWFZ/Mongolia/mongolia_en.htm>).

⁷ Art. I.

⁸ General Assembly Resolution A/RES/3263 (XXIX), 9 December 1974. The resolution has been adopted every year since then. See P.M. Lewis, 'A Middle East Free of Nuclear Weapons: Possible, Probable or Pipe-Dream?', 89 *International Affairs* (2013), 435-436.

⁹ The first resolution to be adopted by the General Assembly on the issue is Resolution 3263 of 9 December 1974. Resolution 46/30 of 6 December 1991 is the first to extend the initiative to all WMDs. The most recent resolution is so far Resolution 67/28 of 11 December 2012. The Arab League has also supported the initiative and called for the drafting of a treaty.

¹⁰ 1995 NPT Review and Extension Conference, Resolution on the Middle East, NPT/CONF.1995/32/RES/1, <www.un.org/disarmament/WMD/Nuclear/1995-NPT/pdf/Resolution_MiddleEast.pdf>.

¹¹ 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, Vol. I, NPT/CONF.2000/28, 16-18,

countries not party to the NPT to accede as soon as possible and accept full scope safeguards of the International Atomic Energy Agency (IAEA), and called all Middle East states and NPT parties, in particular the nuclear weapon states, to make every effort to establish a WMD-free zone in the region. The subsequent 2010 NPT Review Conference called for a conference, to be held in 2012, in view of the establishment of the zone.¹² In October 2011, the UN Secretary-General announced that Finland had been chosen to host the conference with Jaakko Laajava, Under-Secretary of State in Finland's Ministry of Foreign Affairs, acting as 'facilitator'. The conference has however now been postponed and it is unclear if and when it will take place.¹³ In any case, the conference's purpose has never been to adopt a treaty, but to be a further step in the negotiation process that should eventually lead to the long-term goal of drafting and adopting a treaty.

Significant political obstacles have hampered the negotiations for the establishment of the WMD-free zone, including the on-going Palestinian-Israeli conflict, the insurgency in Iraq and the concerns over Iran's nuclear programme.¹⁴ The recent uprisings in several Middle Eastern and North African countries, and in particular the non-international armed conflict in Syria, have also further complicated the matter. The main obstacle is however Israel's 'nuclear ambiguity': even though never officially confirmed, it is thought that after the 1967 War Israel acquired between 80 and 200 nuclear warheads.¹⁵ For Israel, this is a life insurance policy against threats from some of its neighbours. Its nuclear deterrent did not however prevent the 1973 Yom Kippur War, Saddam Hussein's launch of Scud missiles in the 1991 Gulf War or the launch of rockets by Hezbollah and Hamas. On the contrary, it might have encouraged the acquisition of chemical weapons by other Middle Eastern states and perhaps also Iran's nuclear programme.¹⁶ Israel continues to maintain that it is prepared to start discussions on a WMD-free zone only when the peace with all the states of the region is achieved, while the Arab states sees a WMD-free zone as an instrument to achieve peace in the Middle East.¹⁷ In support of Israel's position, the United States has repeatedly declared that it 'would not support a conference in which any regional state would be subject to pressure or isolation'.¹⁸

<www.un.org/disarmament/WMD/Nuclear/pdf/finaldocs/2000%20-%20NY%20-%20NPT%20Review%20Conference%20-%20Final%20Document%20Parts%20I%20and%20II.pdf>.

¹² 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, Vol. I, NPT/CONF.2010/50, 30-31, <[www.un.org/ga/search/view_doc.asp?symbol=NPT/CONF.2010/50\(VOL.I\)&referer=http://www.un.org/en/conf/npt/2010/&Lang=E](http://www.un.org/ga/search/view_doc.asp?symbol=NPT/CONF.2010/50(VOL.I)&referer=http://www.un.org/en/conf/npt/2010/&Lang=E)>.

¹³ See below, Section 9.

¹⁴ M. Hamel-Green, 'Nuclear-Weapon-Free-Zone Initiatives: Challenges and Opportunities for Regional Cooperation on Non-Proliferation', 21 *Global Change, Peace and Security* (2009), 361.

¹⁵ *Ibid.*, 362.

¹⁶ *Ibid.*, 362-363.

¹⁷ Lewis, above note 8, 436.

¹⁸ US Department of State, Press statement, 23 November 2012, <www.state.gov/r/pa/prs/ps/2012/11/200987.htm>.

This chapter explores the legal issues arising from the proposed WMD-free zone in the Middle East in the light of the existing NWFZ treaties. It first looks at the conditions for the entry into force and termination of the treaty and then analyses the obligations arising from NWFZ treaties for both regional and external states. Issues related to the navigational rights of external states are examined in Section 6, while Sections 7 and 8 highlight the weaknesses of the NWFZ treaties in relation to their verification and enforcement. Finally, the last Section examines the possible consequences of the postponement of the 2012 conference.

2. Entry into force and termination of the treaty

Different instruments are at the disposal of the regional states to establish a WMD-free zone. All NWFZs in existence have been established by treaty, with the exception of Mongolia that unilaterally declared itself denuclearized in 1992. Unilateral declarations can give rise to international obligations if they are made publicly and with an intent to be bound:¹⁹ however, they hardly seem to be the most suitable instrument for the de-weaponization of a whole region, in particular a conflictual one. In principle, a zone could also be denuclearized as a consequence of customary international law, should the relevant state practice and *opinio juris* exist, in a way similar to Switzerland's permanent neutrality. This is however not the case of the Middle East, where state practice and *opinio juris* suggest exactly the opposite.

As recommended in the above mentioned General Assembly Resolution 3472 (XXX) B, then, the conclusion of a treaty among the regional states remains the best option to establish a WMD-free zone in the Middle East, as well as elsewhere. The treaty could be open to the signature of the named states,²⁰ might more generally refer to the region,²¹ or might use geographical coordinates to determine the extension of the zone.²² While the Middle East is not a clearly geographically or politically defined region, a 1991 UN Study, endorsed by the League of Arab States, suggested that the WMD-free zone treaty should be open to the

¹⁹ According to the ICJ, '[i]t is well recognized that declarations made by way of unilateral acts, concerning legal or factual situations, may have the effect of creating legal obligations. [...] When it is the intention of the State making the declaration that it should become bound according to its terms, that intention confers on the declaration the character of a legal undertaking, the State being thenceforth legally required to follow a course of conduct consistent with the declaration. An undertaking of this kind, if given publicly, and with an intent to be bound, even though not made within the context of international negotiations is binding' (Nuclear Tests Case (Australia v. France, New Zealand v. France), Judgment, 20 December 1974, ICJ Reports 1974, para. 43 and para. 46, respectively).

²⁰ See Art.1 of the Bangkok Treaty and Art. 1 of the Semipalatinsk Treaty.

²¹ Art. 1 of the Pelindaba Treaty defines the African NWFZ as 'the territory of the continent of Africa, islands States members of OAU and all islands considered by the Organization of African Unity in its resolutions to be part of Africa'.

²² See Art. 4 (2) of the Treaty of Tlatelolco and Annex 1 of the Rarotonga Treaty

participation of all members of the Arab League in addition to Israel and Iran.²³ Among them, however, some states are considered 'core countries', i.e. 'a smaller group essential to the initiation of any serious action for the establishment of the zone and a somewhat larger group whose accession to the arrangement establishing the zone might be necessary to bring it into force'.²⁴ In the IAEA's view, for instance, the zone should at least include 'the area extending from the Libyan Arab Jamahiriya in the West, to the Islamic Republic of Iran in the East, and from Syria in the North to the People's Democratic Republic of Yemen in the South'.²⁵

Securing the participation of all states in case of universal non-proliferation treaties and of all zonal states in case of regional ones is considered vital for the success of the initiative.²⁶ This is because the proliferation of WMDs, or their renunciation, involves national security concerns of particular sensitivity and importance to governments. It is therefore not surprising that non-proliferation treaties usually require a very high number of ratifications for their entry into force. In some cases, this is further specified by requiring that the ratifications include those of certain states: Article XIV of the 1996 Comprehensive Test Ban Treaty (CTBT), for instance, provides that the treaty will enter into force 180 days after the date of deposit of the instruments of ratification of the 44 states listed in Annex 2, i.e. those possessing nuclear power or research reactors at the time of the opening for signature. Considering the high conflictual character of the region and the climate of mutual distrust among the regional states, the WMD-free zone treaty in the Middle East will probably have to require the ratification by all regional states or at least by the core countries, in particular those with WMD capabilities and with nuclear reactors, for its entry into force.²⁷ As this might require a long time, a mechanism providing for temporary entry into force might be added: Article 29 (2) of the Treaty of Tlatelolco, for instance, provides that, whereas the treaty fully enters into force only when all regional states and external powers have ratified the treaty and protocols and have concluded safeguards agreements with the IAEA, '[a]ll Signatory States shall have the

²³ Effective and Verifiable Measures Which Would Facilitate the Establishment Of a Nuclear-weapon-free Zone in the Middle East, Report of the UN Secretary-General, UN Doc. A/45/435, 1991, para. 66, <www.un.org/disarmament/HomePage/ODAPublications/DisarmamentStudySeries/PDF/SS-22.pdf>.

