

# CORE OBLIGATIONS RELATED TO NUCLEAR WEAPONS FOR A MIDDLE EAST ZONE FREE OF NUCLEAR WEAPONS AND OTHER WEAPONS OF MASS DESTRUCTION

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This brief note outlines some possible core obligations relating to nuclear weapons that could be considered in the negotiations for the establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction. The countries of the region who may be parties to negotiating such a zone will need to consider and find agreement among themselves on the scope, strictness, and duration of constraints on a range of nuclear activities. Since all the relevant states would be accepting such constraints for themselves as well as on each other, these obligations will need to reflect commitments states have already made as part of other treaties and arrangements as well as new commitments they are willing to make to each other specifically for the purposes of this treaty. The discussion here is limited to states that participated in the first Conference on the Establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction and thus may be part of treaty negotiations.

The suggested measures draw on and would serve to reinforce commitments that many states in the region have already accepted as parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Comprehensive Nuclear-Test-Ban Treaty (CTBT), and the African Nuclear Weapon Free Zone Treaty (ANWFZT). The measures also draw on the Treaty on the Prohibition of Nuclear Weapons (TPNW), which has now entered into force, since many states in the region were part of the treaty negotiations and voted in favor of adoption of the treaty text (for the status of membership in and expressed support for these four treaties, see Appendix 1).

This discussion also includes nuclear restraints and transparency measures adapted from a report for the International Panel on Fissile Materials on advancing a Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction treaty<sup>1</sup> It also incorporates some principles from the 2015 Joint Comprehensive Plan of Action (JCPOA) regarding time-bound treaty obligations to enable a sustained period of confidence-building that could aid stabilization of a Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction.

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<sup>1</sup> Frank N. von Hippel, Seyed Hossein Mousavian, Emad Kiyaei, Harold A. Feiveson and Zia Mian, [Fissile Material Controls in the Middle East: Steps toward a Middle East Zone Free of Nuclear Weapons and all other Weapons of Mass Destruction](http://fissilematerials.org/library/rr11), Report of the International Panel on Fissile Materials, October 2013. The report is in Arabic [<http://fissilematerials.org/library/rr11>] arabic.pdf -- [ضوابط المواد الانشطارية في الشرق الاوسط: خطوات نحو شرق اوسط خال من](#) [شليטה בחומרים בקיעים במזרח התיכון. צעדים לקראת מזרח תיכון](#) -- and Hebrew -- [חופשי מנשק גרעיני וכל סוגי הנשק להשמדה המונית](#)

## Core obligations

It is widely agreed that the minimum core obligations of a NWFZ should include those which are part of the NPT, as applied to non-weapon states. These obligations include:<sup>2</sup>

- not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly.
- not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices.
- not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices.
- to accept safeguards by the International Atomic Energy Agency with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices.
- not to provide source or special fissionable material, or equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any non-nuclear-weapon State for peaceful purposes, without safeguards.

The verification of obligations on the transfer and control over nuclear weapons is not laid out explicitly in the NPT. It is presumed that the safeguards system of the International Atomic Energy Agency (IAEA) as applied to non-weapon states can adequately monitor whether such a state is undertaking activities that fall under the prohibition to manufacture nuclear weapons. The limits of the IAEA Comprehensive Safeguards Agreement (CSA or INFCIRC/153 corrected), intended to be the basis for independently verifying that no nuclear material within a state is diverted and related facilities not misused, led to a system of supplementary measures codified in the Model Additional Protocol (INFCIRC/540, corrected).

To these longstanding and key NPT obligations could be added those relating to nuclear weapon testing as agreed under the CTBT. Restrictions on testing are necessary since the NPT did not bar nuclear tests. Article V of the NPT allows for non-weapon states to access “under appropriate international observation and through appropriate international procedures, potential benefits from any peaceful applications of nuclear explosions”. This access was never exercised. The relevant nuclear testing obligations from the CTBT are:<sup>3</sup>

- not to carry out any nuclear weapon test explosion or any other nuclear explosion, and to prohibit and prevent any such nuclear explosion at any place under its jurisdiction or control.
- to refrain from causing, encouraging, or in any way participating in the carrying out of any nuclear weapon test explosion or any other nuclear explosion.

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<sup>2</sup> Treaty on the Non-Proliferation of Nuclear Weapons, <http://disarmament.un.org/treaties/t/npt>.

<sup>3</sup> Comprehensive Nuclear-Test-Ban Treaty, <http://disarmament.un.org/treaties/t/ctbt>.

The verification of these obligations is limited to the actual conduct of a nuclear test explosion and is undertaken by the International Monitoring System managed by the Comprehensive Nuclear-Test-Ban Treaty Organization. This global system of monitoring instruments does not serve to verify the prohibition on causing, encouraging, or participating in a nuclear test explosion or the positive obligation on a state to prohibit and prevent such an explosion on its territory. Nor does it verify research relevant to preparing a nuclear weapon test.

There are important additional obligations that some states in the region have accepted as part of the ANWFZT relating to the prohibition of research and development on nuclear weapons and prohibiting the stationing of nuclear weapons and transparency regarding the capability for manufacturing nuclear weapons. These activities are not covered explicitly by the NPT or CTBT. ANWFZT commitments that could be made core obligations in the Middle East Zone treaty include:<sup>4</sup>

- not to conduct research on, develop, manufacture, stockpile any nuclear explosive device by any means anywhere;
- not to seek or receive any assistance in the research on, development, manufacture, stockpiling of any nuclear explosive device;
- not to take any action to assist or encourage the research on, development, manufacture, stockpiling of any nuclear explosive device.
- to declare any capability for the manufacture of nuclear explosive devices.
- to prohibit, in its territory, the stationing of any nuclear explosive device.

ANWFZT verification and monitoring arrangements rely on the IAEA safeguards system and an annual reporting system by states parties. The prohibitions on research and development for weaponization, assistance and encouragement, declaring capability are not fully verifiable under the IAEA safeguards system, even with the substantial verification benefits associated with the application of the measures in the Additional Protocol. However, a prohibition on nuclear weapon related research and development can be verified, as was made clear when, with appropriate transparency and cooperation from Iran, the IAEA was able to reach conclusions regarding “the existence or development of processes associated with nuclear-related activities, including weaponization.”<sup>5</sup>

None of the countries that are part of the current process to develop and agree a Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction are believed to have ever made a nuclear weapon or nuclear explosive device. As long as this situation persists, there would seem to need to carry over from the ANWFZT the obligations on each party to “dismantle and destroy any nuclear explosive device that it has manufactured prior to the coming into force of this Treaty” and “to destroy facilities for the manufacture of nuclear explosive devices or, where possible, to convert them to peaceful uses.”

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<sup>4</sup> African Nuclear Weapon Free Zone Treaty (Treaty of Pelindaba), <http://disarmament.un.org/treaties/t/pelindaba>.

<sup>5</sup> Final Assessment on Past and Present Outstanding Issues regarding Iran’s Nuclear Programme, International Atomic Energy Agency, Vienna, 2 December 2015, <https://www.iaea.org/sites/default/files/gov-2015-68.pdf>.

A fourth source of possible nuclear weapon related core obligations for a Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction is the TPNW. All but four states who were involved in first Conference on the Establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction have registered their support for the TPNW through their vote in favor of adoption of the treaty at the conclusion of the successful negotiating conference in 2017. The TPNW obligations reiterate NPT obligations and CTBT obligations and some ANWFZT obligations, notably “never under any circumstances to”:<sup>6</sup>

- develop, test, produce, manufacture, otherwise acquire, possess, or stockpile nuclear weapons or other nuclear explosive devices;
- transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly or indirectly;
- receive the transfer of or control over nuclear weapons or other nuclear explosive devices directly or indirectly;
- use or threaten to use nuclear weapons or other nuclear explosive devices;
- assist, encourage, or induce, in any way, anyone to engage in any activity prohibited to a State Party under this Treaty;
- seek or receive any assistance, in any way, from anyone to engage in any activity prohibited to a State Party under this Treaty;
- allow any stationing, installation or deployment of any nuclear weapons or other nuclear explosive devices in its territory or at any place under its jurisdiction or control.