The zone would then also include peripheral states such as Djibouti, Comoros, Somalia and Sudan, which are members of the Arab League but not, strictly speaking, Middle Eastern countries. Because of its NATO membership, Turkey is not expected to be included in the zone. It should be recalled that the African countries are already included in the African NWFZ established by the Pelindaba Treaty.

²⁴ Effective and Verifiable Measures, above note 23, para. 65.

²⁵ Quoted *ibid.*, para. 64.

²⁶ N. Ronzitti, 'Aspetti giuridici del progetto di zona priva di armi di distruzione di massa in Medio Oriente', in N. Ronzitti (ed.), *Una zona priva di armi di distruzione di massa in Medio Oriente: problemi aperti* (2012), 21.

²⁷ The Treaty of Tlatelolco entered into force after the ratification of the treaty by all regional states and the ratification of Protocols I and II by the relevant external states, as well as the conclusion of a safeguards agreement with the IAEA by the regional states (Art. 29 (1)). The Treaty of Rarotonga entered into force after eight ratifications (Art. 15), the Bangkok Treaty after seven ratifications (Art. 16), the Pelindaba Treaty after 28 ratifications (Art. 18 (2)) and the Semipalatinsk Treaty after the ratifications of all five regional states (Art. 15).

imprescriptible right to waive, wholly or in part, the requirements laid down in the preceding paragraph. [...] For those States which exercise this right, this Treaty shall enter into force upon deposit of the declaration, or as soon as those requirements have been met which have not been expressly waived'. A similar mechanism could be used in the Middle East context as well.

With regard to termination, it is well-known that non-proliferation agreements, including the NWFZ treaties, contain very generous withdrawal clauses. In the Rarotonga and Bangkok Treaties (Articles 13 and Article 22, respectively), the right of withdrawal is triggered by the breach by another party of a provision essential to the achievement of the objectives of the treaty.²⁸ The Treaties of Tlatelolco (Article 31), Pelindaba (Article 20) and Semipalatinsk (Article 16) allow the withdrawal if a party 'decides that extraordinary events, related to the subject-matter of this Treaty, have jeopardized its supreme national interests'. The withdrawal takes effect twelve months (three months in the Treaty of Tlatelolco) after the date of receipt of the notification by the Depositary or one of the regional organs. It seems unlikely that the WMD-free zone treaty in the Middle East will not include a similar provision, which is standard in most non-proliferation agreements.²⁹

The NWFZ treaties do not set up any mechanism to review a party's decision to withdraw, but usually require that the notification of the withdrawal include a statement indicating the 'extraordinary events' jeopardizing the party's supreme national interests. Even though the other parties could challenge the existence of such extraordinary events, the lack of any definition and the vagueness of this concept hardly make it an effective deterrent against the unjustified exercise of the right of withdrawal. However, a role might be played by the International Court of Justice (ICJ) (in the unlikely event that its jurisdiction is established over the case), since a controversy among states parties on whether a certain situation amounts to an 'extraordinary event' would be a legal dispute concerning the interpretation of a treaty under Article 36 (2) (a) of the ICJ Statute. On the other hand, it is debatable that an act of withdrawal by a state party exercised according to the terms of the treaty could lead to the application of Chapter VII measures by the Security Council against that state, as has been suggested.³⁰ In Resolutions 1718 (2006) and 1874 (2009), for instance, the Council demanded that the Democratic People's Republic of North Korea (DPRK) re-accede the NPT after withdrawing from it and adopted sanctions.³¹ As has been observed, these resolutions 'would seem to carry serious implications with regard to the consensual nature of all of the sources of

²⁸ Art. 13 of the Rarotonga Treaty also mentions the violation 'of the spirit of the Treaty', which is of difficult interpretation.

²⁹ On the 'special' character of these withdrawal provisions, see D.H. Joyner and M. Roscini, 'Withdrawal from and Termination of Non-proliferation Treaties', in D.H. Joyner and M. Roscini (eds.), *Non-proliferation Law as a Special Regime* (2012), 151-171.

³⁰ M. I. Shaker, *The Nuclear Non-Proliferation Treaty, Origin and Implementation, 1959-1979* (1980), Vol. II, 896; M. Willrich, *Non-Proliferation Treaty: Framework for Nuclear Arms Control* (1969), 301.

³¹ The resolutions have been reaffirmed in the recent Resolutions 2087 (2013) and 2094 (2013).

international law, which is in turn intimately linked to the sovereign character of states in the international legal system'.³²

Considering the high conflictual character of the region, it would also be important that the WMD-free zone treaty in the Middle East clarifies whether the treaty remains in force if an armed conflict arises between its parties. Most treaties, including existing NWFZ treaties, are silent on the issue of whether the insurgence of an armed conflict between the parties suspends or terminates the treaty. The International Law Commission (ILC)'s Draft Articles on the effects of armed conflicts on treaties, adopted in 2011, do not include non-proliferation treaties in the indicative list of categories of treaties that continue in operation, in whole or in part, during armed conflict (Draft Article 7 and Annex).³³ Draft Article 14 also specifies that a party is always entitled to suspend in whole or in part the operation of a treaty if that operation is incompatible with the exercise of its right of individual and collective self-defence. Self-defence could, at least in theory, be exercised through the threat and the use of nuclear weapons: it is well-known that the controversial paragraph 97 of the ICJ's Advisory Opinion on the legality of the threat or use of nuclear weapons does not rule out the right to use such weapons 'in an extreme circumstance of self-defence, in which [a state's] very survival would be at stake'.³⁴ Of course, any self-defence reaction must be necessary and proportionate and also comply with the *jus in bello*. If the use of chemical and biological weapons is a violation of international humanitarian law and even a war crime, both in international and non-international armed conflicts,³⁵ the situation is more uncertain with regard to the use of nuclear weapons: they are for instance not mentioned in the Statute of the International Criminal Court (ICC) and the ICJ held that they are only 'generally' contrary to the rules of international law applicable in armed conflict.³⁶ Under Draft Article 14, then, should the prohibitions to possess and use nuclear weapons arising from the WMD-free zone treaty hamper the exercise of the right of self-defence by a state party in 'extreme circumstances', the state could suspend them in order to react against an armed attack (although the use would still have to be consistent with international humanitarian law). It would therefore be

³² D.H. Joyner, 'The Security Council as a Legal Hegemon', 43 *Georgetown Journal of International Law* (2011-2012), 251.

³³ The text of the Draft Articles adopted by the ILC on second reading can be read in Report of the International Law Commission, Sixty-third session (26 April–3 June and 4 July–12 August 2011), General Assembly Official Records, Sixty-sixth session, Supplement No. 10 (A/66/10), 175-178.

³⁴ *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, 8 July 1996, ICJ Reports 1996, para. 97. It is well-known that, according to the ICJ, the legality of the threat depends on the legality of the use in the same circumstances (*ibid.*, para. 47). On threats as a self-defence measure, see J.A. Green and F. Grimal, 'The Threat of Force as an Action in Self-Defense in International Law', 44 *Vanderbilt Journal of Transnational Law* (2011), 285 et seq.

³⁵ Ronzitti, above note 26, 39. See Rules 73-76, in J.-M. Henckaerts and L. Doswald-Beck (eds.), *Customary International Humanitarian Law* (2005), Vol. I, 256-267.