For states that have never had nuclear weapons, key obligations are intended to be verified by the IAEA safeguards system. As with the other treaties noted above, some prohibitions are not fully verifiable through this system.

All of the four treaties discussed, and the other NWFZ treaties, recognize and leave in place the use of nuclear energy for peaceful purposes. This is in part a political legacy of a technocratic view from the 1960s that nuclear energy inevitably would be a major source of energy and access to it should be protected through treaty rights, but with agreed regulations on its use because of nuclear energy’s connection through key materials, technologies, and knowledge to nuclear weapon proliferation. The imagined future of the widespread use of nuclear energy has not come to pass and the prospects for nuclear energy are increasingly uncertain.<sup>7</sup> As of 2020, only 31 countries operate nuclear power reactors, with five countries generating about 70 percent of global nuclear electricity (which is only about 10 percent of global commercial gross electricity production), and some large, long-standing nuclear programs are coming to end -- Germany’s nuclear phaseout will be completed by the end of 2022.<sup>8</sup>

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<sup>6</sup> Treaty on the Prohibition of Nuclear Weapons <http://disarmament.un.org/treaties/t/tpnw/text>.

<sup>7</sup> [The Uncertain Future of Nuclear Energy](http://fissilematerials.org/library/rr09.pdf), Report of the International Panel on Fissile Materials, September 2010, <http://fissilematerials.org/library/rr09.pdf>.

<sup>8</sup> World Nuclear Industry Status Report 2020, [https://www.worldnuclearreport.org/IMG/pdf/wnisr2020-v2\\_lr.pdf](https://www.worldnuclearreport.org/IMG/pdf/wnisr2020-v2_lr.pdf).

The continued possible decline in interest in civilian nuclear energy globally because of increasingly poor economics compared to renewable energy, and the well-established risks from nuclear accidents, disposal of long-lived highly radioactive nuclear spent fuel, and possible proliferation, all may affect the actual future of nuclear energy programs in the Middle East. A Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction treaty could be well served by seeing value in and enabling a nuclear free region. This would remove many possible sources of future security concerns and significantly ease verification demands.

In the absence of an early decision by states in the Middle East to forgo nuclear energy where states do not have it and a phase-out in states that already have it, it is worth considering how a Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction treaty could help reduce concerns about national nuclear fuel cycle activities. It is clear from the history of the region over the past three decades that agreed additional measures of restraint and transparency with regard to nuclear fuel cycle activities that go beyond those in the NPT and its safeguards system could be useful. Over this period there has been significant regional and global concern about nuclear activities in Libya, Iran, Iraq, and Syria related to the pursuit nuclear weapon capabilities despite all these states being parties to the NPT and having safeguards.

A Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction could gain additional stability if the treaty obligations, directly or as a protocol to it, included an agreed system of verifiable nuclear fuel cycle constraints, some of indefinite duration and others which are initially bounded in time but potentially capable of being made indefinite. The notion of treaty obligations that are of limited duration but that could be extended by agreement of the parties is not without precedent. It is worth noting that while existing NWFZ treaties and all their obligations are of unlimited duration, the NPT as negotiated required (Article X.2) that “twenty-five years after the entry into force of the Treaty, a conference shall be convened to decide whether the Treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods. This decision shall be taken by a majority of the Parties to the Treaty.”

The potential positive value of such additional nuclear fuel cycle measures is that they put limits on nuclear activities of possible concern and introduce levels of transparency that together offer predictability and stability for an extended period after entry into force of such a treaty. This glide-path approach allows for the treaty and other political, economic, social, and technical processes to take effect and help further bind treaty parties in mutual, cooperative relationships.