³⁶ *Legality of the Threat or Use of Nuclear Weapons*, above note 34, para. 105 (2) (E).

important to include a specific provision in the treaty affirming that it continues its operation even in case of armed conflict.

3. Core obligations

By ratifying a NWFZ treaty, states first of all commit themselves not to possess or accept on their territory 'nuclear weapons' or 'nuclear explosive devices'. The broader notion of 'nuclear explosive device' is used in the Rarotonga, Pelindaba and Semipalatinsk treaties and should be preferred to 'nuclear weapon',³⁷ as the latter might leave some ambiguity on whether nuclear explosive devices for peaceful purposes are admissible.³⁸ The obligation not to possess applies to all zonal states and extends to all forms of control by the states parties anywhere (within or outside the zone, e.g. in a military base situated in an allied country not included in the NWFZ), as well as to manufacture and acquisition. The devices must be 'explosive', i.e. capable of releasing a considerable amount of nuclear energy in a very short time and in an uncontrolled manner.³⁹ This excludes from the scope of the prohibitions conventional and experimental nuclear reactors, reprocessed nuclear material and depleted uranium ammunitions, which do not cause an uncontrolled blast or heat wave.

The Rarotonga, Bangkok, Pelindaba and Semipalatinsk treaties specify that the definition of 'nuclear weapon' or 'nuclear explosive device' 'does not include the means of transport or delivery of such a weapon or device if separable from and not an indivisible part of it'.⁴⁰ Missiles capable of delivering nuclear weapons are therefore not prohibited by those treaties.

As mentioned, in the Middle East WMD-free zone the object of the prohibitions to possess and control will extend to chemical, biological and radiological weapons because of the strategic link that states in the region have made among the various WMDs, with biological and chemical weapons being the 'poor man's nukes'.⁴¹ The definitions of chemical and

³⁷ On its meaning, see M. Roscini, *Le zone denuclearizzate* (2003), 37-42.

³⁸ The problem arose in relation to the Treaty of Tlatelolco (*ibid.*, 263-265).

³⁹ See para. III (e) of the note of the Government of the Federal Republic of Germany issued at the moment of the signature of the NPT: 'At the present stage of technology nuclear explosive devices are those designed to release in microseconds in an uncontrolled manner a large amount of nuclear energy accompanied by shock waves, i.e. devices that can be used as nuclear weapons' (<http://collections.europarchive.org/tna/20080205132101/www.fco.gov.uk/Files/kfile/024a_NonProliferaionNuclearWeapons,0.pdf>).

⁴⁰ Art. 1 of the Rarotonga Treaty. See also Art. 1 of the Bangkok, Pelindaba and Semipalatinsk Treaties.

⁴¹ Egypt, Israel, Syria, South Sudan and Somalia are among the eight states that have not yet ratified the Chemical Weapons Convention. Egypt argues that it will sign and ratify it only after Israel accedes to the NPT (C. Baumgart and H. Müller, 'A Nuclear Weapons-Free Zone in the Middle East: A Pie in the Sky?', 28 *The Washington Quarterly*, Winter 2004-2005, 49). Chemical weapons were used in the Iran-Iraq War in the 1980s and by Iraq against the Kurds. Algeria, Syria and Libya were (or are) also suspected of having a chemical weapons programme.

biological weapons could be borrowed from Article II of the 1993 Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction and Article I of the 1972 Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, respectively. There might however be problems with radiological weapons, as no existing treaty provides a ready-made definition.

The second fundamental provision contained in the NWFZ treaties is the prohibition of stationing nuclear weapons or nuclear explosive devices within the zone, which is defined in Article 1 (c) of the Semipalatinsk Treaty as 'implantation, emplacement, stockpiling, storage, installation and deployment'.⁴² This prohibition distinguishes the NWFZ treaties from the NPT. The latter does not prohibit the presence of nuclear weapons on the territory of non-nuclear weapon states, providing that they do not acquire control over them (for instance, about 90 nuclear warheads are thought to be stationed in the US Ghedi Torre and Aviano military bases in Italy). On the other hand, the Treaties of Tlatelolco, Rarotonga, Bangkok, Pelindaba and Semipalatinsk prohibit the presence of nuclear explosive devices within the zones, whoever owns or controls them. In the Middle East context, this might cause problems with regard to the US military bases in Bahrain (where the 5th fleet of the US Navy is stationed), Qatar (which hosts the forward headquarters of the US Central Command), Kuwait, Oman, Saudi Arabia and the United Arab Emirates (UAE). The United States has also a commitment to Israel's security that has been frequently reaffirmed.⁴³ Furthermore, the United Kingdom and France have concluded defence agreements with several Gulf states, and Israel, Egypt, Jordan, Bahrain and Kuwait have the status of major non-NATO allies.⁴⁴ It is not clear whether these security agreements and alliances imply a threat or use of nuclear weapons and whether nuclear weapons are stored in foreign bases in the region, as this is left intentionally ambiguous.⁴⁵ Be that as it may, the conclusion of a security agreement with a nuclear weapon state or the participation in a nuclear military alliance is not as such inconsistent with the obligations arising from a NWFZ treaty. The answer would depend on the circumstances of each case: if 'a treaty or alliance [...] does not envisage nuclear retaliation in support of an ally, nor include the stationing of nuclear weapons on the territory of that ally', then it would be 'no bar to the

⁴² The definition is identical to that contained in Art. 1 (d) of the Bangkok Treaty. Art. 1 (d) of the Pelindaba Treaty and Art. 1 (d) of the Rarotonga Treaty also include in the definition of stationing the 'transport on land or inland waters'. While in the Bangkok Treaty transport by states parties is the object of a specific prohibition (even though it is not qualified as a form of stationing), no prohibition of transport is contained in the Semipalatinsk Treaty. The Treaty of Tlatelolco, without using the word 'stationing', prohibits 'the receipt, storage, installation, deployment and any form of possession of any nuclear weapons, directly or indirectly' (Art. 1).

⁴³ R. Mulas, 'Nuclear Weapon Free Zones and the Nuclear Powers – Lessons for a WMD/DVs Free Zone in the Middle East', Policy Brief for the Middle East Conference on a WMD/DVs Free Zone, No. 5, December 2011, 6-7.

⁴⁴ *Ibid.*

⁴⁵ *Ibid.*, 7.

creation of a nuclear-weapon-free zone' and in such a case 'a non-nuclear weapon State allied to a nuclear-weapon State can [...] also be a party to a nuclear-weapon-free zone treaty'.⁴⁶ In order to avoid assuming conflicting obligations, the denuclearized states should carefully verify that the NWFZ treaty is not in contrast with other agreements to which they are a party.⁴⁷

Another problem is related to the distinction between stationing and other forms of presence of nuclear weapons within the zone. As in all NWFZ treaties the right of any ship and aircraft, including those carrying nuclear weapons, to visit ports and landing in airfields is reaffirmed,⁴⁸ it would be important to clarify when such visits become 'stationing': no limits of number or duration is provided in the existing NWFZ treaties.

The prohibition of the use of nuclear weapons by the states parties only expressly appears in the Treaties of Tlatelolco, Bangkok and Semipalatinsk.⁴⁹ It could however be argued that such prohibition is unnecessary as it is implied in the prohibition of possession and control. To avoid ambiguity, however, it would be advisable that the Middle East WMD-free zone treaty expressly contains such important prohibition.

4. Other obligations

Apart from the two core prohibitions of possession/control and stationing, the NWFZ treaties also contain other supplementary obligations, not necessarily present in all five existing treaties. The Pelindaba, Rarotonga, Bangkok and Semipalatinsk Treaties require states parties to conclude with the IAEA an agreement for the application of safeguards in accordance with the NPT and not to provide source or special fissionable material or related equipment to any non-nuclear weapon state unless that state has concluded with the IAEA a comprehensive safeguards agreement.⁵⁰ However, the provision of such material or equipment to nuclear weapon states is not prohibited. The Semipalatinsk Treaty is the first and so far only NWFZ treaty to refer to the 1997 Additional Protocol (INFCIRC/540 (Corr.)) providing for more intrusive and comprehensive verification measures.⁵¹ Indeed, under the safeguards system based on the previous INFCIRC/153, the possibility for the IAEA to detect clandestine nuclear activities is limited, as inspections focus on declared nuclear material and on strategic points in declared facilities. Under the Additional Protocol, instead, the IAEA is given the authority to

⁴⁶ 1976 Comprehensive Study, above note 4, Annex I, para. 92.

⁴⁷ Report of the Disarmament Commission, above note 4, para. 32. This reference to the compatibility with previous international and regional agreements was deemed necessary by the US, British, French and Polish delegates (Disarmament Commission, Press Release DC/2641, 30 April 1999, 10-12, 22).

⁴⁸ See below, Section 6.

⁴⁹ Art. 1 of the Treaty of Tlatelolco, Art. 3 of the Bangkok Treaty, Art. 3 of the Semipalatinsk Treaty.

⁵⁰ Rarotonga Treaty, Annex 2; Pelindaba Treaty, Art. 9; Bangkok Treaty, Art. 5; Semipalatinsk Treaty, Art. 8.

⁵¹ Art. 8.

inspect undeclared facilities and to access all parts of a state's nuclear fuel cycle and any other location where nuclear material is or may be present. In the Middle East, the Additional Protocol is in force in Jordan, Kuwait, Libya and UAE. Bahrain, Iran, Iraq, Morocco and Tunisia have signed the Protocol, but have not yet ratified it.

The Rarotonga, Bangkok, Pelindaba and Semipalatinsk treaties provide for an obligation on the states parties not to conduct nuclear tests and to prevent them in their territories (the Semipalatinsk Treaty includes an express reference to the CTBT).⁵² They do so regardless of their threshold and of whether they are conducted above or underground. Article 18 of the Treaty of Tlatelolco allows nuclear explosions for peaceful purposes, but the regional states and the nuclear powers have interpreted this provision as prohibiting all explosions.⁵³ The prohibition of nuclear testing is usually conceived as a provision aimed to support the nuclear non-proliferation regime by preventing the development of new types of arms and the modernization of the existing arsenals. In the NWFZ treaties, however, where the regional states (with a few exceptions) never had nuclear ambitions, this prohibition has the main purpose of delegitimizing nuclear explosions by the nuclear powers.⁵⁴ For instance, the South Pacific NWFZ was established mainly in order to prevent further nuclear tests by France in the region.⁵⁵

The Pelindaba Treaty is the only NWFZ treaty that prohibits to carry out military nuclear research and that requires the contracting parties to declare, dismantle, destroy or convert nuclear explosive devices and the facilities for their manufacture.⁵⁶ This provision was included with South Africa's nuclear facilities in mind and should also be included in the Middle East WMD-free zone to cover Israel's military nuclear activities and materials, as well as some Arab states' chemical facilities. The dismantlement of WMD arsenals should precede the entry into force of the WMD-free zone treaty and be conducted under the supervision of an international team of inspectors.⁵⁷

The Pelindaba Treaty is also the only treaty that prohibits to take, assist or encourage any action aimed at an armed attack 'by conventional or other means' against nuclear

⁵² Art. 6 of the Rarotonga Treaty; Art. 3 of the Bangkok Treaty; Art. 5 of the Pelindaba Treaty; Art. 5 of the Semipalatinsk Treaty.

⁵³ Roscini, above note 37, 263-264.

⁵⁴ As acknowledged in the guidelines adopted by the Disarmament Commission in 1999, NWFZs are 'a useful complement to the international regime for the prohibition of any nuclear-weapon-test explosions or any other nuclear explosion' (Report of the Disarmament Commission, above note 4, para. 37)

⁵⁵ As far as Central Asia is concerned, the Soviet Union conducted more than 450 atmospheric and underground nuclear tests in Semipalatinsk between 1949 and 1989 (A.J. González, 'Radioactive Residues of the Cold War Period: A Radiological Legacy', IAEA Bulletin, No. 40 (4) (December 1998), 4).

⁵⁶ Art. 3 and Art. 6, respectively.

⁵⁷ N. Fahmy and P. Lewis, 'Possible Elements of an NWFZ in the Middle East', Disarmament Forum (2011/2), 45, <www.unidir.org/pdf/articles/pdf-art3085.pdf>.

installations situated within the zone.⁵⁸ This is an important provision that supplements existing jus ad bellum ad jus in bello rules. Indeed, Article 51 of the UN Charter does not rule out attacks on nuclear installations in self-defence if this is necessary and proportionate.⁵⁹ Under the jus in bello, however, they can only be attacked if they are a 'military objective' as defined in Article 52 (2) of the 1977 Protocol I additional to the 1949 Geneva Conventions on the Protection of Victims of War, and the attack is not 'expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated'.⁶⁰ Furthermore, for states parties to Protocol I, nuclear electrical generating stations can only be attacked if the additional stricter conditions provided in Article 56 on installations containing dangerous forces are met.⁶¹ The inclusion of a provision such as Article 11 of the Pelindaba Treaty in the Middle East WMD-free zone treaty would therefore outlaw all residual cases of attacks on nuclear installations that would otherwise escape the jus ad bellum and jus in bello provisions.⁶² The IAEA General Conference has for instance stated that 'it would further the

⁵⁸ Art. 11.

⁵⁹ In the Oil Platforms Judgment, the ICJ pointed out that '[t]he United States must also show that its actions were necessary and proportional to the armed attack made on it, and that the platforms were a legitimate military target open to attack in the exercise of self-defence' (Case concerning Oil Platforms (Iran v. United States), Merits, Judgment of 6 November 2003, <www.icj-cij.org>, para. 51). This seems at first sight to suggest that Art. 51 of the UN Charter extends to targeting issues and could be invoked to prohibit all attacks against nuclear installations in the light of the IAEA General Conference Resolution that declares 'that all armed attacks against nuclear installations devoted to peaceful purposes should be explicitly prohibited' (GC(XXVII)/RES/407, 9 November 1983, para. 1). The significance of para. 51 of the Oil Platforms Judgment, however, should not be overstated. What the Court meant here, perhaps not in the clearest way, is what it had already said in the Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons (above note 34, para. 34), i.e. that any use of force in self-defence has to comply not only with jus ad bellum requirements (armed attack, necessary and proportional reaction), but also with the jus in bello (principle of distinction). There is nothing in para. 51 suggesting that the Court is reasoning only from the perspective of jus ad bellum.

⁶⁰ Art. 51 (5) (b) of Additional Protocol I. According to Art. 52 (2) of Additional Protocol I, 'military objectives are limited to those objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage'.

⁶¹ Under Art. 56 (1) and (2), '1. Works or installations containing dangerous forces, namely dams, dykes and nuclear electrical generating stations, shall not be made the object of attack, even where these objects are military objectives, if such attack may cause the release of dangerous forces and consequent severe losses among the civilian population. Other military objectives located at or in the vicinity of these works or installations shall not be made the object of attack if such attack may cause the release of dangerous forces from the works or installations and consequent severe losses among the civilian population. 2. The special protection against attack provided by paragraph 1 shall cease: (a) for a dam or a dyke only if it is used for other than its normal function and in regular, significant and direct support of military operations and if such attack is the only feasible way to terminate such support; (b) for a nuclear electrical generating station only if it provides electric power in regular, significant and direct support of military operations and if such attack is the only feasible way to terminate such support; (c) for other military objectives located at or in the vicinity of these works or installations only if they are used in regular, significant and direct support of military operations and if such attack is the only feasible way to terminate such support'.

⁶² In the Middle East WMD-free zone, the prohibition should also cover attacks against installations containing chemical or biological substances.

cause of peace to extend the prohibition of armed attack so as to protect all nuclear installations devoted to peaceful purposes'.⁶³ The prohibition of attacks on nuclear installations would also have another aspect of particular interest in the context of the Middle East if one recalls the recent case of the Stuxnet malware that damaged the centrifuges at the Natanz uranium enrichment facility in Iran:⁶⁴ the question is whether a cyber attack would amount to an 'armed attack' in the sense of a provision like Article 11 of the Pelindaba Treaty. The fact that the provision refers to attacks 'by conventional or other means' seems to allow a broad interpretation, at least with regard to cyber operations that produce consequences comparable to those of attacks conducted with kinetic weapons.⁶⁵

A further aspect of NWFZ treaties, which distinguishes them from other non-proliferation treaties, is that they also contain provisions aiming to protect the natural environment, such as the prohibition to dump radioactive substances at sea⁶⁶, the obligation not to allow the disposal of radioactive waste of other states,⁶⁷ and the obligation to ratify the 1986 Vienna Convention on Early Notification of a Nuclear Accident.⁶⁸ Furthermore, according to Article 6 of the Semipalatinsk Treaty, '[e]ach party undertakes to assist any efforts toward the environmental rehabilitation of territories contaminated as a result of past activities related to the development, production or storage of nuclear weapons or other nuclear explosive devices, in particular uranium tailings storage sites and nuclear test sites'.⁶⁹ The obligation is however a mere obligation of conduct, not an obligation to achieve a precise result (the environmental rehabilitation of contaminated territories) and is presumably triggered by the request for assistance of the state to which the contaminated territories belong.