This approach of using time-bound measures to create stability as part of an agreement underlies the JCPOA.<sup>9</sup> The measures there include caps and time limits for 8.5 years on some uranium enrichment centrifuge research and development activities, 10-year limits on some centrifuge production and operation activities, 15-year limits on uranium enrichment levels and locations, and on plutonium separation (reprocessing), heavy water production and heavy water reactors. The JCPOA also includes time bound measures of additional transparency, for instance 10 years of oversight of the purchase of dual-use materials, 20 years of continuous monitoring of uranium

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<sup>9</sup> Joint Comprehensive Plan of Action (JCPOA), 14 July 2015, [https://www.undocs.org/S/RES/2231\(2015\)](https://www.undocs.org/S/RES/2231(2015)).

enrichment centrifuge production, and 25 years of continuously monitoring of uranium mining and milling. There also are enduring commitments, including to not separate plutonium.

The process of reaching agreement on a Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction treaty and achieving entry into force will have to run in parallel to the clock on the various JCPOA time-bound obligations – some of the core JCPOA obligations may end before the treaty enters into force, soon after entry into force, or long afterwards, unless these obligations are extended as part of the treaty, and presumably applied to all parties. It therefore will be uncertain what the scale, nature and transparency of Iran’s nuclear activities will be when a possible Middle East Zone treaty enters into force unless measures are included in the treaty to fix in place the scope and transparency of these activities for some agreed time after entry into force.

If a core aim is to strengthen the stability of the region against potential proliferation risks, critical potential nuclear fuel cycle control measures to include in the Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction treaty are:<sup>10</sup>

*A ban on the separation of plutonium.* Even if Middle East countries pursue ambitious civilian nuclear power programs, they need not develop reprocessing capabilities. No sound economic or environmental justification exists for using plutonium for civilian applications and reprocessing and stockpiling separating plutonium creates serious proliferation risks as the material could be used to make nuclear weapons.<sup>11</sup>

*Restrictions on Uranium Enrichment.* Centrifuge enrichment plants pose significant proliferation concerns because they can be quickly reconfigured for production of Highly Enriched Uranium (HEU) that is weapon-usable.

- A general prohibition on the production and use of HEU; the International Atomic Energy Agency treats uranium enriched above 20 percent as direct weapon-usable material.
- A limit on the maximum uranium enrichment of 5–7 percent U-235; this is more than sufficient for fuel used in light-water nuclear power reactors.
- A multilateral arrangement for uranium enrichment rather than national enrichment programs; it could be managed by the body responsible for implementing the treaty.

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<sup>10</sup> Zia Mian, A. Glaser, F. von Hippel, S. Mousavian, E. Kiyaei, and H. Feiveson, [Fissile Material Controls in the Middle East: Steps Toward a Middle East Nuclear-Weapon-Free Zone](http://www.princeton.edu/~aglaser/PU084-Mian-Glaser-2014.pdf), 55th Annual INMM Meeting, Atlanta, Georgia, July 2014. <http://www.princeton.edu/~aglaser/PU084-Mian-Glaser-2014.pdf>.

<sup>11</sup> [Plutonium Separation in Nuclear Power Programs. Status, Problems, and Prospects of Civilian Reprocessing Around the World](#), Report of the International Panel on Fissile Material, July 2015.

## Cooperative Verification and Safeguards

Along with accepting all the verification, safeguards and reporting measures in the NPT, including those which are not mandatory, and in the ANWFZT, and TPNW, there could be benefit in including complementary regional arrangements for safeguards, and transparency and cooperative verification.

*Comprehensive Safeguards Agreements and Additional Protocol.* A core obligation could be for states that have not yet done so to adopt a Comprehensive Safeguards Agreement and the Additional Protocol. While a Comprehensive Safeguards Agreement permits IAEA inspection of declared sites, the Additional Protocol provides IAEA inspectors access to all parts of the nuclear fuel cycle, “complementary access” to all buildings on a nuclear site, and allows collection of environmental samples at sites other than declared locations. States also are required to specify the location of nuclear fuel cycle activities, including operating and shut down uranium mines.<sup>12</sup> Following the experience with the JCPOA, states could regionalize and extend the duration of, or make permanent, the transparency measures beyond the Additional Protocol accepted by Iran.

Appendix 2 lists the status of Comprehensive Safeguards Agreements and the Additional Protocol for states participating in the first Conference on the Establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction.