Considering that terrorism has affected most, if not all, states in the Middle East and that the region has served as a hub for illicit nuclear trafficking, it would be important that the WMD-free zone treaty in the Middle East contains provisions on the prevention and repression of illicit nuclear activities by non-state actors. Indeed, in Resolution 1540 of 28 April 2004 the UN Security Council expressed its concern for 'the threat of illicit trafficking in nuclear,

⁶³ GC(XXVII)/RES/407, 9 November 1983.

⁶⁴ D.P. Fidler, 'Was Stuxnet an Act of War?', 9 *Privacy Interests* (July/August 2011), 56-59.

⁶⁵ On cyber operations and jus ad bellum, see M. Roscini, 'World Wide Warfare: Jus ad bellum and the Use of Cyber Force', 14 *Max Planck Yearbook of United Nations Law* (2010), 85-130. On jus in bello aspects, see M.N. Schmitt, 'Wired Warfare: Computer Network Attack and jus in bello', in M.N. Schmitt and B.T. O'Donnell (eds.), *Computer Network Attack and International Law*, *International Law Studies*, Vol. 76 (Newport: Naval War College, 2002), 187-218. See also Tallinn Manual on the International Law Applicable to Cyber Warfare (Cambridge: Cambridge University Press, 2013).

⁶⁶ Art. 7 of the Pelindaba Treaty; Art. 7 of the Rarotonga Treaty; Art. 3 of the Bangkok Treaty.

⁶⁷ Art. 3 (2) of the Semipalatinsk Treaty.

⁶⁸ Art. 6 of the Bangkok Treaty.

⁶⁹ The provision was added in order to address the problem of the areas contaminated as a result of the nuclear-related activities carried out in Central Asia during the Soviet era, such as weapons storage and testing, uranium mining, plutonium production.

chemical, or biological weapons and their means of delivery, and related materials, which adds a new dimension to the issue of proliferation of such weapons and also poses a threat to international peace and security' and required all states to adopt effective laws which prohibit any non-state actors 'to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery' and 'take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery, including by establishing appropriate controls over related materials'. Some measures against non-state actors activities are contained in existing NWFZs. Under Article 10 of the Pelindaba Treaty and Article 9 of the Semipalatinsk Treaty, for instance, each state party undertakes to maintain 'effective standards of physical protection of nuclear material, facilities and equipment to prevent its unauthorized use or handling or theft'. The measures adopted to this aim must be 'at least as effective' as those called for by the 1980 Convention on the Physical Protection of Nuclear Material⁷⁰ and by the recommendations and guidelines developed by the IAEA in this field.⁷¹

Finally, it is worth noting that the NWFZ treaties do not prohibit the production of fissile material: this prohibition is only contained in the 1992 Joint Declaration on the Denuclearization of the Korean Peninsula.⁷²

5. The obligations of external states

⁷⁰ The Convention, opened for signature on 3 March 1980 and entered into force on 8 February 1987, requires each contracting party 'to take appropriate steps within the framework of its national law and consistent with international law to ensure as far as practicable that, during international nuclear transport, nuclear material within its territory, or on board a ship or aircraft under its jurisdiction insofar as such ship or aircraft is engaged in the transport to or from that State, is protected at the levels described in Annex 1' (Art. 3). The purpose, which is instrumental to Arts. I, II and III of the NPT, is to prevent fissile material, usable for the construction of arms from being illegally stolen. Of the potential parties to the Middle East WMD-free zone, only Egypt, Iran, Iraq, Somalia and Syria have not yet ratified the Physical Protection Convention.

⁷¹ The recommendations were prepared for the first time in 1972 by a panel of experts convened by the IAEA Director General and were revised in 1975, 1977, 1989, 1993, 1998 and 2010 (INFCIRC/225). See Fahmy and Lewis, above note 57, 46. Even though they are not binding, the implementation of the IAEA recommendations is required by the agreements that the Agency concludes with the states to which it provides assistance and by the bilateral cooperation agreements in the field of nuclear energy.

⁷² The text can be read at <<http://cns.miis.edu/inventory/pdfs/aptkoreanuc.pdf>>. The legal status of the document is unclear. In December 1993, UN General Assembly Resolution 48/75 L, adopted by consensus, recommended 'the negotiation in the most appropriate international forum of a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons and other nuclear explosive devices'. The 1995 NPT Review and Extension Conference's Decision 2 indicated '[t]he immediate commencement and early conclusion of negotiations on a nondiscriminatory and universally applicable convention banning the production of fissile material for nuclear weapons or other nuclear explosive devices' as an important measure for the full implementation of Art. VI of the NPT (NPT/CONF.1995/32 (Part I), Annex, para. 4, <www.un.org/disarmament/WMD/Nuclear/1995-NPT/pdf/NPT_CONF199501.pdf>).

The typical structure of a NWFZ treaty regime includes protocols attached to the main treaty. One is addressed to the external states that are de jure or de facto internationally responsible for non-independent territories situated within the zone (if any).⁷³ By ratifying these protocols, such states commit themselves to respect at least some prohibitions of the NWFZ treaties with regard to the territory for which they are internationally responsible. The external states continue then to possess nuclear weapons even after the ratification of the protocol, but they cannot station or test them in their territories within the zone. This is not without problems. In some cases, as Guantánamo Bay, it might not be easy to establish what state is responsible de jure or de facto for the territory.⁷⁴ Another controversial case is the inclusion of the Chagos Archipelago in the African NWFZ, over which both Britain and Mauritius claim sovereignty. This archipelago in the British Indian Ocean Territory hosts one of the most valuable US military bases in the region.⁷⁵ According to the map appended to the Pelindaba Treaty, the NWFZ covers the 'Chagos Archipelago - Diego García' albeit with a footnote (inserted at the British government's request) stating that the territory 'appears without prejudice to the question of sovereignty'. Upon signing the protocols, the United Kingdom noted that it did 'not accept the inclusion of [the Chagos Archipelago] within the African nuclear-weapon-free zone without their consent'.⁷⁶ This claim was opposed in the Russian statement, according to which, as certain states declared to consider themselves free from obligations arising from the protocols with respect to the above mentioned territory, Russia would also not be bound by its undertakings under Article 1 of Protocol I in respect to it.⁷⁷

In the Middle East, the participation of Palestine in the WMD-free zone treaty might be problematic not only from a political perspective. According to the majority view, both the West Bank and the Gaza Strip are territories under belligerent occupation.⁷⁸ On 31 October 2011, UNESCO has however admitted Palestine as a member state and, on 29 November 2012, the UN General Assembly granted Palestine 'non-member observer state' status. Should therefore Palestine accede to the WMD-free zone treaty as a state, or should Israel as the

⁷³ This Protocol is attached to the Tlatelolco, Rarotonga and Pelindaba Treaties.

⁷⁴ The question is whether the competence to denuclearize the territory rests on the United States, because of the lease of the territory from Cuba, or on Cuba itself, which has maintained sovereignty over the area. The former is probably correct, as the lease was exactly for the use of the territory for military purposes. Furthermore, since Cuba's sovereignty over Guantánamo Bay is reduced to a nudum jus, it would not be able to implement the denuclearization obligations contained in the Treaty of Tlatelolco. See Roscini, above note 37, 123-125.

⁷⁵ P.H. Sand, 'Diego Garcia – A Thorn in the Side of the Africa's Nuclear-Weapon-Free Zone', *Bulletin of the Atomic Scientists*, 8 October 2009, <www.thebulletin.org/web-edition/op-eds/diego-garcia-thorn-the-side-of-africas-nuclear-weapon-free-zone>.