*Regional Nuclear Fuel-cycle and Verification Organization.* States may complement IAEA safeguards and inspections of nuclear activities in the region with a dedicated regional capability. A precedent for such an arrangement is the Brazilian–Argentine Agency for Accounting and Control of Nuclear Materials (ABACC) developed between Argentina and Brazil as part of the Latin American NWFZ, and their agreed Common System of Accounting and Control of Nuclear Materials, which aims to verify non-diversion of nuclear materials towards nuclear weapons from any of the nuclear activities of the two countries.<sup>13</sup> ABACC was modeled on Euratom, which shares safeguards responsibilities with the IAEA in European Union.

The Middle East zone regional organization, possibly together with the IAEA, could oversee operations of any fuel-cycle facilities in the region, such as uranium enrichment plants, and monitor all nuclear materials used in any enrichment facility in the region, including uranium mining and purification, uranium imports, conversion of uranium into uranium hexafluoride (UF<sub>6</sub>) for enrichment or from UF<sub>6</sub> after enrichment.

*Middle East Open Skies.* A regional arrangement for mutual over-flights of unarmed aircraft or drones carrying agreed monitoring instruments could serve to increase confidence in the absence of clandestine nuclear facilities. The 1992 Open Skies Treaty provides a precedent for such over-flights.<sup>14</sup> Specific sensors could include:

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<sup>12</sup> Model Protocol Additional, INFCIRC/540 (corrected), International Atomic Energy Agency, Vienna, 1997, <https://www.iaea.org/sites/default/files/infirc540c.pdf>.

<sup>13</sup> Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials, <https://www.abacc.org.br/en>.

<sup>14</sup> Treaty on Open Skies, <https://www.osce.org/files/f/documents/1/5/14127.pdf>.

- gamma-ray spectrometers to identify ground-level radiation anomalies from uranium mining activity.<sup>15</sup>
- infrared sensors to verify the operating or shutdown status of a nuclear reactor by detecting the temperatures of reactor containment building or cooling towers.<sup>16</sup>
- krypton-85 sensors for monitoring the radioactive gas released when spent nuclear fuel is being prepared for plutonium separation.<sup>17</sup>

These measures of nuclear restraint and associated monitoring and verification could serve as strong technical and political barriers to any future attempts to seek nuclear weapons capability and add additional stability to a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction.

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<sup>15</sup> P.G. Martin, O.D. Payton, J.S. Fardoulis, D.A. Richards, T.B. Scott, “The Use of Unmanned Aerial Systems for the Mapping of Legacy Uranium Mines,” *Journal of Environmental Radioactivity*, Volume 143, May 2015, Pages 135-140.

<sup>16</sup> See Frank N. von Hippel, Seyed Hossein Mousavian, Emad Kiyaei, Harold A. Feiveson and Zia Mian, [Fissile Material Controls in the Middle East: Steps toward a Middle East Zone Free of Nuclear Weapons and all other Weapons of Mass Destruction](#), Report of the International Panel on Fissile Materials, October 2013.

<sup>17</sup> Michael Schoeppner, [Remote detection of undeclared reprocessing](#), Report of the International Panel on Fissile Material, October 2018; Michael Schoeppner, [Detecting Clandestine Reprocessing Activities in the Middle East](#), *Science & Global Security* 26, no. 1 (2018): 3-19.



**Appendix 1: Status of Middle East states with regard to ratification/accession or signature (S) or vote in favor (V) for treaties relating to nuclear weapons**

Treaty on the Non-Proliferation of Nuclear Weapons (NPT)

Comprehensive Test Ban Treaty (CTBT)

African Nuclear Weapon Free Zone Treaty (ANWFZT)

Treaty on the Prohibition of Nuclear weapons (TPNW)

Israel is not included since it did not participate in the first Conference on the Establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction.