⁷⁶ See <http://disarmament.un.org/treaties/a/pelindaba_1/unitedkingdomofgreatbritainandnorthernireland/sig/cairo>.

⁷⁷ See <http://disarmament.un.org/treaties/a/pelindaba_1/russianfederation/sig/cairo>. Problems have also arisen in the context of the Pelindaba Treaty with regard to the Canary Islands and Madeira, which Spain and Portugal refuse to see as 'African' dependencies (Roscini, above note 37, 141).

⁷⁸ Ronzitti, above note 26, 28.

Occupying Power assume the relevant, and more limited, obligations by ratifying a protocol addressed to states that have the responsibility of non-independent territories within the zone? The latter solution would be politically unacceptable for the Palestinians, while the former would probably lead to the refusal of Israel (and perhaps also of the United States and the United Kingdom) to participate in the treaty. It should be recalled that the Palestinian Liberation Organization (PLO) enjoys some treaty-making power at least for matters related to the right of self-determination of the people it represents.⁷⁹ a more practical option might then be an ad hoc protocol signed by the PLO, with the caveat that the protocol does not affect the status of the territories.

Another protocol is addressed to the nuclear weapon states, which, by ratifying it, agree not to test any nuclear weapons within the zone.⁸⁰ These Protocols do not distinguish between atmospheric and underground nuclear tests and therefore complements the CTBT regime.

Finally, a protocol contains the negative security assurances provided by the NPT nuclear weapon states to the denuclearized states. These are so far the only legally binding nuclear assurances provided by the nuclear weapon states.⁸¹ With the exception of China, however, the nuclear powers have issued declarations at the moment of signature and/or ratification by which they have reserved the right to use or threaten the use of nuclear weapons in certain circumstances, in particular when a denuclearized state is in material breach of its denuclearization obligations or in the case of an attack on the nuclear weapon state, its dependent territories, its armed forces or other troops, its allies or a State towards which it has a security commitment, carried out or sustained by a party to the NWFZ treaty in association or alliance with a nuclear weapon State.⁸²

Furthermore, the negative security assurances protocols attached to only two of the treaties (the Treaties of Tlatelolco and Rarotonga) have been fully signed and almost fully ratified by the nuclear powers (the United States still has to ratify the Rarotonga Protocol). The Pelindaba Protocol I has been ratified by France, United Kingdom, Russian Federation and China but not the United States. The Bangkok and the Semipalatinsk Protocols have not been signed or ratified by any nuclear power yet. At the NPT Review Conference of May 2010, though, the then US Secretary of State Hillary Clinton announced that the US government will

⁷⁹ The PLO signed for instance the Oslo Accords in 1993 and 1995.

⁸⁰ This Protocol is not attached to the Tlatelolco and Semipalatinsk Treaties.

⁸¹ At the universal level, the nuclear weapon states did not accept the inclusion of negative security assurances in the final text of the NPT for fear that their nuclear doctrines and alliances could be undermined and limited themselves to subsequently make unilateral statements in 1978 and 1995. In these statements, China was the only nuclear weapon state to offer unconditional assurances. In Resolution 984 (1995), the UN Security Council took note 'with appreciation' of the 1995 statements, which superseded those given in 1978. See Roscini, above note 37, 307-310.

⁸² The statements can be read in the on line treaty database of the UN Office for Disarmament Affairs, <www.un.org/disarmament/HomePage/treaty/treaties.shtml>. See also SIPRI Yearbook, 2010, 495-497, 499, 500-501.

seek Senate advice and consent to ratification of the Rarotonga and Pelindaba Protocols.⁸³ As to the Bangkok and Semipalatinsk Protocols, Clinton declared that the US government is willing to continue consultations with the zonal states in order to eventually ratify the instruments.

The Protocol attached to the Bangkok Treaty has proved to be particularly controversial, as the obligation not to use or threaten the use of nuclear weapons applies anywhere 'within the Southeast Asia Nuclear Weapon-Free Zone': this means that the nuclear weapon states would be prevented from using nuclear weapons against a state not party to the treaty but the territory of which is included in its geographical scope of application,⁸⁴ launching missiles with a nuclear warhead from ships, submarines or aircraft located within the zone (even to hit a target located outside it), and employing nuclear weapons against any vessel (even belonging to another nuclear weapon state) which is in the exclusive economic zone (EEZ) or on the continental shelf of the parties. This is one of the reasons why the nuclear powers, and the United States in particular, have so far refused to sign the Bangkok Protocol. This language should be avoided in the Middle East WMD-free zone treaty, so to secure the support of all nuclear weapon states.

Finally, as India and Pakistan are geographically very close to the Middle East and also de facto nuclear powers, they should also be invited to provide negative security assurances to the zonal states.⁸⁵ Opening the relevant protocol to their signature, however, would entail recognizing their nuclear status, which the NPT parties are opposed to do. The problem could perhaps be solved by employing an open formulation that allows the accession of 'all powers possessing nuclear weapons', as in Protocol II of Treaty of Tlatelolco, without taking position on the de jure or de facto character of such possession.⁸⁶

Negative security assurances do not need to be granted with regard to chemical or biological weapons, as a ban on their use already arises from the 1993 Chemical Weapons Convention and the 1925 Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare (which do not distinguish between haves and have-nots), as well as from customary international law.⁸⁷

⁸³ 'Secretary Clinton's Remarks at NPT Review Conference', 3 May 2010, <www.america.gov/st/texttrans-english/2010/May/20100504083001bpuh7.084292e-02.html>.

⁸⁴ This point is at present irrelevant, as all regional states have ratified the Bangkok Treaty. It cannot be excluded, however, that in the future they might withdraw from it.

⁸⁵ India has unilaterally declared that 'it fully respects the status of the NWFZ in South-East Asia', is 'ready to convert this commitment into a legal obligation' and 'remains responsive to the expressed need for such commitments from other nuclear-weapon-free zones also' (J. Prawitz, Existing NWFZs: History and Principles, Paper prepared for the Dag Hammarskjöld Foundation Seminar on Nuclear-Weapon-Free Zones: Crucial Steps Towards a Nuclear-Weapon-Free World, Uppsala, 1-4 September 2000, 33).

⁸⁶ Art. 29 of the Treaty of Tlatelolco.

⁸⁷ Ronzitti, above note 26, 40.

6. The navigational rights of external states

One of the most controversial features of the NWFZ treaties is their maritime boundaries. Since the fulfilment of the requirements of Article 29 (1), which occurred in 2002, for instance, the zone of application of the Treaty of Tlatelolco has included portions of international waters off to the coast of Latin America, defined by geographical coordinates.⁸⁸ The South Pacific NWFZ also encompasses ocean areas, but the main provisions of the Rarotonga Treaty only apply to the waters under the sovereignty of the contracting parties and the airspace above them (the only exceptions are the prohibition for the parties to dump radioactive materials at sea and the prohibition for the nuclear powers to test nuclear explosive devices).⁸⁹ The Bangkok Treaty explicitly includes within the Southeast Asia NWFZ the EEZ and the continental shelf of the parties: only the prohibition of dumping, however, seems to apply to those spaces, even though the treaty is ambiguous as far as the transit of nuclear ships is concerned.⁹⁰ The Pelindaba Treaty, more cautiously, provides that the boundaries of the African NWFZ correspond with the outer border of the territorial sea of the parties.⁹¹

The fact that marine areas are included in the NWFZs was of concern to the nuclear powers as it could have affected the navigational rights of ships carrying nuclear weapons of external states, and, ultimately, nuclear deterrence policies.⁹² The issue is of particular sensitivity in the Middle East region: indeed, several important straits would be partly or entirely encompassed in the zone, e.g. the Straits of Tiran, Gubal, Hormuz and Bab al-Mandeb, as well as the Suez Canal. The Bangkok Treaty contains a clause, which also appears, in a shorter version, in the Rarotonga and Pelindaba Treaties, according to which nothing in the Treaty 'shall prejudice the rights or the exercise of these rights by any State under the provisions of the United Nations Convention on the Law of the Sea of 1982, in particular with regard to freedom of the high seas, rights of innocent passage, archipelagic sea lanes passage or transit passage of ships and aircraft, and consistent with the Charter of the United Nations' (Article 2 (2)).⁹³ Pursuant to this norm, if the law of the sea recognizes the usual rights of

⁸⁸ Before that moment, the denuclearization concerned only the whole of the territories of the states for which the treaty is in force and which had issued the declaration of waiver provided for in Art. 29 (2).

⁸⁹ Arts. 1 and 7 of the Rarotonga Treaty and Art. 1 of Protocol 3.

⁹⁰ Art. 2 (1).

⁹¹ Arts. 1 and 2.

⁹² The problem does not exist with regard to the transit of chemical and bacteriological weapons, which is prohibited as a consequence of the total bans on the possession of such weapons imposed by the Chemical Weapons and Biological Weapons Conventions (Ronzitti, above note 26, 34).

⁹³ Art. 2 (2) of the Rarotonga and Pelidaba Treaties provides that '[n]othing in this Treaty shall prejudice or in any way affect the rights, or the exercise of the rights, of any State under international law with regard to freedom of the seas'. The Tlatelolco Treaty does not contain safeguard clauses, and transit is not explicitly forbidden, but, according to the interpretation of the Comisión Preparatoria para la Denuclearización de América Latina (COPREDAL), it must be understood to be governed by the principles and rules of international law, that is, it is for the territorial State, in the free exercise of its sovereignty,

navigation to vessels carrying nuclear weapons, the denuclearized states could not submit their passage to authorization and prevent it.⁹⁴ In fact, both warships and vessels carrying nuclear materials enjoy the right of innocent, transit and archipelagic sea lanes passage as per Articles 19, 22, 23, 38 and 53 of the 1982 UN Convention on the Law of the Sea, and Article 88 of the Convention, interpreted in connection with Article 301, only forbids those military activities at sea which involve the threat or use of force.⁹⁵ Furthermore, the coastal states only enjoy certain exploitation and exploration 'sovereign rights' over their EEZs and continental shelves, and freedom of navigation is preserved (Articles 56 and 77 of the Montego Bay Convention).⁹⁶

The clause that preserves the navigational rights of ships of third states must be read together with another provision (contained in all treaties, with the only exception of the Treaty of Tlatelolco), which recognises the right of each party to decide for itself 'whether to allow

to grant or deny permission for such transit in each individual case, without prejudice to the normal rights of navigation (COPREDAL/S/30, 7 February 1967, quoted in A. García Robles, *El Tratado de Tlatelolco: génesis, alcance y propósitos de la proscripción de las armas nucleares en la América latina* (1967), 247-248).

⁹⁴ Among the regional states, Iran, Libya and the UAE have only signed the Montego Bay Convention, while Israel and Syria have neither signed nor ratified it. Similar considerations apply to the overflight of aircraft of third states carrying nuclear weapons (M. Roscini, 'Something Old, Something New: The 2006 Semipalatinsk Treaty on a Nuclear Weapon-Free Zone in Central Asia', 7 *Chinese Journal of International Law* (2008), 609).

⁹⁵ The Strait of Tiran between the Red Sea and the Gulf of Aqaba links the territorial sea with international waters and therefore the non-suspendable right of innocent passage applies to it (Art. 45 (1) (b) of the Montego Bay Convention). Art. V of the 1979 Peace Treaty between Egypt and Israel reaffirms that '[t]he Parties consider the Strait of Tiran and the Gulf of Aqaba to be international waterways open to all nations for unimpeded and non-suspendable freedom of navigation and overflight. The parties will respect each other's right to navigation and overflight for access to either country through the Strait of Tiran and the Gulf of Aqaba'. See also Art. 14 (3) of the 1994 Peace Treaty between Israel and Jordan. The transit passage regime should apply to the Strait of Hormuz, as it joins two parts of international waters or EEZs. Iran is however not a party to the 1982 Convention on the Law of the Sea and has declared that it would apply the transit passage regime only to states that have ratified that convention, while to others the right of non-suspendable innocent passage as provided by the 1958 Geneva Convention applies (see N. Oral, 'Transit Passage Rights in the Strait of Hormuz and Iran's Threats to Block the Passage of Oil Tankers', *ASIL Insights*, Vol. 16, Issue 16, at 3). The Strait of Bab al-Mandeb connects two EEZs (the Gulf of Aden and the Red Sea) and therefore the transit passage regime should apply to it. The Strait of Gubal is subject to the regime of international straits or, according to another school of thought, to the regime of passage that has been established for the Suez Canal (R. Lapidot, 'Red Sea', in R. Wolfrum (ed.), *The Max Planck Encyclopedia of Public International Law* (2012), Vol. VIII, 695). The Suez Canal is an artificial waterway which is 'inland waters' of Egypt, but where the free passage of all ships, including warships, is provided by the 1888 Constantinople Convention. The Suez Canal is already included in the African NWFZ and, when signing Protocol III of the Pelindaba Treaty, France reaffirmed that 'the Treaty shall in no way impair the principle of free passage through the Canal, both in time of war and in peacetime' (<http://disarmament.un.org/treaties/a/pelindaba_3/france/sig/african+union>).

⁹⁶ Iran, Oman and UAE have proclaimed EEZs. It is however to be recalled that practice in relation to the MOX (plutonium-uranium mixed oxide) shipments from Europe to Japan suggests the possible future emergence of a more restrictive regime according to which the coastal states may prohibit vessels carrying hazardous substances to enter their EEZ. See <www.world-nuclear.org/info/inf39.html> for the facts and my comments in M. Roscini, 'La zone dénucléarisée du sud-est asiatique: problèmes de droit de la mer', 105 *Revue générale de droit international public* (2001), 628-633.

visits by foreign ships and aircraft to its ports and airfields, transit of its airspace by foreign aircraft, and navigation by foreign ships through its territorial sea or archipelagic waters and overflight of foreign aircraft above those waters in a manner not governed by the rights of innocent passage, archipelagic sea lanes passage or transit passage'.⁹⁷ This provision introduces a further exception to the general obligation of the states parties to a NWFZ treaty not to allow the possession or control of any nuclear explosive device in their territory by anyone. Consequently, not only do the NWFZ treaties not prejudice the normal navigational rights of ships and aircraft under the law of the sea, including those carrying nuclear weapons, but they do not even require the parties to prevent other forms of presence (providing they do not amount to stationing). This clause is unnecessary and represents a serious loophole in the denuclearization regime and should therefore not be included in the Middle East WMD-free zone treaty.

One of the Middle Eastern states to be included in the WMD-free zone, Iran, borders the Caspian Sea. The Caspian is not actually a 'sea' but rather an international lake not governed by the law of the sea.⁹⁸ No agreement among the littoral states has been reached on the delimitation of its waters yet. Its inclusion in the Middle East WMD-free zone might therefore raise issues that have already arisen in connection with the Central Asian NWFZ.⁹⁹ The Semipalatinsk Treaty solved the problem by adding a clause providing that '[n]othing in this Treaty shall prejudice or in any way affect the rights of any Central Asian States in any dispute concerning the ownership of or sovereignty over lands or waters that may or may not be included within this zone'. A similar provision should be included in the Middle East WMD-free zone treaty as well.

7. Verification

The above mentioned General Assembly Resolution 3472 (XXX) B requires that NWFZs provide for an 'international system of verification and control'. In the NWFZ treaties, these tasks are usually performed by two parallel mechanisms, one entrusted to the IAEA and the other to regional bodies. The regional organs or organizations could be set up by the NWFZ treaty itself (the Tlatelolco Treaty established an international organization (OPANAL), while the Pelindaba Treaty set up an African Commission on Nuclear Energy and the Bangkok Treaty the

⁹⁷ Art. 7 of the Bangkok Treaty. See also Art. 5 (2) of the Rarotonga Treaty, Art. 4 of the Semipalatinsk Treaty and Art. 4 (2) of the Pelindaba Treaty.

⁹⁸ W.E. Butler, 'The Soviet Union and the Continental Shelf', 63 *American Journal of International Law* (1969), 106; R.R. Churchill and A.V. Lowe, *The Law of the Sea* (1999), 60; M. Gramola, 'State Succession and the Delimitation of the Caspian Sea', 14 *Italian Yearbook of International Law* (2005), 237-238; P. Tavernier, 'Le statut juridique de la mer Caspienne: mer ou lac?', *Actualité et droit international*, 20 October 1999, <www.ridi.org/adi/199910a1.htm>.

⁹⁹ Roscini, above note 94, 606-607.