STATE	NPT	CTBT	ANWFZT	TPNW
<b>Algeria</b>	12 Jan. 1995	11 July 2003	11 Feb. 1998	(V) 7 July 2017
<b>Bahrain</b>	3 Nov. 1988	12 April 2004	–	(V) 7 July 2017
<b>Comoros</b>	4 Oct. 1995	(S) 12 Dec. 1996	24 July 2012	–
<b>Djibouti</b>	16 Oct. 1996	15 July 2005	(S) 11 April 1996	(V) 7 July 2017
<b>Egypt</b>	26 Feb. 1981	(S) 14 Oct. 1996	(S) 11 April 1996	(V) 7 July 2017
<b>Iran</b>	2 Feb. 1970	(S) 24 Sep. 1996	–	(V) 7 July 2017
<b>Iraq</b>	29 Oct. 1969	26 Sep. 2013	–	(V) 7 July 2017
<b>Jordan</b>	11 Feb. 1970	25 Aug. 1998	–	(V) 7 July 2017
<b>Kuwait</b>	17 Nov. 1989	6 May 2003	–	(V) 7 July 2017
<b>Lebanon</b>	15 July 1970	21 Nov. 2008	–	(V) 7 July 2017
<b>Libya</b>	26 May 1975	6 Jan. 2004	11 May 2005	–
<b>Mauritania</b>	26 Oct. 1993	30 April 2003	24 Feb. 1998	(V) 7 July 2017
<b>Morocco</b>	27 Nov. 1970	17 April 2000	(S) 11 April 1996	(V) 7 July 2017
<b>Oman</b>	23 Jan. 1997	13 June 2003	–	(V) 7 July 2017
<b>Palestine</b>	10 Feb. 2015	–	–	(V) 7 July 2017
<b>Qatar</b>	3 Apr. 1989	3 March 1997	–	(V) 7 July 2017
<b>Saudi Arabia</b>	3 Oct. 1988	–	–	(V) 7 July 2017
<b>Somalia</b>	5 Mar. 1970	–	(S) 23 Feb. 2006	–
<b>Sudan</b>	31 Oct. 1973	10 June 2004	(S) 11 April 1996	(V) 7 July 2017
<b>Syria</b>	24 Sep. 1969	–	–	–
<b>Tunisia</b>	26 Feb. 1970	23 Sep. 2004	7 Oct. 2009	(V) 7 July 2017
<b>UAE</b>	26 Sep. 1995	18 Sep. 2000	–	(V) 7 July 2017
<b>Yemen</b>	1 June 1979	(S) 30 Sep. 1996	–	(V) 7 July 2017

**Appendix 2: Status of Middle East states with regard to with regard to accession or signature (S) of Comprehensive Safeguards Agreement and the Additional Protocol**

Comprehensive Safeguards Agreement (CSA)

Additional Protocol (AP)

Israel is not included since it did not participate in the first Conference on the Establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction.

STATE	CSA	AP
<b>Algeria</b>	7 Jan, 1997	(S) 16 Feb. 2018
<b>Bahrain</b>	10 May 2009	20 July 2011
<b>Comoros</b>	20 Jan. 2009	20 Jan. 2009
<b>Djibouti</b>	Signed 2010	26 May 2015
<b>Egypt</b>	30 June 1982	–
<b>Iran</b>	15 May 1974	(S) 18 Dec. 2003*
<b>Iraq</b>	29 Feb. 1972	10 Oct. 2012
<b>Jordan</b>	21 Feb. 1988	28 July 1998
<b>Kuwait</b>	7 March 2002	2 June 2003
<b>Lebanon</b>	5 March 1973	–
<b>Libya</b>	8 July 1980	11 August 2006
<b>Mauritania</b>	10 Dec. 2009	10 Dec. 2009
<b>Morocco</b>	18 Feb. 1975	21 April 2011
<b>Oman</b>	5 Sep. 2006	–
<b>Palestine</b>	14 June 2019	–
<b>Qatar</b>	21 Jan. 2009	–
<b>Saudi Arabia</b>	13 Jan. 2009	–
<b>Somalia</b>	–	–
<b>Sudan</b>	7 Jan. 1977	–
<b>Syria</b>	18 May 1992	–
<b>Tunisia</b>	13 March 1990	(S) 24 May 2005
<b>UAE</b>	9 Oct. 2003	20 Dec. 2010
<b>Yemen</b>	14 Aug. 2002	–

\* As part of the JCPOA, Iran accepted provisional application of the Additional Protocol as of 16 January 2016 pending entry into force.