Commission for the South-East Asia NWFZ and an Executive Committee), or could be already existing regional organizations whose competencies are broadened (the Rarotonga Treaty relies on the Pacific Islands Forum). These bodies receive the reports submitted by the states parties, carry out consultations, request clarifications, and, in some cases, conduct inspections. However, only the Bangkok and Tlatelolco Treaties provide for “challenge” ones, while in the Rarotonga and Pelindaba Treaties the inspection machinery can only be triggered by the regional organs, and not requested by the parties themselves.¹⁰⁰ The weakest treaty from the regional verification point of view is the Semipalatinsk Treaty, as it neither envisages the establishment of an international organization nor relies on existing ones, but simply provides for annual consultative meetings to review compliance, with decisions taken by consensus.¹⁰¹

The dual IAEA/regional verification system is due to the fact that the IAEA safeguards agreements, conceived in relation to Article III of the NPT, were not meant to monitor compliance with the broader obligations contained in a NWFZ treaty. The two mechanisms, thus, do not overlap, but have different competences: the IAEA detects the diversion of fissile materials from peaceful to military uses, while the regional organs monitor compliance with the other denuclearization obligations, in particular with the prohibition of stationing nuclear weapons within the zone.¹⁰² The problem with the WMD-free zone in the Middle East is that there is no existing regional organization that could step in for verification purposes: the Arab League does not include the main regional actors, i.e. Israel and Iran. Routine inspections might be entrusted to the IAEA, while a newly established organ or organization might be given the right to conduct ad hoc or even special inspections:¹⁰³ this would however require a careful consideration of the decision-making process in that organ or organization. In the Middle East, the verification problem is further complicated by the fact that verification procedures need to be extended to chemical and biological weapons. Verification of chemical disarmament in the zone could be ensured through a reference in the treaty to the Organisation for the Prohibition of Chemical Weapons’ verification activities, but at present there is no verification system applicable to biological weapons (although a protocol to the 1972 Bacteriological Weapons Convention has been proposed).¹⁰⁴

¹⁰⁰ Art. 16 of the Treaty of Tlatelolco, Annex to the Bangkok Treaty, Annex 4 of the Rarotonga Treaty and Annex IV of the Pelindaba Treaty.

¹⁰¹ Art. 10 and Annex.

¹⁰² In the Middle East, Israel has always argued that verification should be regionally based, with national inspectors operating alone or in conjunction with the IAEA. Arab countries, on the other hand, would prefer to entrust verification to the IAEA.

¹⁰³ Fahmy and Lewis, above note 57, 48.

¹⁰⁴ Ronzitti, above note 26, 43. It is worth recalling that Security Council Resolution 687 (1991) with regard to Iraq provides for verification measures that cover chemical, biological and nuclear weapons as well as ballistic missiles that are very intrusive, as they meet no limitation of time and place and do not require prior notification of inspection or right of refusal.

8. Enforcement

There are no specific regional mechanisms in the NWFZ treaties for enforcing the denuclearization obligations in case of violations. The Tlatelolco, Rarotonga, Bangkok and Pelindaba Treaties only provide that the matter can or must be referred to the UN Security Council and/or General Assembly, the Organization of the American States (OAS), the African Union (AU), the Pacific Islands Forum or the IAEA.¹⁰⁵ In the Semipalatinsk Treaty, no role of the UN main organs in the enforcement process is expressly envisaged. However, this would not prevent the Security Council from dealing with a violation of the denuclearization regime under Chapters VI or VII of the UN Charter. The IAEA Board of Governors might also report to the Security Council and to the General Assembly cases of non-compliance with the safeguards agreements, as well as suspend the IAEA's assistance to the wrongdoing state, call for the return of materials and equipment and suspend it from the exercise of the privileges and rights of membership.¹⁰⁶

Apart from institutionalized reactions, states parties to a denuclearization treaty that are injured by its violation could also individually resort to countermeasures under the law of state responsibility.¹⁰⁷

9. Conclusions: what are the possible scenarios?

The conference for a WMD-free zone in the Middle East, called for by the NPT 2010 Review Conference and which was supposed to take place in December 2012, has now been postponed sine die.¹⁰⁸ Although it was never supposed to be a drafting conference, it would have been an important step in the negotiation and eventual adoption of a treaty establishing such zone. As the conference has not been convened, what are the possible scenarios?

The best case scenario, supported by the co-sponsors of the Middle East Resolution and by the facilitator,¹⁰⁹ is that the conference will take place at the earliest opportunity before the 2015 NPT Review Conference. Certain regional states have however manifested their strong disappointment for the aborted 2012 conference. Indeed, the Middle Eastern states (with the exception of Israel) attach great importance to the WMD-free zone project, which was part of the great bargain for the indefinite extension of the NPT in 1995. Arab League members have

¹⁰⁵ Art. 21 of the Treaty of Tlatelolco, Annex 4 of the Rarotonga Treaty, Annex IV (4) of the Pelindaba Treaty, Art. 14 (3) of the Bangkok Treaty.

¹⁰⁶ Article XII (C) of the IAEA Statute.

¹⁰⁷ Roscini, above note 37, 370-381.

¹⁰⁸ See <www.state.gov/r/pa/prs/ps/2012/11/200987.htm>.

¹⁰⁹ Lewis, above note 8, 441-442.

thus threatened to boycott participation in the NPT Preparatory Committee meetings in preparation of the 2015 NPT Review Conference.¹¹⁰ The worst case scenario, then, is that the possible abandonment of the WMD-free zone project will determine disaffection of Middle Eastern states towards the NPT and eventually a chain of withdrawals from the treaty. Even though the language of Article X of the NPT is notoriously very broad, it might however be difficult to qualify the postponement or even the demise of the WMD-free zone project as 'extraordinary events, related to the subject matter of this Treaty, [that] have jeopardized the supreme interests' of the Middle Eastern NPT member states, allowing the withdrawal from the NPT. States parties could of course also resort to the general grounds for the termination of the participation in a treaty contained in the 1969 Vienna Convention on the Law of Treaties (VCLT).¹¹¹ In response to the postponement of the WMD-free zone conference, Iran's ambassador to the IAEA, Soltanieh, claimed for instance that '[t]he US has taken the conference on banning nuclear weapons in the Middle East as hostage and this is a flagrant violation of the NPT'.¹¹² The reference to the US's 'flagrant violation of the NPT' might refer to a possible invocation of the *inadimplenti non est adimplendum* clause contained in Article 60 of the VCLT. It is not clear, however, what the 'material breach' committed by the United States is in this case: it is not a 'repudiation of the Treaty not sanctioned' by the VCLT as the United States has not denounced the treaty. Therefore it could only be 'the violation of a provision essential to the accomplishment of the object or purpose' of the NPT (Article 60 (3) of the VCLT). Be that as it may, in cases of treaties 'of such a character that a material breach of its provisions by one party radically changes the position of every party with respect to the further performance of its obligations under the treaty' (as the NPT arguably is), the other parties are only entitled to invoke the breach to suspend, and not terminate, the operation of the treaty in whole or in part with respect to themselves (Article 60 (2) (c)).

In any case, in spite of the postponement of the 2012 Conference, the news that the Middle East WMD-free zone project is dead is premature. The establishment of other NWFZs has also been lengthy and problematic.¹¹³ After all, it took 30 years for the first NWFZ – that in Latin America and the Caribbean - to fully enter into force. Preparing a good WMD-free zone draft treaty for negotiation remains therefore essential for the success of the initiative: international lawyers have an important role to play in this regard and it is hoped that this chapter will contribute to the debate.

¹¹⁰ E.M. Grossman, 'Arab League Threatens Nonproliferation Even Boycott', Global Security Newswire, 21 February 2013, <www.nti.org/gsn/article/arab-states-threaten-boycott-nonproliferation-conference>.

¹¹¹ It is true that the NPT was adopted before the VCLT and that the Convention does not apply to treaties concluded before its entry into force, but most rules contained thereby are generally considered a codification of customary international law.

¹¹² 'Iran's IAEA envoy slams US blatant violation of NPT regulations', Press TV, 26 November 2012, <www.presstv.ir/detail/2012/11/26/274641/iran-raps-us-blatant-violation-of-npt>.

¹¹³ See Roscini, above note 37, 8-18.